Nov 12 2025

News, Resources, & Notes

this issue

News & Resources P.1

More News & Resources P.8

Outreach Notes P.20

Upcoming Events:

1. ITEEA Annual Conference, March 25-28, 2026. Virginia Beach
2. National Robotics Challenge, April 16-18, 2026. Marion
3. 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

OHIO EDUCATOR SUMMIT

The Ohio Technology and Engineering Educators Association (OTEEA) cohosted the 2025 Ohio Educator Summit on **Wednesday**, October 22nd, in cooperation with River Valley Local Schools at River Valley High School.

Mr. Roy Hall, Jr. was the keynote speaker and helped all see their importance in students lives. Spending time with students addressing their concerns, learning about their needs and wants, teaching them as whole persons has a big impact.

A number of sessions developed practical understanding of how AI can be used effectively in the classroom.

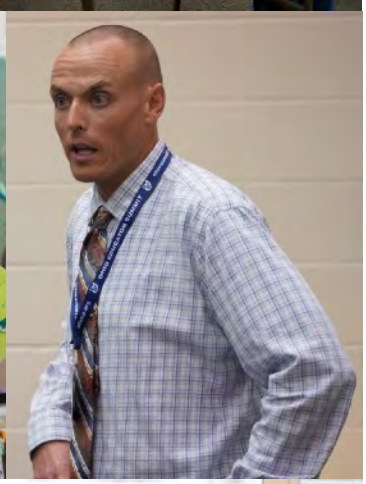
Andy Limbert from St. Brendan School presented on a multi-step project using real world measurements, translated to 3-Dimensional design for practical purposes. Students are challenged to use measurement and math principals both physically and virtually in developing a chair and a model person, Steve, to sit on the chair. 3D Printing, Laser Engraving and Augmented Reality can all be employed in the design and making processes.

AI Teacher Tools
Tiered Levels
Depth of Know
Level 5
Level 2
Level 1

BLEEDING CONTROL
BLEEDING CONTROL

What's New in Google Workspace

Marion

WHO CREATED


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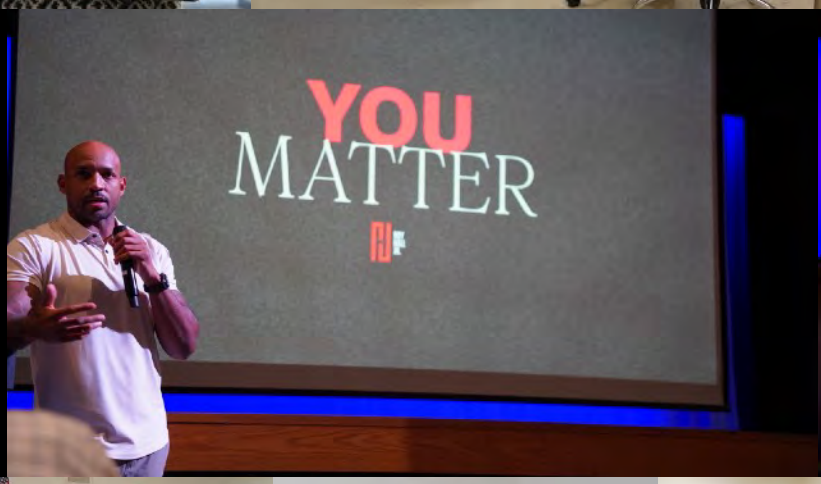

You
MATTER

THROWN TO
THE WOLVES:

Levi Brown from Riverdale Schools provided an opportunity for participants to share what works and questions about technology and engineering and construction education tools with each other. We also got to tour the River Valley HS and MS facilities and learn about their programs.

Falcon BEST Robotics Competition

BGSU | Falcon BEST

Coach Preview

Falcon BEST Robotics Competition

Saturday, Nov. 15

9:30 a.m. to 4:30 p.m.
BGSU Stroh Center
Free to attend

Come experience Falcon BEST, an annual robotics competition where creativity and engineering collide.

- Watch middle and high school teams put their hand-made robots to the test.
- Explore team exhibits and experience the excitement of a national STEM challenge.
- Discover how your students can participate next year completely free, with no cost for registration or materials.

Stay for an hour or the whole day. There's plenty to see!

Planning to attend? Simply email Paula Mlinar and let us know.

Fun Fact: Falcon BEST is free to attend and compete in. Each team receives complimentary materials kits – including a VEX V5 kit – so your students can focus on learning engineering and teamwork without financial barriers.

IFPS Fluid Power Support Associate

Since 1960, the International Fluid Power Society (IFPS) has provided an objective, third-party assessment of skill levels and knowledge for thousands of fluid power professionals, making it the industry standard for the fluid power and motion control industries.

