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2025 **News,
Resources,
& Notes**



OHIO EDUCATOR SUMMIT

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Upcoming Events:

1. [Ohio Educator Summit/OTEEA](#) Conference, Wednesday, October 22, 2025, River Valley High School, Caledonia
2. [ITEEA Fall Forum](#), November 5 & 6, 2025, Online
3. [ITEEA Annual Conference](#), March 25-28, 2026. Virginia Beach

OTEEA webinars
[online archive](#)

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

STEM is Elementary
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The Ohio Technology Summit Registration Open

The Ohio Technology and Engineering Educators Association (OTEEA) is hosting the 2025 [Ohio Educator Summit](#) on **Wednesday**, October 18th, in cooperation with River Valley Local Schools at River Valley High School. If you teach classes in nearly any area of technology, you will find a session that applies to your curriculum.

Registration is now open at the [Ohio Educator Summit](#) website, click on the Attend tab. The early bird rate is available until October 10. OTEEA members get 25% off using the promo code OTEEA.

Mr. Roy Hall, Jr. will be joining us as our keynote speaker at our 2025 event. He is a high-energy keynote speaker with over 15 years of experience helping people ignite purpose, elevate performance, and disrupt mediocrity.

Some selected session topics, more are on the website including several on AI uses.

Practical 3D Design with TinkerCad and Steve w/ the Blue Shoe - Andy Limbert, St. Brendan School

Explanation of a multi-step project using real world measurements, translated to 3-Dimensional design for practical purposes. Students are challenged to use measurement and math principals both physically and virtually. 3D Printing, Laser Engraving and Augmented Reality can all be employed.

3D Printing, CNC, and other Tools Meet Up - Paul Post, OTEEA

An opportunity for participants to share what works and questions about technology and engineering education tools with each other.

What would you do? Challenging Scenarios for Educators - Travis Stout, River Valley Local Schools

A discussion surrounding tips and tricks for dealing with modern-day educational challenges. Challenging scenarios will be presented and discussed, with suggested strategies from a high school principal on how to navigate these ever changing times within our educational environment.

Increasing Student Engagement Through Audio/Visual Projects - Ben Thompson, River Valley Local Schools

You will see practical examples of what it looks like to use a cell phone and a microphone (even earbuds with a built in mic) to allow students to show their knowledge and explore their creativity through recorded media. You will also have time to brainstorm with other instructors about how this strategy could be implemented in your classroom.

From Pages to Prototypes: Storybook STEAM Across Grades - Aubree Horning, Marlinton Local Schools

What happens when a picture book becomes a blueprint for invention? Or when a novel inspires an immersive theme park? In this session, we'll explore how stories can launch hands-on STEAM projects across all grade levels—from kindergartners sketching and building playful prototypes to high schoolers designing large-scale experiences rooted in literary units. Together we'll look at ways to merge literacy with creativity, engineering, and design thinking. Expect to leave with a toolkit of ideas and a spark of curiosity, ready to reimagine how reading can lead to making, building, and inventing in your classroom.

Canva - The Tool That Can Do Everything! - Kristie Hughes, NWOCA

Have you heard all the buzz over Canva but don't know where to start? This session will showcase how to create visually appealing and engaging classroom materials with Canva. Come to this session to see all the magic.

Back to School With Discover Engineering

Educators from across the country recently joined us for Back to School with Discover Engineering, an interactive webinar that showcased practical ways to bring engineering into the classroom.

The session introduced teachers to classroom-ready resources—including [hands-on engineering activities](#), [demonstration videos](#), and [career profiles](#)—that make it easier than ever to connect students with real-world problem-solving.

[Read more and watch](#)

26-27 ExCITE Grant Cohort Application Is Open

Project ExCITE is an NSF-funded partnership between the International Technology and Engineering Educators Association (ITEEA), Hofstra University and North Carolina State University to develop a professional development program to help prepare the nation's high school Technology and Engineering teachers to teach a College Board Advanced Placement level one-year Computer Science Principles (AP-CSP) course.

ExCITE II is recruiting high school Technology & Engineering Education (T&E) teachers in all 50 states who will deliver the ExCITE AP-CSP byDesign course within their Technology and Engineering Education classrooms and labs during the next school year (26-27).

