



## Upcoming Events:

1. Northwest Ohio Regional Technology (NORTech) Robotics Competition, March 5, BGSU
2. ITEEA Annual Conference, March 25-28, 2026. Virginia Beach
3. National Robotics Challenge, April 16-18, 2026. Marion
4. OTEEA School Exhibits and Restoration Innovation Challenge, April 17, 2026, Marion

OTEEA webinars  
[online archive](#)

OTEEA News, Resources, and Notes [online archive](#)

STEM is Elementary  
[Newsletter Subscription And Archived Issues](#)

[STEM competitions and more resources](#) spreadsheet

[Link to OTEEA membership form](#)



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Outreach Notes **P.15**

# National Robotics Challenge News

## NRC '26 Registration is Open!

With the arrival of 2026, it's time to turn your focus to the greatest open-platform robotics competition in the world! Registration is now open and must be completed by Friday, February 27, 2026. Thanks to our sponsors, our registration fees remain the lowest of any event at this scale, at only \$85 per school/organization plus \$20 per robot team entered.

This year we are excited to be celebrating 40 YEARS of open-platform robotics, and we can't wait to see the innovative designs your students develop for the 2026 NRC!



For forty years, the National Robotics Challenge has been providing open-platform robotics competition in a way that no other program can replicate. With low entry fees, and twelve unique contest options, you can find a competition for each of your students, regardless of their experience.

Download your copy of the 20 **2026 Contest Manual**. Let the building begin!



April 16-18, 2026  
Marion, Ohio

[www.thenrc.org](http://www.thenrc.org)

[Register For The NRC](#)

## Check Out This NRC Sanctioned Event



Registration is now open for the **Northwest Ohio Regional Technology (NORTech) Robotics Competition**, part of the [National Robotics Challenge](#) (NRC)! This annual event provides an incredible platform for students to showcase their engineering skills and compete in a variety of robotics challenges.

### Who Can Participate?

Students in **grades 6–12** from Ohio and surrounding states, including homeschool students, are welcome to join.

#### Event Details:

- **Date:** Thursday, March 5, 2026 (Snow Date: Thursday, March 12, 2026)
- **Time:** 9:30a – 2p (competitions start closer to 10)
- **Location:** BGSU Student Union
- **Registration Deadline:** Friday February 13<sup>th</sup> (guaranteed t-shirt)

Late Registration Monday February 23<sup>rd</sup> (t-shirt not guaranteed)

- **Lunch:** Lunch is **not provided**. Please plan to bring a brown-bag lunch; space will be available for eating.
  - We hope to have an update about sponsoring a lunch for all students, teachers & volunteers. For now, please plan to bring a lunch or lunch money for the BGSU Student Union Falcon Nest Cafeteria

#### 👉 [Register Now](#)

- You will be able to update your registration until February 13<sup>th</sup>.
- A link to update will be provided in your confirmation e-mail. This way you can tentatively register early and go back to fill in student t-shirt sizes at another time.

#### 👉 [Learn More](#)

## You're Invited to DesignColumbus 2026



Registration is now open for [DesignColumbus](#) — Ohio's premier event to connect with the transformation of our built environment to be more healthy, prosperous and sustainable. DesignColumbus will once again offer an inspiring keynote address, a vibrant expo hall, tons of networking opportunities and an amazing variety of educational sessions. We look forward to seeing you there!

### [DesignColumbus 2026](#)

**When:** March 16 from 8 a.m. – 5 p.m.

**Where:** Mitchell Hall, Columbus State Community College

#### [Register](#)

### Announcing our education-packed program

We're pleased to announce the exciting program for DesignColumbus. Join us for a full day of sessions showcasing how sustainability, innovation and preservation are reshaping the built environment across Ohio and beyond. The program highlights practical strategies for reusing existing buildings, advancing circular and zero waste design, reducing operational and embodied carbon and applying emerging tools such as LEED v5, building performance standards, AI-driven analytics, prefabrication and 3D printing.

Case studies range from historic barns and Victorian homes to net-zero offices, healthcare facilities, workplaces and affordable housing —

demonstrating that high performance can be achieved across building types and scales. The agenda also provides robust continuing education opportunities, while emphasizing collaboration, workforce development, wellness and measurable outcomes that position Columbus as a leader in forward-looking green building practice.