International Fluid Power™ Society

In 2024, IFPS launched a Fluid Power Support Associate certificate. According to Donna Pollander, CEO of IFPS, the Fluid Power Support Associate Certification is the perfect starting point for those beginning their journey in the fluid power industry. Those who pass the certification test show that they are proficient in industry terminology, supply chain operations, basic fluid power principles and component functions, fluid properties, seal usage, and safety principles within the fluid power industry. Learn more here!

Educators are eligible to take their first IFPS certification exam for free. Learn more here!

Fluid Power Town Hall

Did you know that fluid power technology helps make things move—from airplane wings and construction equipment to theme park rides and electric vehicles? It's the driving force behind innovation in industries like aerospace, entertainment, transportation, and more.

Join the National Girls Collaborative Project's Youth Advisory Board and the National Fluid Power Association (NFPA) for an inspiring Town Hall featuring women in STEM who are shaping the future through fluid power technology. NGCP is a nationwide "network of networks" that works to inspire and empower youth—especially girls—to pursue STEM education and careers.

This event invites participants to explore how creativity, collaboration, and problem-solving fuel exciting STEM careers. Hear directly from three women at NFPA member companies as they share their journeys and insights during a panel discussion facilitated by members of the Youth Advisory Board.

Educators: Bring this real-world STEM experience to your classroom or after-school group! Encourage your students—especially those curious about engineering, technology, and innovation—to attend and discover the exciting possibilities within the fluid power industry.

Event Details:
Wednesday, December 3
6:00–7:00 PM CT
Virtual Event (Free to Attend)

Register Here to Attend! Please reach out to Haley Nemeth at hnemeth@nfpa.com with questions.

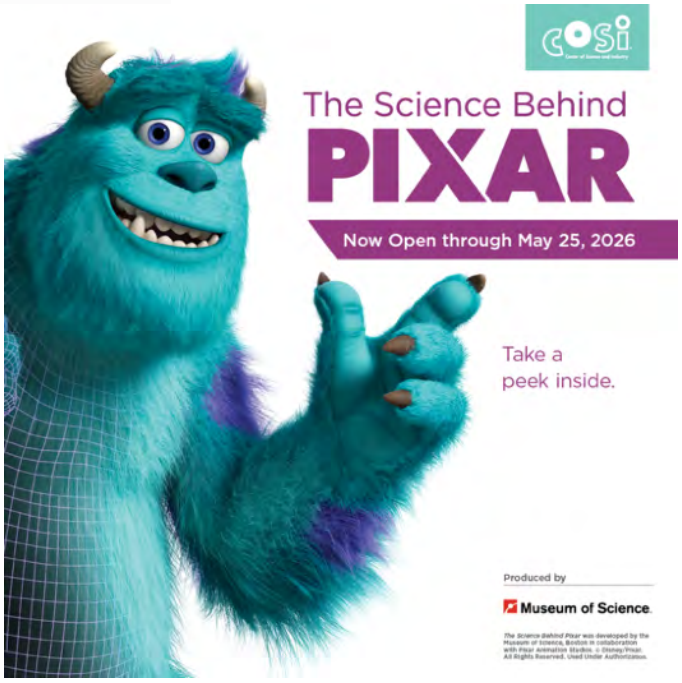
Fluid Power Scholarship Application Now Open

The NFPA Education and Technology Foundation is now accepting applications for $2,500 Fluid Power Scholarships available to students pursuing fluid power education. This scholarship is partially funded by generous donations to the Tom Wanke Legacy Fund. Multiple scholarships are available for the 2026-27 academic year. The deadline for applying is March 15, 2026, at 11:59 PM CDT.

A minimum 2.5 GPA on a 4.0 scale, 500-word essay, and one letter of recommendation are required from each applicant. The Foundation's goal is to help graduating high school seniors, and individuals enrolled at technical colleges, community colleges, and universities pursue their interests in fluid power.

Please share this information with your peers and encourage students to apply.

The Science Behind Pixar Is NOW OFFICIALLY OPEN at COSI!



The wait is over! You can now step into the world of your favorite films and explore the artistry, imagination, and cutting-edge science that bring Pixar stories to life. From hands-on activities and interactive displays to behind-the-scenes secrets of animation, this one-of-a-kind exhibition shows how math, science, and creativity combine to make movie magic for fans of all ages. ***The Science Behind Pixar* is NOW OPEN at COSI through May 25, 2026.**

Purchase your tickets! >>

Technology and Engineering Education News and Resources

Activities, Contests, Student Opportunities, and New Technologies

2025-26 Great Big Home and Garden Show Student Design Contest Update

I am pleased to announce that we are doing the contest again this year. I have linked a few different items here. Rubrics have been updated since last issue.
1) Rules and Regulations packet.
2) Rubrics, now with each section on its own page!
3) Civil plans in PDF form
4) Civil plans in .dwg form.