Teacher Benefits:

- Kits: One full class set of computer control/robotics materials (one kit for two students) that will become the property of the school district at the conclusion of the project (\$2800 value).
- A stipend of \$2000, with \$1000 paid in September and another \$1000 paid upon receipt of the final project research notes at the end of the school year paid directly to the teacher.



- Reimbursement for all travel costs, meals, and accommodations.
- ITEEA Membership: 1-year membership at no cost.
- Certified as a College Board AP Teacher
- CEUs: Qualify for 90 Hours of Continuing Education Credit

[Check out the Video & Flyer Here](#)

Engineering & Technology Videos at PBS

Discover resources and projects that connect students to engineering design practices and future careers.

[View resource](#)

CTE Momentum: Your AI Horizons Challenge

The Your AI Horizons Challenge is a nationwide challenge inspiring high school students to envision AI-driven careers. The U.S. Department of Education invites high schools to propose AI solutions that reimagine traditional ways of working. Through this challenge, students will explore artificial intelligence's impact on industries and their future careers.

[Learn more about the challenge](#)

The CTE Momentum challenges have already inspired hundreds of students across the country with fun, career-connected learning. Curious about how teams have approached past challenges? Check out the winners of the [Your Place in Space Challenge](#) and [Power Your Future Challenge](#). They worked with their teachers to propose some incredible, innovative solutions while learning about how their CTE skills set them up for successful careers.

As a reminder, you can find more information and resources for the Your AI Horizons Challenge on the [about](#) and [resources](#) pages. Submissions are due on November 19 at 6:00 p.m E.T.

[Register here!](#)

#STEMmovesOhio Design Challenge

Each year, the Ohio STEM Learning Network issues a design challenge that any Ohio classroom can join. Students form teams, research a real community need, and prototype solutions for regional and state showcases. The 2025-26 challenge asks students to improve electric transportation across the state.

[Read more](#)

2025-2026 Student Video Contest Is Open!



The wait is over—our Population Education program's *World of 8 Billion* student video contest has officially opened for the 2025-2026 school year. We're inviting students in grades 6 through 12 (and international equivalents) to take on the challenge of creating a short video that connects population growth with one of today's most pressing global issues.

This year, participants will choose from three important topics: Energy, Wetlands, or Economics. The contest encourages students to research and understand these challenges and think critically and creatively about how to address them.

[Read more](#)



Your Wait Is Over!



We are incredibly excited to announce the release of the 2026 National Robotics Challenge Contest Manual. 2026 marks our fortieth anniversary as a robotics competition, and we hope you and your students will join us to participate in and celebrate this milestone!

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

Technology and Engineering Education News and Resources

Activities, Contests, Student Opportunities, and New Technologies

can find a competition for each of your students, regardless of their experience.

Visit www.thenrc.org/contest-manual to download your copy of the 2026 Contest Manual. Let the building begin!

Nominate Ohio's Excellent Technology and Engineering Programs and Teachers!

OTEEA is an ITEEA affiliate association so we choose the award winners. You can use the nomination form linked below and on the websites. If you have question contact [Paul E. Post](#). Although the nomination form may say self-nomination you can also use it to nominate someone else filling in as much as you can. You are doing great things with your students and know others also doing great things. Please nominate them or yourself!

Program Excellence Award

Recognizing technology and engineering education programs that model excellence and serve as inspiration to others.

Awarded by ITEEA and sponsored by Paxton/Patterson for decades, The Program Excellence Award is one of the highest honors given to technology and engineering education programs at the elementary, middle, and high school levels and is presented in recognition of outstanding contributions to the profession and their students.

[Read more](#)

[Program Excellence \(PE\) Nomination Form](#)

Teacher Excellence Award

Recognizing classroom teachers for outstanding contributions to technology and engineering education.

Awarded by ITEEA and sponsored by Goodheart-Willcox for decades, the Teacher Excellence Award is one of the highest honors given to technology and engineering education classroom teachers at the elementary, middle, and high school levels and is presented in recognition of outstanding contributions to the profession and their students.