[View program](#)

## More about the event

### Continuing Education

Attendees can earn AIA and GBCI continuing education units (CEUs) by attending our exciting lineup of education sessions. Those attending the full event can earn up to 5 CEUs in one day.

### Expo

Experience the latest high-tech materials from 50 of the industry's most innovative building product manufacturers. Tap into the expertise of some of the region's best brands, face-to-face, at the expo.

### Networking

Take advantage of a host of opportunities to connect with your colleagues. Besides the Expo, education sessions and breaks, please plan to join us at our Happy Hour — which not only offers more time to spend with those you know and those you want to meet, but also gives you a chance to win great prizes!

## 2026 NASA STEM Enhancement in Earth and Space Science (SEES) Internship

Application Deadline: Sunday, Feb. 22

The SEES Summer Intern Program is a nationally competitive STEM experience for high school students hosted by the University of Texas Center for Space Research. Interns collaborate with NASA, academic, and industry experts using mission data across disciplines such as aerospace, astronomy, planetary science, remote

sensing, microgravity research, and space geodetic techniques. Interns take part in mission-based projects and strengthen teamwork, communication, and professional skills critical to the nation's future science and engineering workforce.



Current high school sophomores and juniors who are U.S. citizens are eligible to apply. [Click here](#) to learn more.

## NEO:STEM Now Newsletters



Building the Future of STEM in Northeast Ohio

Connecting schools, businesses, and communities to inspire curiosity, develop future-ready STEM skills, and open doors to new opportunities.

[Read January 9 Newsletter here](#)

[Read January 16 Newsletter here](#)

[Score with STEM News](#)





# Technology and Engineering Education News and Resources

Activities, Contests, Student Opportunities, and New Technologies

## The Daily STEM

[Read January 19 edition here](#)

## Drones in School News



### More Races This Month!

Earn season points and qualify for the Season Championship in Detroit, Michigan! Click the links below to download the tracks and instructions so you don't miss an opportunity to compete.

#### January Virtual Race

Submit Your Files by 11:59 PM on January 31st

#### January Simulator Race (The FINAL Sim Race of 2025-26)

Post Times in VelociDrone by 11:59 PM on January 31st

[Read full Mid-January newsletter](#)



## Empower Your Classroom With ExCITE II Cohort 3!

Are you passionate about preparing your students for the future of technology and engineering? The **ExCITE II program** is now recruiting **high school technology & engineering educators for Cohort 3 (26-27 school year)**, and this is your opportunity to be part of a national initiative that's transforming how students experience computer science and engineering design. We consider a target program to offer these types of concepts to the students: woodworking, 3d printing, CAD, CNC, drafting, robotics, engineering design process, etc. We are not targeting computer science educators.

Through ExCITE II, you'll receive comprehensive training to teach **AP Computer Science Principles (CSP) byDesign**, a course that

blends computational thinking with hands-on, project-based learning. This isn't just professional development, it's a chance to elevate your teaching, expand your students' opportunities, and join a vibrant community of educators committed to innovation in STEM education.

As a participant, you'll receive a **full class set of robotics and computer control kits** (valued at \$2,800) that will remain with your school district after the program. You'll also earn a **\$2,000 stipend**, with half paid at the start of the school year and the remainder upon completion of your project research notes. All travel, lodging, and meal expenses for in-person events are fully reimbursed, so you can focus on learning and collaboration without financial stress. In addition, you'll become a **certified College Board AP CSP teacher**, receive a **free one-year ITEEA membership**, and qualify for **90 hours of continuing education credit**; a powerful boost to your professional credentials.

If you're ready to bring hands-on, design-based computer science education to your students and grow as a leader in your field, we encourage you to apply today. [Learn more and apply here](#)

10 cohort seats left for the 26-27 school year, do not delay!