If you know of someone that may be interested, please forward this information on to them and have them reach out to me so I can get them added to our email list.

If you have any questions, let Erik Ward know.

'Grant'ing Greatness Engineering Program Receives Grant to Further 21st-Century Education

From one grant to another, the Hoover High School [HHS] Career Tech programs are setting their students up for success. After the state of Ohio awarded HHS with a total of 6.5 million dollars in grants out of their annual

Engineering teacher Mr. Todd Alkire speaks in the new welding lab as part of the Career Tech tour in August. The engineering classes are also under renovation NCCS

300 million dollar budget, the advancements made possible by the grants will help for generations to come.

The grant that Hoover engineering teacher, Mr. Todd Alkire, applied for

the Ohio Technical Equipment Grant which is “a funding initiative provided by the state of Ohio.”

Although Hoover already has an engineering program, through the 2.5 million dollar grant, it will be rebranded as an Engineering and Advanced Manufacturing program, which adds another element to the already impressive Engineering portion and allows for interested students to get more experience in that specific field.

Read more

Time Is Running Out To Be Part of ITEEA's 2026 STEM Showcase

The STEM Showcase is a high-energy exhibition of classroom innovations, creative strategies, and impactful practices. Whether you're a K-12 teacher, administrator, professor, or student, this is your moment to shine and inspire. Share one powerful highlight from your teaching or program in this conference highlight event. It's an excellent opportunity for first-time presenters to share their ideas in a casual and collaborative setting! Apply before the December 5 deadline!

Five Schools To Receive $50K for Innovation in Career Readiness

Interest form available for upcoming school funding prize and fellowship program

Building Hope has partnered with American Student Assistance to create the Future Forward Schools Prize and Fellowship Program, a new initiative that celebrates innovation in career exploration. The program is awarding $50,000, as well as resources and professional networks, to five schools nationwide that excel in career exploration beginning in middle school. Awardee schools will be recognized on a national scale for their innovation and can nominate two leaders each to join the Future Forward Fellowship.

All K-12 schools are eligible to enter, including districts, private schools, and community schools. Schools must be operational for two years prior to applying, and eligible programs must demonstrate proven impact and scalability. At least 50% of students served must come from underrepresented or under-resourced populations.

Applications will open in December and close Jan. 31. Interested schools can fill out the online interest form in the interim, or learn more about the program on the Building Hope website.

Register Before the December 5 Early-Bird Deadline and SAVE on ITEEA's 2026 Annual Conference

This is where your next great idea begins — don't miss your moment! At ITEEA 2026, you'll join a dynamic community of educators who are boldly reimagining technology, engineering, and STEM learning. Together, we'll explore what's next and uncover powerful new ways to inspire and empower every learner. Expect immediate classroom impact, authentic connections, immersive workshops, and the kind of vibrant energy that only Virginia Beach can deliver. New this year: A smarter schedule that puts the most engaging content in front of the biggest audiences — so you get more out of every session. **The Early-Bird deadline is December 5** — and it's coming fast. Lock in your discounted rate now and

secure your spot at the forefront of STEM education!

See the flyer at end of this newsletter.

Chats With Change Makers

Watch video

The STEM Pulse

The October 10 edition is out with news, funding and event information. Read issue

Read the October 24 issue.

Read the October 31 issue.

Read the November 7 issue.

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 October 17 Newsletter here

Read October 24 Newsletter here

Read October 31 Newsletter here

Read November 7 Newsletter here

STEM Playbook Returns to the Mahoning Valley

We're back — and doubling down on impact. Through our partnership with the **United Way of Youngstown and the Mahoning Valley**, STEM Playbook will lead after-school programs all school year at **Boardman Center Middle**, **Sebring McKinley Junior/Senior High**, and **Youngstown Community School**.

Last summer's pilot showed what's possible when learning meets play:

- **93% of students** said they want to pursue a STEM career
- **97%** used smart sports devices and wearable tech
- **70%** planned to use the skills they learned in their science and math classes

Now, we are bringing that same high-energy learning into the school year — giving students a season-long chance to explore how STEM shows up in sports, fitness, and future careers.