[Read more](#)

[Teacher Excellence \(TE\) Nomination Form](#)



Why It Matters:

Teaching is its own reward—but being recognized by your peers? That's next level. ITEEA makes it easy to spotlight the impact educators and programs are making every day.

Opportunities:

- Program & Teacher Excellence Awards – Honoring standout K-12 programs and educators worldwide. See Above.
- Distinguished Technology and Engineering Educator & Emerging Leader Recognitions –

Prestigious recognition for experienced and rising professionals.

- Special Recognition Awards – Celebrating changemakers in the field.
- Scholarships & Citations – Supporting future and current educators in Technology & Engineering Education.
- STEM School of Excellence - Apply to showcase your school's integrative STEM program and inspire others!




Deadlines:

- Most nominations due November 1, 2025
- STEM School of Excellence applications due December 5, 2025



Be Celebrated at ITEEA 2026!

Awardees will be honored at our [88th Annual Conference](#) in Virginia Beach, March 25–28, 2026.

 [Nominate or Apply Now](#) – All criteria and deadlines are outlined on each award page.

[EXPLORE ALL AWARDS AND SCHOLARSHIP OPPORTUNITIES](#)

The Art of Tinkering in STEM Education

What if taking things apart could spark a new way of thinking? Tinkering gives children a new pathway to explore what's possible when they bring an idea to fruition through intrinsic, hands-on experimentation. The shift toward project-based and self-directed learning in education is tied to building a foundation of essential life skills, from problem solving and critical thinking to creativity and collaboration.

Could tinkering be the link to enhancing educational experiences? Tactile learning brings everyday science and engineering to life in ways that engage learners. So, how can educators facilitate more exploratory learning experiences? It's simpler than we think. [Read on](#) to discover how students benefit from the art of tinkering.

LIVE Soybean Harvesting Virtual Field Trip



Tuesday, Oct. 14 @ 1 p.m. Eastern

Ohio Soybean Council and GrowNexGen invite classrooms of all ages to ride along with an Ohio soybean farmer on **a LIVE harvesting virtual field trip** at 1 p.m. Eastern on Oct. 14!

This 30-45-minute trip will connect classrooms directly with Ohio soybean farmers Adele and Eric Flynn for a live ride-along in a combine as they harvest soybeans. Students will learn how a combine works, what happens to soybeans after they are harvested, and the many uses for soybeans in our everyday lives.

From the comfort of your own classroom, you and your students will:

- Get a live video tour of soybean fields and ride in a combine during harvest
- Learn how a combine works and how grain is stored in and transported through an elevator
- Ask questions directly to a farmer about harvesting, soybean uses and management
- Discover the uses and benefits of Ohio soybeans
- Understand the challenges farmers face and the decisions they must make
- Find out about the variety of careers available for STEM students in agriculture
- and much more!

[Click or Tap Here to Register for this Virtual Field Trip!](#)

NEO:STEM Now Newsletter



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 here](#)

TECHCORPShack

Collaborate. Create. Compete. Sign up today!



This year, 400 high school students in Cleveland, Columbus, and Elyria will have the opportunity to compete in our seventh TECHCORPShack. The TECH CORPS Hackathon is a high-energy, full-day event where high school students team up to tackle real-world challenges using the latest technology. Students unleash their creativity, learn new skills, compete for cash prizes, and build lasting connections with peers and mentors. Students can register now to join the competition. We're also recruiting volunteers to serve as tech volunteers, judges, and guides. [Sign up](#) today to be part of this exciting event!

[Register Now](#)

ITEEA 2025 Fall Forum



At ITEEA's 2025 Fall Forum, you'll gain access to sessions designed to help you thrive with takeaways in:

- Leveraging artificial intelligence (AI) to streamline and transform your teaching
- Integrating innovative classroom activities and open-access resources to enhance student engagement
- Practical tips for advocating with policymakers and key messages to lead with for securing funding and navigating legislation..

These sessions are designed to empower you with ideas you can put into practice immediately.

Busy in November? You can view all sessions at your convenience for up to 90 days after the event!

👉 [View the Agenda](#) + [Register Now](#)

Advance CTE

[Advance CTE](#) has an archive of past webinars and upcoming events [listed here](#).