## Turning Failure Into Fuel: How Self-Reflection Shapes Design Success

[ITEEA STEM Sparks](#)

What really happens when beginning designers face failure? Andrew Jackson's article, "Does that mean it's a success?": Beginning Designers' Forethought and Self-Reflection in Engineering Design Thinking (Journal of Technology Education, Spring 2025), dives deep into the mindset and strategies of high school students tackling an iterative soft robotics challenge. Through think-aloud protocols, design artifacts, and interviews, Jackson reveals how forethought and self-reflection—two critical phases of self-regulation—

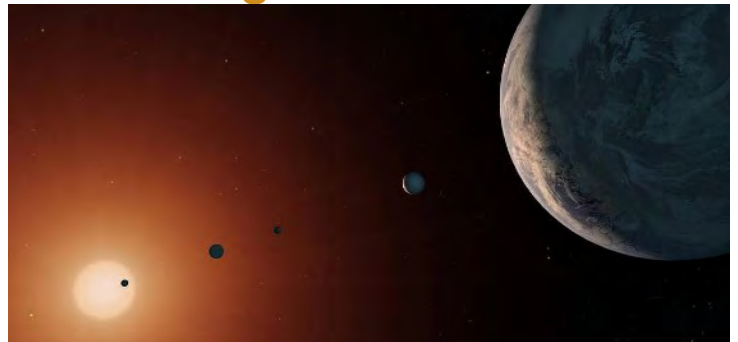
shape students' ability to persist, adapt, and learn from setbacks.

The study uncovers striking contrasts: some teams embrace iteration and view failure as a stepping stone, while others fixate on early ideas and rationalize partial success to avoid further effort. These behaviors highlight the powerful interplay between planning, evaluation, and decision-making in design thinking. Jackson argues that teaching students not just what to do but what to think during design can transform frustration into productive learning moments.

What are some of the ways that educators can help students develop stronger design thinking and self-regulation skills?

[Read more](#)

## Celebrate 30 Years of Exoplanet Discovery With NASA's Universe of Learning



Thirty years ago, astronomers confirmed the first planet orbiting another star – a moment that changed how we see the universe. Today, more than 5,000 exoplanets have been discovered, revealing worlds that are hot, cold, rocky, stormy, and everything in between.

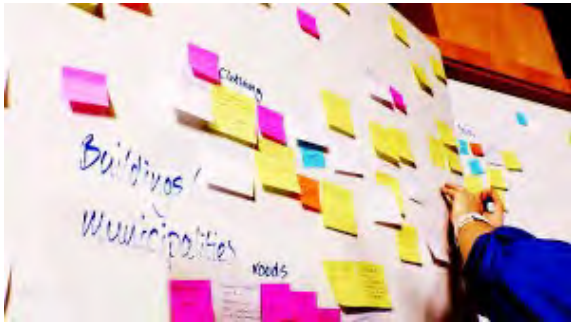
To celebrate this milestone, NASA's Universe of Learning invites informal educators, museum staff, and community science leaders to explore the new **30 Years of Exoplanets facilitator guide**. This story-first resource brings the science of exoplanets to life through interactive tools, visuals, and adaptable learning activities.

Educators can explore:

- A narrative journey through 30 years of exoplanet discovery
- Ready-to-use activities like *DIY Planet Search* and *Exoplanet Trading Cards*
- Visuals from Webb, Hubble, and the Exoplanet Travel Bureau

Looking for more out-of-this-world resources? Visit [NASA's Universe of Learning website](#) to find ways to connect with the science of NASA astrophysics.

## Featured PBS Learning Media Picks



### Organizing for Innovation

Provide students with an opportunity to investigate how engineers overcame challenges to meet certain criteria when they were designing a Double Dutch machine and see the benefit of having multiple perspectives on a team when solving a complex problem.

[Explore](#)



### Nature Works - To Make Clean Energy

Explore where our energy comes from, what makes certain types of energy renewable and

sustainable, and what makes a good environment for harnessing sustainable power.

[Explore](#)

### A Super Duper Wombat Whirligig



Explore the design process through an animated story and a hands-on activity in this lesson from Work It Out Wombats! The design process is a foundational engineering and computational thinking (CT) skill used when creating something like a work of art or an invention.