Read More

MedTech at AtriCure: BioPathways Virtual Visit

DATE: Friday, Nov. 21, 2025
TIME: 1 p.m. Eastern

Biology, AP Biology, Anatomy, Physiology, Physics, Chemistry, STEM & Career Tech teachers...

Show students how multiple science disciplines combine with engineering design in Ohio's thriving life sciences careers during **a LIVE 45-minute Virtual Visit on Nov. 21** to AtriCure's Mason, Ohio headquarters.

AtriCure's groundbreaking technologies reduce post-surgery pain and are transforming the treatment of irregular heartbeat (atrial fibrillation or Afib) and related conditions around the globe.

Read more

Engage Your Students With Engineering's Societal Impact!

Transform your classroom with ***Engineering in Action through Socially Relevant Contexts*** - a ready-to-launch online PDF toolkit that turns students into problem-solvers! Minimal prep, maximum impact.

This power-packed resource delivers:

- Hands-on activities that spark curiosity and deep engagement
- Standards-aligned lessons adaptable to your community's needs
- Career-readiness skills that employers demand

Perfect for educators seeking to electrify learning, meet STEM benchmarks, and cultivate tomorrow's innovators—without the headache of extensive planning.

ITEEA MEMBER PRICE: $40
NON-MEMBER PRICE: $48

IGNITE FUTURE ENGINEERS TODAY!

Reboot & Reimagine Ohio Educational Technology Conference (OETC) '26

OETC '26
OHIO EDUCATIONAL TECHNOLOGY CONFERENCE
FEBRUARY 10-12 | COLUMBUS, OH

Get ready to Reboot & Reimagine your approach to educational technology! Early Bird Registration for the Ohio Educational Technology Conference (OETC) '26 is officially open, offering you the best rates to join Ohio's premier ed-tech event. Taking place February 10-12, 2026, the conference is the essential gathering for P-20 educators, leaders, and technology specialists looking to explore the latest advancements, discover innovative tools, and connect with a vibrant community of professionals.

Read more

STEM Talk: 30-Minute, Monthly STEM Pulse Check

1st Thursday of the month from 12-12:30 EST

Register for NEXT STEM TALK | Dec. 4 at 12 PM

How To Listen To Past Episodes

The STEM Talk Podcast: The full video, vodcast can be found on YouTube Podcast, and podcast is on Spotify and other podcast providers.

Adobe Brick | Indigi-Genius

Indigenous peoples were able to gather their most basic needs for shelter using the items around them. Before lumber became the go to, adobe was a staple building material for the southwest and other Indigenous communities. But what makes this humble brick so simple yet sturdy and sustainable?

Read more and watch video

This 3D Printed Book Moves, Lights Up & Inspires: Engineering Meets Art

What if a book could do more than just tell a story, what if it could move, teach, and inspire all at once? The 3D-printed mechanical book is not your average volume of pages. It's a new fusion of engineering and artistry, where gears turn, circuits light up, and intricate mechanisms come alive with the flip of a page. This isn't just a book; it's a tactile experience, a masterclass in innovation, and a testament to the boundless possibilities of design. By blending technical precision with creative expression, this creation challenges the way we think about books, transforming a traditionally static medium into a dynamic, interactive marvel.

Read more and watch video

Applications Now Open for New E4Usa Teachers — 2026–2027 School Year

Do you know an educator who would be a great fit for e4usa? Applications are now open for new teachers to join our 2026–2027 cohort! Selected educators will attend Summer PD in 2026 and gain access to our hands-on engineering curriculum, yearlong support, and national community of practice.

Help us grow our reach—please share this opportunity with your friends and colleagues!

Apply Now

Ohio District Honored for Excellence in STEM Education

(Beast01/Getty Images)

Akron Public Schools has excelled in the Ohio Academy of Science's Governor's Thomas Edison Awards for Excellence in STEM Education and Student Research, with 40 out of 76 honored Ohio schools and 865 of 1,244 recognized teachers coming from the district. The teachers there have adopted inquiry-based STEM teaching methods, and the district's science and health department has been recognized for fostering a love of discovery and innovation.

Full Story: Akron Beacon Journal (Ohio) (10/14)

Field Trip: a New Video Series Showcasing Ohio Schools

A new video series from the Ohio Department of Education and Workforce highlights how educators and school leaders across the state are transforming learning for students. The first episode explores how three school districts are making essential connections between classroom

learning and future careers, equipping students with real-world knowledge, skills, and experiences.

Watch now

Welcome From New OSLN Director Sandra Wilder

Imagine the world where every child learns through curiosity, inquiry and exploration. The world where students embrace the unknown, seek challenges, and drive innovation. Imagine the world where schools are hubs of design thinkers and problem-solvers. Since its inception in 2008, the Ohio STEM Learning Network has worked alongside educators, leaders, community organizations, educational institutions, and business partners to turn this vision into reality.