Credential Chaos: Career Certificates Boom in High School, but Not all Have Value [The74](#)

States want students to earn career certificates and licenses, but many earn credits employers don't seek.

[Read more](#)

2025-26 Fluid Power Action Challenge Season Is Open!



The 2025-26 [Fluid Power Action Challenge](#) (FPAC) season launched with NFPA's annual Organizer and Host meeting, which introduced the "[Fenced Drop Zone](#)" challenge. The FPAC is a STEM based design and build competition that challenges middle and high school students to solve engineering problems using fluid power (hydraulics and pneumatics). It also reinforces key life skills: collaboration, problem solving, time management, project management, and communication.

Multiple [FPACs have been scheduled](#) for the academic year; please review the events for one near you. If you are considering hosting an event, please visit our [Getting Started](#) page to learn more and explore our cost estimator example. James Foster, Workforce Program Manager (jfoster@nfpa.com) is happy to assist with questions.

Live Science Stories

[LiveScience](#)

[30,000-year-old 'personal toolkit' found in the Czech Republic](#) - Archaeologists have found an extraordinary cluster of Stone Age artifacts that may have been the personal gear of a single prehistoric individual.

The STEM Pulse

The September 26 edition is out with news, funding and event information.

[Read issue](#)

[Special Edition on their Convening](#)

2025 Cartoon Contest Winners!

[The Rube Goldberg Institute](#)

Congratulations to our winners. [Check out their Crazy Contraptions!](#)

Take the Macho Out of Mechanics Workshop



Learn from fellow farmers how to maintain and troubleshoot your farm equipment.

Saturday October 18 at Future Days Farm, Albany, Ohio

[Learn more and register](#)

News From Interesting Engineering

[Interesting Engineering](#)

[Solar-powered 'artificial plant' purifies radioactive soil by 95% in 20 days](#) – This technology is highly effective, drastically speeding up a process that would typically take many months.

[Japan's new plasma propulsion engine could deorbit space debris contact-free](#) – The new propulsion engine ejects two streams of plasma simultaneously.

The Kid Should See This

[The Kid Should See This](#)

Smart videos for curious minds of all ages

Here are some selected videos.

- [Can these RC LEGO vehicles climb a wall that keeps getting taller?](#)

An Indigenous-Led Solar Canoe Initiative Expands Across the Amazon

[Mongabay](#)

A solar-powered canoe initiative originally [launched in Ecuador's Amazon](#) in 2017 has now expanded to Indigenous coastal communities in Brazil, Peru, Suriname and the Solomon Islands. Researchers say the effort helps communities in tropical regions [reduce gasoline and diesel use](#), avoid road expansion and develop non-extractive income projects like tourism and forestry products businesses.

The [Kara Solar Foundation](#), an Indigenous-led team of engineers, communicators, social scientists and solar technicians, created the project after Indigenous Achuar people in the southeastern Ecuadorian Amazon expressed their vision to build a solar-powered boat. Tapiatpia, the first solar canoe, survived an 1,800-kilometer (1,118-mile) journey across several Amazonian rivers and safely returned to Achuar territory in 2017.

[Read more](#)

Futurity

[What Are the Risks of Geoengineering to Fight Climate Change?](#) – A hard look at geoengineering to fight climate change reveals global risks, researchers report.

[Smart Shoe Insert Could Up Mobility for People with Walking Issues](#) – A new smart shoe insert could improve mobility for people with walking problems, researchers report.

A New Book Explains the Delay in Hiring Women as Astronauts

Find out how NASA's astronaut selection process has evolved.



In her new book, [On a Mission: The Smithsonian History of US Women Astronauts](#), Valerie Neal confirms what we've known all along: Astronauts—whether men or women, civilian or military—are extremely high achievers, often earning multiple advanced degrees in science, engineering, medicine, or

mathematics. These accomplishments are considered requirements for the job, and yet NASA did not permit impressively credentialed women into the astronaut corps until 1978 (more than 15 years after [Alan Shepard](#) launched into space). [Sally Ride](#) became the first American woman in space on June 18, 1983. Since then, 60 more American women have traveled to space as astronauts. Neal, a curator emerita from the National Air and Space Museum, offers a culturally insightful history of the experiences of these women astronauts, the challenges they've faced, and their distinctive stories. Her book makes a convincing case for the full participation of women in space, so much so that they don't want to be referred to as "female astronauts" or "women astronauts." They don't consider themselves an astronaut subset—they are simply "astronauts." Neal was recently interviewed by Air & Space Quarterly's senior editor Diane Tedeschi.