[Explore](#)

## Pathways, Girls Who Code's Free, Virtual Summer Program



[Pathways](#) is Girls Who Code's free, virtual summer program for high school girls and nonbinary students to explore tech, build in-demand skills, and create projects that make a difference—no experience required!





Over seven weeks of flexible learning (June 29-August 14, 2026), students can choose from courses like AI, cybersecurity, game design, data science, and web development, while connecting with peers and industry mentors.

The Pathways application is now open! 📄 Apply by February 25 for priority consideration; applications close April 10.

[APPLY TODAY](#) 🚀

## Teaching Position Open in Worthington City Schools

- **Technology Education Teaching Position** for the 2026 - 2027 School Year
- JobID: 3171
- **Position Type:** HIGH SCHOOL TEACHING/ Industrial-Technology Education
- Date Posted: 1/16/2026
- **Location:** Worthington Kilbourne High School
- Date Available: 08/17/2026
- Closing Date: 01/23/2026
- License: Industrial Technology or Technology Education License is preferred for this position. If this license is not held, must be willing to obtain a Technology Education Licensure from ODE. This is a 3-year pathway to obtain the required Technology Education License.

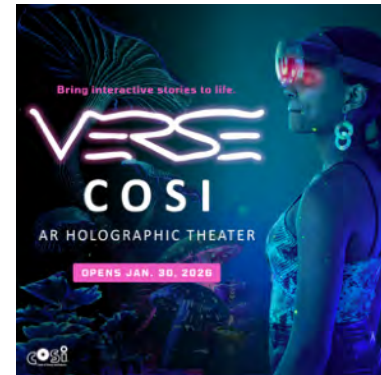
[More info at Teach In Worthington](#)

## The Circuit: News From COSI

**JUST ANNOUNCED! A new kind of experience is coming to COSI January 30th!**

Meet Verse COSI, an immersive augmented experience which puts you at the center of an engaging story, a story where YOU are the main character. Guests can walk around wearing fully transparent glasses that allow you to see and interact with 3D characters, vibrant worlds, and engaging storylines. It's not virtual reality. It's augmented reality! That means you stay connected to the real world while the story comes

to life around you. Tickets for Verse COSI go on sale Friday, January 23.



**Mark your calendars! COSI Science Festival is back this year from April 29 - May 2, 2026!**

There several ways you can participate! Join us as a guest at any of our many community events from April 29 through May 1. Join us for our Big Science Celebration May 2, onsite at COSI. Apply to host a community event. Apply to be an exhibitor at the Big Science Celebration. Nominate a STEAM Star!

[Read more](#)

## Ohio Energy Project News and Updates



### New! Student Question of the Month!

We're excited to launch our Student Question of the Month—a new way to spark curiosity and connect classroom learning to real-world energy, STEM, and careers in energy.

Each month, we'll select a student-submitted question and answer it in a short, engaging video shared on our social media channels. Questions can be about anything from how electricity gets to our homes to careers in energy or how energy impacts the environment.

## How Teachers Can Participate:

Invite your students to submit their questions and send them to [roseanna.vasquez@ohioenergy.org](mailto:roseanna.vasquez@ohioenergy.org). You're welcome to submit one question or a few from your class.

Be sure to follow Ohio Energy Project on social media to see if your students' questions are selected—and students can also submit questions directly through our upcoming social media posts.

Thank you for helping us encourage curiosity, critical thinking, and student voice. We can't wait to see what your students are wondering about!

## Lego League Jr. 2026

The Ohio State College of Engineering CARE Office's Outreach and Engagement team is working with an excellent student organization, Lambda Psi, to present "Lego League Jr.". Students 6-10 years old will get the opportunity to be mentored by Ohio State engineering students as they build a Lego kit in teams and work through the engineering process. This free program will be held at Northland High School every Saturday from 2/7-3/7, 10am-12:30pm. Snacks will be provided. Please note that a parent or guardian must be in attendance with their child throughout the entirety of the program. Spots are limited, so be sure to register by January 30th to reserve your child's spot!

Click the link to register: [www.go.osu.edu/legoleagueregistration2026](https://www.go.osu.edu/legoleagueregistration2026)

We are also offering this opportunity to high school volunteers looking for skill development in teaching, mentorship, and project management while fulfilling service hours. High schoolers will assist the OSU engineering students and are required to attend volunteer training at Ohio State University on January 30th.