As the new director of the Ohio STEM Learning Network, I am focused on accelerating career-connected, high-quality STEM learning in every region of our state with the Department of Education & Workforce, Battelle Education, and our incredible network of schools and partners.

Read more

Ohio Natural Energy Institute News

Includes Modeling natural gas production and Science of energy lessons, and more.

Read newsletter

Webinar: Power Generation and Storage

Nov. 25
9:00-10:30 a.m.

Enhanced energy storage is critical to unlocking the potential of solar power generation. This webinar, hosted by OSU Extension, will highlight an expert panel discussing how storage is expanding energy options for residential and industrial consumers.

Read more and Zoom link

Interesting Facts

- The word 'scientist' dates back only to 1834.
- 8 Features You Didn't Know Your Microwave Had
- The Stories Behind 8 Everyday Electronic Emblems
- How Far Can You Really Drive With an 'Empty' Gas Tank?

News From Interesting Engineering

Interesting Engineering

Entering an AI-powered Vineyard – Farmers need a huge amount of data to manage their produce. They used to have to guess how their crops and farmland are doing. Not anymore. This experimental vineyard might just change the way we handle our farms.

Man Builds 8Bit Computer Made of Kids Toys – This person just built an 8bit computer out of a kids toy! Shadowman39 has made a hobby out of building complex structures out of plastic K'Nex parts. but this might be his most complicated one yet.

Under Threat! How New Semiconductor Plants are Facing Big Problems. – The coronavirus pandemic brought to light the power China and Taiwan have over semiconductor chips, the intellectual heart of

every electronic vital to modern day to day life. Now the US is scrambling to catch up. But are their efforts doomed before they can even start?

Powerful solar battery energy storage could replace generators at construction sites – The system's low-noise performance makes it ideal for night work and residential settings.

Magnetic 'muscles' turn origami into crawling robots that move and heal from within – A new 3D-printing breakthrough gives origami robots magnetic "muscles," letting them crawl and deliver medicine inside the body.

Canadian engineers build self-powered solar home that cuts energy use by nearly half – The Komoka, Ontario house uses solar panels, a heat pump, and a thermal battery to achieve true net-zero energy performance.

These Personal Flying Machines Are Coming

Science meant for preserving the dead now strengthens cedar construction wood – Researchers in Canada are applying a new technique that can offer longer life to the Western red cedar, one of the country's most iconic building materials. They are using the same method that's used for the long-term preservation of human and animal remains.

Video: YouTuber turns disposable vapes into battery wall that runs his whole workshop

Walk Me: Toyota stuns world with robot chair that walks, climbs, and folds itself – Step aside wheels. Toyota's Walk Me climbs stairs on robotic legs.

US engineers' new shape memory alloy system could make rail tracks safer, longer-lasting – The SMA-based rail ties, tested with industry partner Rocla Concrete Tie, exceeded U.S. rail safety standards in simulated traffic tests.

Roof tiles made from coal ash and glass waste cut carbon emissions by 13% – RMIT engineers created sustainable roof tiles using coal ash and glass waste, reducing emissions and boosting durability.

Ohio STEM Innovation Summit

The Ohio STEM Learning Network will host the fourth annual Ohio STEM Innovation Summit on June 9, 2026 at the Greater Columbus Convention Center in Columbus, Ohio.

The event will ignite curiosity throughout Ohio's thriving STEM education community. Innovative sessions will build engagement and collaborative problem-solving. An expanded line-up of programming will help teachers, school leaders, and supporters of STEM:

- foster new connections
- highlight STEM best practices and
- find inspiration in new innovative classroom strategies

Read more

Career Tech Update SmartBrief

Sign up for Career Tech Update SmartBrief from ACTE

The smarter way to stay on top of career and technical education news

The Kid Should See This

The Kid Should See This

Smart videos for curious minds of all ages

Here are some selected videos.