[Read more](#)

Inside India's Astonishing Solar Revolution

In 2014, the world's second largest coal consumer made a bold promise: to increase its solar capacity from three gigawatts to 100 gigawatts in just eight years. Many people called it overly ambitious, but energy expert Kanika Chawla saw the opportunity of a lifetime. She tells the story of how India became a solar powerhouse, turning an expensive dream into an economic reality — and creating a model for other countries to follow suit.

[Watch TED Talk](#)

13 Formative Assessments That Inspire Creativity

Sometimes mixing in formative assessments that go a step beyond exit slips and low-stakes quizzes can inject some fun—and creativity—into learning.

[Read more](#)

Meet the Grit Freedom Chair



An interesting design, don't usually post sales info but the design may trigger some ideas...

Thousands of riders around the world use their GRIT Freedom Chairs to live more active lives—hiking on mountain trails, navigating sandy beaches, or just spending quality time with their family.

[Learn more](#)

October Is Manufacturing Month

Information from

- [The International Trade Administration](#)
- [Manufacturing Day](#) this Friday
- [The Ohio Manufacturers' Association](#)
- [Manufacturing USA](#)
- [US Census Bureau](#)
- [Learning Blade](#)



Did you know October is Manufacturing Month in the U.S.? This month shines a spotlight on the innovation, creativity, and career opportunities manufacturing brings to our world. [Learning Blade](#) (free to Ohio educators) helps students explore these exciting careers through hands-on, career-connected missions and lessons like:

- Beneath the Waves, Building Submarines:
 - Safety in Metalworking
 - Wonderful World of Welding
 - Powering the Deep
- Car Manufacturing:
 - Assemble Something Different
 - Meeting Demand
 - Communication in Manufacturing
- Lightweight Aircraft:
 - Quality Assurance
 - The Cost of Design
 - Modern Machining Technology

Kick off Manufacturing Month by inspiring students to imagine their future in manufacturing!

ESC of Central Ohio Tech Talk Tuesdays

Starting Oct. 7

Join us for a dynamic four-part virtual workshop series designed to strengthen and expand career-

based instruction across K-12. Tech Talk Tuesdays brings together administrators, teachers, CTE instructors, college and career counselors, career support staff, and industry partners to explore innovative practices and emerging trends that prepare students for success beyond the classroom.

[Read more](#)

STEM Is Elementary



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

Innovation Insider



There is so much going on in the youth innovation space, the [Innovation Insider](#) will keep you up to date on some of the best of it!

Sign up to receive this monthly share of youth innovation from around the world: [Sign up for Innovation Insider](#)

New! You can now listen to every article in Innovation Insider!

Starting May 2025, we've added audio commentary using NotebookLM by Google to make stories more accessible for the visually impaired and more convenient for anyone on the go. Innovation should include everyone.



1. The Outreach group is looking for more members!
2. Have a story or pictures to share that tell about your program or

students?
Let us know!

3. The webinar has been discontinued. Archived webinars can be [viewed at online](#).

4. What OTEEA programming would you like to see?

Contact [Paul Post](#)

“Time waste differs from material waste in that there can be no salvage. The easiest of all wastes and the hardest to correct is the waste of time, because wasted time does not litter the floor like wasted material.”
— Henry Ford

This Week's Technology Tip

What every button on your iPhone can do (including hidden features)

[Popular Science](#)

If you own an iPhone 16 or an iPhone 17, you'll find different buttons around the sides of your smartphone. Older iPhones have fewer, depending on the model, but all of these buttons are multitaskers: They come with secondary functions as well as primary ones.



[Read more](#)

Similar for other phones

[Tips, Tricks & Shortcuts Every Samsung Owner Should Know](#)

[How To Use Google Pixel 10 Pro!](#)