Click the link to sign up as a high school volunteer: <https://forms.office.com/r/rPPLe7tCaV>

[Read more from the newsletter](#)

## CARE OFFICE & LAMBDA PSI Lego League Jr.

HELP US INTRODUCE STEM TO CHILDREN  
THROUGH A SHARED LOVE OF LEGOS

Sign Up Below



Volunteer Training will  
be 1/30 from 5-7pm

Scott E 100

Food will be  
provided!

Every Saturday (2/7 - 3/7)  
(10am - 1pm)

Northland Highschool  
"Rides Provided"

The Ohio State Chapter of Lambda Psi Engineering Honorary  
**Children's Event!** <https://go.osu.edu/legoleague26registration>

## Lego League Jr.

Our program introduces STEM to children through a shared love of LEGOs.



<b>Location:</b> Northland High School	<b>Time Commitment:</b> 10 AM - 12:30 PM Every Saturday (2/7 - 3/7)
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Join the Ohio State CARE Office & Lambda Psi Minority Engineering Honorary for Lego League Jr! Help introduce a love of science and engineering to your student through LEGOs guided by practicing engineers. Please contact Melissa Parris at [parris.47@osu.edu](mailto:parris.47@osu.edu) or Nia Johnson at [johnson.7353@osu.edu](mailto:johnson.7353@osu.edu) with any questions.

**All participants are required to have at least one parent/guardian present throughout the entire duration of each session.**



## Ohio Fuel Cell and Hydrogen Coalition

[Read the January 9 OFCHC Global Spotlight here](#)

## The STEM Pulse

The January 9 edition is out with news, funding and event information. Also includes a link to the monthly STEM Talk podcast.

[Read the January 9 issue.](#)

## Do You Have Everything You Need for Engineers Week?



Engineers Week (February 22-28, 2026) is more than a week-long celebration of a profession- it's a movement to show young people that engineering is creative, collaborative, and most importantly, open to everyone.

This year's theme, Transform Your Future, is a powerful reminder that engineering doesn't just shape our world- it shapes our opportunities, our communities, and the futures we can imagine for ourselves and our children.

Learn more! [Join our next webinar on January 28](#) to explore how to celebrate engineers and inspire the next generation and visit our [Engineers Week webpage](#) for free downloadable resources.

## Finding Rube Goldberg A Granddaughter's Journey

Join a lively online conversation with our Creative Director, Jennifer George. Two consecutive Wednesdays, January 28th and February 4th at 4pm EST.

A poster for the "Finding Rube Goldberg A Granddaughter's Journey" event. It features a collage of Rube Goldberg's inventions and a photo of Jennifer George. The text includes "92Y Roundtable Presents", "Join Jennifer George for a two-part conversation about her grandfather, the art that made him an adjective, and his enduring legacy of invention.", "Wednesday Jan 28 &amp; Feb 4 4-5pm, Eastern", and a registration box with the code "RUBE50" for 50% off enrollment.

[Register here](#) 50% off code; RUBE50

## Work Progresses on \$13M Multipurpose Center in Ohio

Construction is progressing on The Bridge, a \$13 million multipurpose education, health and community center at Bridgeport High School in Ohio. The new building is designed with a focus on career readiness, offering students from elementary through high school a range of programs to build awareness and foundational skills. The curriculum includes career exploration at the middle school level and guidance to help upper-level students make informed career choices, ensuring graduates are prepared to pursue various career pathways.

Full Story: [WTOV-TV \(Steubenville, Ohio\)](#) (1/12)

## Interesting Facts

- [The Secrets Behind 5 Optical Illusions](#)

## Ohio Pitch Challenge - Video Submissions Now Open



It's time to begin submitting your students' pitch videos for the 2026 Ohio Pitch Challenge! The submission deadline is **March 2, 2026**.

There are two ways to enter. To get started with either submission option, create an account in our submission portal and select whether you are entering as a student or an educator:

### 1. Individual Student Submission

If your students have access to a computer, they may upload their video submissions themselves. If you would like to confirm which students have submitted, please contact [mdwilson@us.edu](mailto:mdwilson@us.edu) after you have provided your students with a specific classroom deadline.