- Space Junk and the Kessler Syndrome: How will we clean up 131 million pieces of debris?
- An engineer builds a working retractable lightsaber after 100+ failed attempts

History Facts

- Why Are Old Photos Sepia-Toned?
- Boats used to be powered by horses.
- The Untold Stories of 5 Influential Black Inventors
- https://historyfacts.com/science-industry/article/what-the-world-smelled-like-before-industrialization/

Futurity

- Air Pollution Can Contribute To Diabetes

Detecting Deepfakes: Don't Be Fooled by Disinformation I Be MediaWise

PBS Learning Media

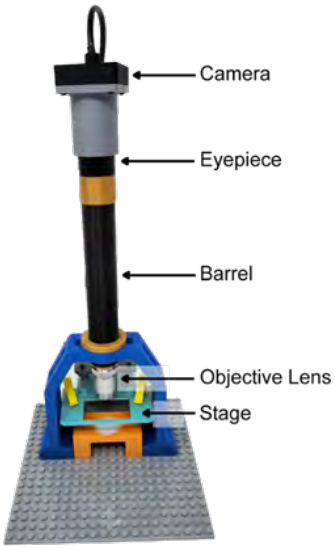
No, that's not really Keanu behind that TikTok account: Students will learn about different types of "deepfake" techniques, how to identify fake videos created by artificial intelligence as well as the positive and negative uses of the technology.

Read more and watch

Supporting the Effective Use of School Makerspaces for Science and Engineering Education: the NTLS Microscope Prototyping System

STEM Sparks

The NTLS Microscope is a microscope design prototyping system intended to provide students with foundational skills that will enable them to design their own enhancements that build on the basic framework provided.



The strategy of purchasing the optical elements of the microscope and 3D-printing the mechanical components like the barrel and focus mechanism made it possible to fabricate a microscope for considerable savings in comparison with its commercial counterpart.

Read more

STEM Is Elementary

The November issue of STEM is Elementary is available here

A STEM and Food Family Festival

NWO announces its newest event, STEMPlate, in partnership with BGSU Falcon Food Pantry and BGSU Dining Services.

December 7, 2025
2 pm - 6 pm
Perry Field House, BGSU

Registration is NOW OPEN for STEMPlate!

Registration link: https://tinyurl.com/2f4ae7fj

Growing Minds, Growing Communities, where learning, innovation, and food accessibility come together!

This family-friendly, hands-on festival invites our community to explore STEM education, sustainable food systems, and the power of knowledge in shaping a more nourished future. Through interactive workshops, science experiments, food demonstrations, and engaging discussions, we'll empower families with the tools to understand where their food comes from and how technology shapes the future of food access.

- Explore engaging STEM exhibits
- Join hands-on cooking & nutrition demos
- Discover science-based food solutions
- Connect with local organizations working for food justice

Together, we're growing awareness, opportunity, and action, one meal and one mind at a time.

To individuals with disabilities, please indicate if you need special services, assistance or appropriate modifications to fully participate in these events by contacting Accessibility Services at access@bgsu.edu or 419-372-8495. Please notify us prior to the event.

Sponsored in part by:
Harold and Helen McMaster Foundation

The Orange Line 2025 Urban Columbus: the Future in Focus

The Center for Architecture and Design is excited to launch The Orange Line 2025! Our theme this year is *Urban Columbus: The Future in Focus,* and we invite architects, landscape architects, designers, students and community members to propose new structures to fill out Downtown's urban fabric for our city's future.

Please mark your calendars to join us for a celebration of the exhibit **Thursday, Dec. 4, 5 p.m.-7:30 p.m.**, at CFAD, 50 West Town St.

One final note: If your firm is too busy this year to build a model for the Orange Line, please consider sponsoring one of our student teams from architecture and design program at central Ohio high schools.

Register here

We can't wait to see your designs!

The Ohio Young Entrepreneur Pitch Contest Is Open

Register your class or program by December 1. Videos due by March 2.

Learn more

Inspire your students to dream big this school year. With only one month left to register for the Ohio Young Entrepreneur Pitch Contest, now's the time to encourage them to bring their ideas to life, compete in grade-level divisions, and build valuable real-world skills.

Integrating the Pitch Contest into your curriculum also gives students meaningful practice in skills they'll carry far beyond the classroom, including:

- Building resilience by refining ideas through feedback
- Strengthening communication with a clear, persuasive pitch
- Practicing creative thinking to turn problems into opportunities
- Developing confidence by presenting and standing behind their idea

Students can participate individually or in teams, with over 200 chances to win and more than $5,000 in prizes available.

- 150 Semi Finalists receive a young innovator award
- 60 Finalists reiceive $60 per team
- 12 Grand Prize Winners receive $250 per team

Bonus: Teachers who submit at least ten entries will also receive a free classroom party with pizza, donuts, or ice cream to celebrate their students' imagination and hard work.

To help you and your students every step of the way, download our free Pitch Toolkit. It's filled with interactive worksheets and videos designed to spark creativity, inspire innovation, and turn ideas into reality

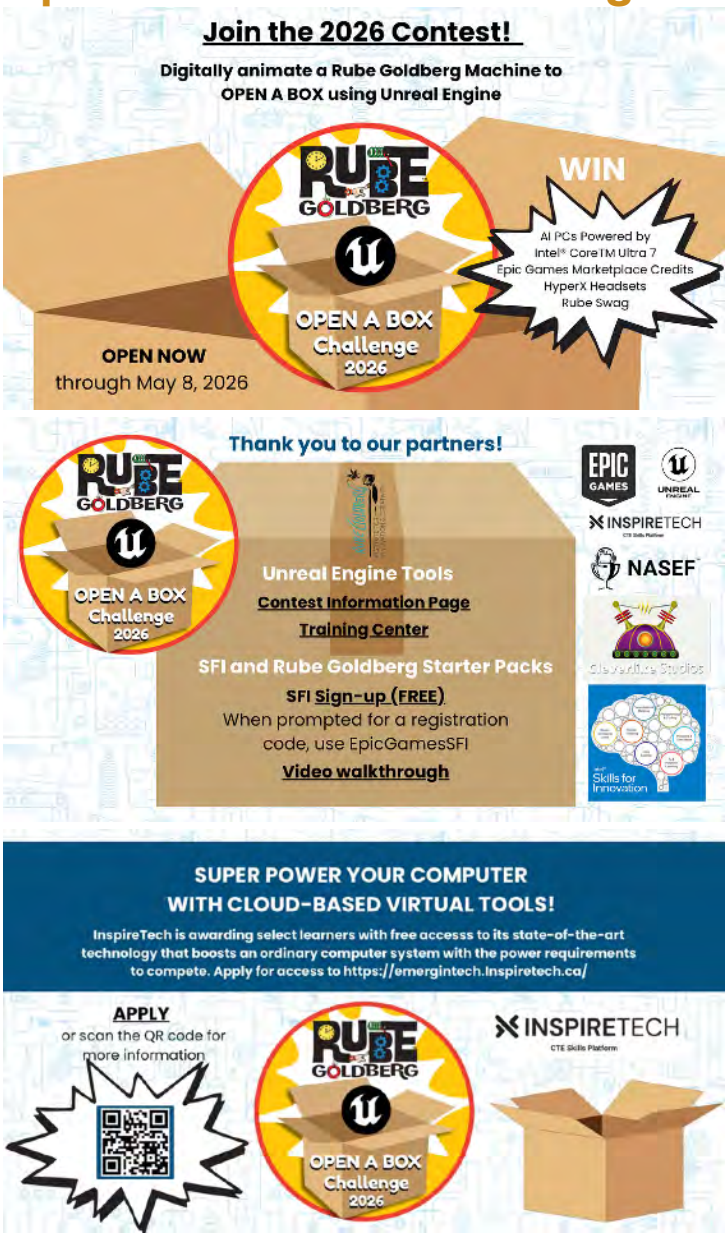
Need support with implementation? We also offer consultations to help you integrate the Pitch Challenge into your classroom or program.

[Download your free toolkit here]

[Book a consultation with us today]

young entrepreneur PITCH CHALLENGE OHIO

Open A Box With Unreal Engine!



Join Us for a CSEdWeek Sneak Peek

CSTA

Computer Science Education Week (Dec. 8–14) is an annual call to action to inspire K-12 students to learn computer science, advocate for equity, and celebrate the contributions of students, teachers, and partners to the field.

This CSEdWeek, we're zeroing in on how **CS Powers AI Innovation**. As artificial intelligence rapidly reshapes our world, a deep understanding

of computer science fundamentals isn't just an advantage — it's essential. Join us in equipping the next generation with the computational thinking and problem-solving skills needed to lead the charge in AI development, ensuring they can build innovative and impactful solutions for the future.

Join us for the CSEdWeek Sneak Peek event on **Nov. 18 at 6 p.m. CT** for an engaging overview of upcoming activities and ways teachers can get involved.

Battelle Awards $900,000 in STEM Education Grants to Ohio Schools

COLUMBUS, Ohio (Nov. 10, 2024) – Battelle announced today the funding of 194 grants totaling $900,000 to enhance STEM learning in classrooms across Ohio. The Ohio STEM Learning Network Classroom Grants support sustainable, STEM-based educational projects in 165 public schools and 130 school districts in 68 counties.

The program fosters the growth of the Ohio STEM Learning Network as a public-private partnership between Battelle and the State of Ohio. Ensuring all students develop the skills to be successful in science, technology, engineering, and math (STEM) fields is Battelle's top philanthropic priority.

Read more

STEM NEXT: New Book Bridges With Industry

We are proud to introduce the next resource in our ongoing work to strengthen career-connected learning across afterschool and summer programs: Building Bridges with Industry: A Playbook for Integrating Career-Connected Learning into Out-of-School Time.