### 2. Classroom Submission

If you prefer to collect and submit all videos on behalf of your students, you may do so using the official submission template. Please complete one line per video and be sure to include:

- The names of all students featured in the video
- A completed permission form for each student

The submission template can be found [here](#) and in the submission portal. Permission forms are also available for download [here](#).

### [Submission Portal](#)

Learn more about the contest rules, prizes and judging rubric on the main Ohio Pitch Challenge website.

### [Visit the Website](#)

# MOTT

## MILLION DOLLAR CHALLENGE

A Pitch Competition for Kids and Teens

### Special Note

This year, all Ohio Pitch Challenge entries will automatically be entered into the **Mott Million Dollar Challenge**. You can learn more about this opportunity at [mottmillion.org](http://mottmillion.org).

This is a great opportunity for your students to be eligible for prizes through both competitions.

### OETC TEE Sessions

Engineering on a Budget: Low-Tech Making with High-Impact Results

STEM & Computer Science Practical Classroom Practices

Tuesday, February 10, 12:00 PM – 1:30 PM

Also

Thursday, February 12, 8:00 AM – 9:30 AM

Exhibit Hall Sandbox Area

Description

Discover how to transform your classroom into a hub of innovation without breaking the bank. In this hands-on sandbox, educators will explore the synergy between MakeDo cardboard construction tools and 3Doodler printing pens. Learn how to combine upcycled materials with handheld 3D printing and simple cardboard construction to

teach rapid prototyping, spatial reasoning, and the engineering design process. Whether you are looking to enhance a dedicated Makerspace or simply add a STEAM station to your homeroom, join us to build, test, and brainstorm curriculum connections.

#### Speaker

- Tad Douce, River Valley Local Schools, Director of Educational Technology and Communication



There is still time to register for OETC 2026!

Get ready to connect, learn, and be inspired at OETC 2026, happening February 10–12, 2026, at the Columbus Convention Center in Columbus, Ohio. Serving the entire P–20 EdTech community, OETC brings together educators, IT professionals, leaders, and library/media specialists to explore the latest innovations in educational technology. This is your chance to gain fresh ideas, collaborate with peers, and discover new ways to ensure access and foster meaningful learning through technology.

[View the schedule](#) and don't miss your opportunity to be part of a dynamic community shaping the future of education!

[Register Now!](#)

## ITEEA News



**Join Hundreds of Technology and Engineering Educators in Virginia Beach — Save with Preregistration Rates Until February 20th!**

**Full programming coming soon!** Access the largest community of technology and engineering educators in the world to network and learn from one another. Connect with decision-makers and innovators shaping the future of STEM Education. Preregistration offers significant savings as well as the assurance that your spot will be reserved for high-demand sessions and workshops.

[Register now!](#)

If you're looking for fresh ideas, hands-on learning, and meaningful connections, **this is the place to be.**

[Explore What's New for 2026](#)

### Group Membership

The new ITEEA group membership flyer is at the end of this newsletter.

## Empire Builders: the Rise and Fall of the Rust Belt - Boom to Bust

The age of the motorized vehicle brings a new way of transportation, and with it a new way of working. Mass production would help seal the victory in the Second World War, and a former Ford assembly-line worker named Berry Gordy uses his knowledge to create one of the most influential music scenes of all time: Motown Records and its stable of talented musicians.

[Watch on YouTube](#)



## Interesting Engineering

- [World's first 361-foot fully recyclable wind turbine blade unveiled in China](#) – The MySE23X blade uses pultruded carbon fiber panels, which are much stronger and lighter than standard fiberglass.

## 2026 Central Ohio STEM Expo

February 28, 2026

The Point at Otterbein University



Get Ready for a Fun Filled Day of Knowledge and Exploration!

The Central Ohio STEM Expo is a free educational outreach event for students in Kindergarten through 8th grade that will feature fun, interactive activities and exhibits in the Science, Technology, Engineering and Math fields.

[Read more and register](#)

## Computer Science Teachers Association News

### AI in Action Series

Discover practical, classroom-ready strategies from experienced educators as they share approaches aligned with the [CSTA AI priorities](#). This multi-part series highlights a different focus area in each session, offering guidance across grade levels and subject areas. You'll learn how to integrate new tools and practices, build literacy and ethical understanding into your curriculum, and explore proven, ready-to-use lessons. Whether you're new to the topic or looking to deepen your practice, you'll leave with actionable ideas and resources you can implement right away.

During our Jan. 29 session, we'll have breakouts on the following topics:

- Strategies for Critical Thinking in the Age of AI, presented by Tim Swick
- AI Isn't Magic: Making Representation and Reasoning Visible Across Classrooms, presented by Tamar McPherson
- Equity and Access: Bias and Selecting Data Sets, presented by Chris Jacob
- Beyond the Algorithm: How AI Is Transforming Society, presented by Dan Jones.

### Winter Online PD Sessions Now Open

We designed these [online professional development courses](#) to provide a flexible, deep learning experience that you can complete at your own pace. Course content includes meaningful and interactive activities focused on application to your CS classroom — you'll do a lot more than just read and watch. Plus, you'll experience asynchronous collaboration with other CS educators as you both give and get feedback and exchange ideas.

Courses include:

- Add-Ons to Boost Equity and Inclusion for Your CS Curriculum (4 hours)
- Fostering a Sense of Belonging in Your CS Classroom (4 hours)
- Teaching Security: The Security Mindset (4 hours)
- Using Data to Improve Diverse Participation in CS (6 hours)
- Women in CS: Understanding the Impacts, Disparities and Their Voices (5 hours)
- Identity Inclusion for K-12 Computer Science Educators (12 hours)
- Why Teach Programming with GenAI? (6 hours)
- Empowering CS: Resources for New Teachers (3 hours)

## Manufacturing USA's 2025 Year-in-Review

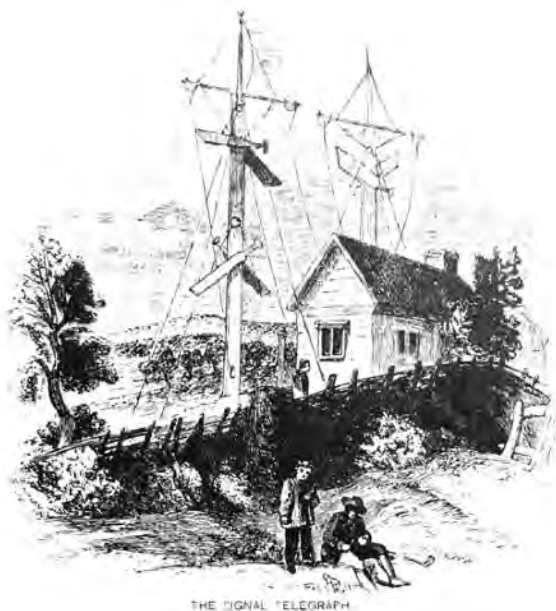
Following our milestone ten-year anniversary, 2025 was a year of continued innovation, engagement, and improvement experienced by the advanced manufacturing network and beyond.

[Read the notable highlights from 2025](#)

## How the Telegraph Went From Semaphore to Communication Game Changer

[Smithsonian Magazine](#)

Samuel Morse was an artist by trade, but to the world he's best known for connecting the dots — and dashes— that forever changed the way we communicate.



The wondrous information and communication technologies that define our age have their origins in some of the most basic of scientific principles and were first manifest in the 18th century electric telegraph. But that too had a precedent. Originally, the word “telegraph” —literally “to write at a distance”— referred to a relay communication system developed in 18th-century France by the Brothers Chappe. The Chappe semaphore telegraph consisted of a series of towers topped

with three rotating arms or panels that could be moved into nearly 200 standard positions, each assigned a unique value or meaning. Messages could be relayed across vast distances by transmitting from one tower or hill (hence, “Telegraph Hill”) to another up to 15 miles away; operators used telescopes to observe and decode the message before doing the hard work of cranking their own semaphore panels into place to relay the message further down the line.

[Read more](#)

## The Kid Should See This

[The Kid Should See This](#)

Smart videos for curious minds of all ages

Here are some selected videos.

- [How to build a colorful ice igloo, a time-lapse and tutorial](#)
- [What do you do if you fall through thin ice?](#)

## STEM Is Elementary

# STEM

## IS ELEMENTARY

In honor of the parents, educators, administrators, program leaders, mentors, and peers who dedicate their life's work to supporting and inspiring young innovators and changemakers, we proudly dedicate the January issue of STEM is Elementary to you.



The January issue of STEM is Elementary is [available here](#).



## This Week's Technology Tips

### Achieving a Silky Smooth Finish

#### [Woodworkers Guild of America](#)

How do you get a super smooth finish on your projects? First, by understanding the physics of what makes a smooth finish. When light hits your project it will “fall” into any depressions that you have in the material. This doesn’t necessarily mean you have defects in the wood. It’s simply the nature of wood. It has grain, and the grain naturally has high and low spots. Rob does a great job in this video showing us how grain and light interact.

#### [Watch video](#)



### ITEEA Tech Tool of the Month

Genially is a powerful, interactive content-creation platform that lets STEM and engineering teachers turn ordinary lessons into dynamic, engaging experiences. With Genially, you can build animated presentations, interactive diagrams, clickable simulations, escape rooms, infographics, and gamified activities—all without needing advanced design or coding skills. It’s perfect for engineering classrooms where visualizing processes, systems, and data is key, and it allows students to explore content at their own pace through interactive elements like pop-ups, hotspots, and embedded videos. Best of all, Genially offers a robust free version, making it easy to start creating professional-quality, high-impact learning materials without any upfront cost.

[Click here to learn more.](#)



“Engineering is achieving function while avoiding failure.” – Henry Petroski



*Grow Your Professional Learning Network  
with an ITEEA 2025-2026  
Group Membership!*



## MEMBERSHIP MAKES A DIFFERENCE!

**Purchase an ITEEA Group membership now to gain access to  
valuable member benefits at an annual rate of \$260!**

**ITEEA OFFERS GROUP MEMBERSHIPS FOR ELEMENTARY, MIDDLE, AND HIGH  
SCHOOLS THROUGH WHICH YOUR TEAM OF PROFESSIONALS CAN BENEFIT FROM:**

- Complimentary electronic subscription to [Technology and Engineering Education \(TEE\)](#), ITEEA's flagship publication (\$70 value).
- Discounted registration to [ITEEA Conferences](#).
- Eligibility for [ITEEA awards, scholarships, and other recognition](#).
- Discounted ITEEA publications and products.
- Discounted [Professional Learning byDesign \(PLbD\)](#) trainings and workshops.
- Discounted professional liability insurance, with rates as low as \$108/year for \$1 million in liability protection, \$60,000 of life insurance at no cost for one full year for new members, and further savings on additional [insurance programs](#) through the [Trust for Insuring Educators \(TIE\)](#).
- Free registration for year-round members-only engagement opportunities such as [Educator Xchanges](#).
- Free school position advertising on the [Career Connections](#) page of the ITEEA website for up to three months (\$350 value), plus promotion on ITEEA's News Feed and/or Social Media.

***LEARN MORE AND JOIN TODAY!***

**[WWW.ITEEA.ORG/GROUP-MEMBERSHIP](http://WWW.ITEEA.ORG/GROUP-MEMBERSHIP)**



**All group memberships commence July 1 and conclude on June 30 of the following year.**

*The International Technology and Engineering Educators Association  
[www.iteea.org](http://www.iteea.org)*



2026 EECO Winter  
Conference:  
Creative Ways to Teach  
STEAM in Winter  
**Winter Snow**

Full Conference (2 meals, snacks and  
lodging included)

Member: \$60

Non-member: \$95

**Student: \$30**

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Saturday only (2 meals & snacks  
included)

Member: \$45

Non-member: \$80

**Student: \$15**

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*A new facilitator training for this year!*

Project WET Facilitator Training : Friday  
and Saturday (4 meals, snacks, lodging  
and materials included) : **\$95**

*College credit and contact hour  
certificates available!*

*Spread the word :)*

Registration Deadline Jan. 28th