Developed in partnership with Jobs for the Future, the Playbook is designed for system-level leaders, including statewide afterschool networks, intermediaries, and partner organizations that support career-connected learning in informal settings across regions and communities.

The Playbook offers clear strategies and practical steps for initiating, strengthening, and maintaining those relationships. It draws on field research, examples from states that are developing these partnerships, and insight from leaders working to expand career-connected learning at scale.

Download the Playbook

This new resource builds on our Career-Connected Learning Framework introduced earlier this year, which has helped programs design learning experiences that support career awareness, exploration, and preparation. The Playbook complements that work by focusing on the partnerships and system-level conditions that make high-quality implementation possible across multiple sites and regions.

Together, these resources reflect STEM Next's work through the Institute for a STEM Ready America to strengthen and scale innovation in afterschool and summer learning, expanding opportunities for young people to explore and prepare for future careers.

Behavior Change To Improve School Waste Practices

November 20 from 2 – 3 p.m. ET

Join the Center for Green Schools for a webinar series exploring the psychology of behavior change

Reducing waste in schools is not just about providing the right bins—it's about shifting daily habits and building a culture of sustainability. In this second installment of our behavior change webinar series, we'll explore how understanding human behavior and social psychology can unlock more effective strategies to reduce waste and increase diversion rates across K–12 campuses.

Register now

It's Not Too Late: Access ITEEA Fall Forum Programming On-Demand!

We know schedules can be tight — but you don't have to miss out on the insights and inspiration from last week's Fall Forum. Now you can **access all sessions on-demand at a special discounted rate.**

Experience over 35+ sessions totaling over 15 hours of on-demand professional learning at 40% off live registration pricing!

Members: $59 | Nonmembers $75

👉Access Now

This comprehensive programming is designed to help educators **enhance teaching practices both for and beyond the classroom**, with strategies, tools, and insights you can apply immediately on topics such as:

- Hands-on Projects, Competitions, and Classroom Resources
- Innovative Curriculum and Instructional Strategies
- Advancing Leadership, Advocacy, and Safe Practices
- Leveraging Technology for Efficient, Effective Teaching, and more!

On-Demand access gives you the flexibility to learn at your own pace — anytime, anywhere. Don't miss this opportunity to bring the Fall Forum to your screen!

Open Culture

- The Ambitious Engineering Behind the Golden Gate Bridge
- The Surprising Power of Boredom: It Lets You Confront Big Questions & Give Life Meaning
- Roman Architecture: A Free Online Course from Yale

Val-Kill Industries

Eleanor Roosevelt National Historic Site

By 1926, when Eleanor Roosevelt and three friends—Nancy Cook, Marion Dickerman, and Caroline O'Day—joined in partnership to establish Val-Kill Industries, the American Arts and Crafts Movement had reached its declining years.[1] Some advocates, disheartened by the movement's inherent inability to effect change in an industrial society, redirected their momentum, drawing national attention to the craft traditions of America's colonial past.[2] The decade of the 1920s witnessed an explosion of activity in what historians refer to as the Colonial Revival, a complex reactionary movement against growing immigration, multiculturalism, and anxieties over urbanism and modernism.[3]

Read more

Otto Berge, Arnold Berge, and Frank Landolfa in the Val-Kill Shop, ca. 1929. NPS Photo

Val-Kill Industries video

This 16-Year-Old Invented an A.I. Tool To Help Cool Down the World's Hottest Cities

Isaque Carvalho Borges experiences the urban heat island effect in his home of Palmas, Brazil, and he wants to do something about it.

Read more

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

"Manufacturing drives innovation, but the talent pipeline can't build itself. By bringing real manufacturing processes into classrooms, we give students both the skills and confidence to explore this critical sector."
- WhyMaker CEO, Liz

This Week's Technology Tip

Creating a Bent Lamination

WGOA

Want to make curved parts? No need to steam your project pieces. You can create a very cool curved part by doing a bent lamination.

What's a bent lamination?

In a bent lamination thin strips of wood are glued together in a form. As the glue dries the pieces assume the shape of the form.

The form

Make your form from something robust. It takes a lot of pressure to close a bent lamination and the form needs to tolerate the pressure. Plywood works well.

Read more and watch

Dive in and Discover all ITEEA 2026 has to Offer – Connection, Collaboration, and Learning

🌊 Attendees Can Expect

- **Immediate classroom impact:** leave with proven tools, lesson ideas, and implementation tips you can use on Monday morning.
- **Real connections:** network and share ideas with nearly 1,000 like-minded educators and leaders.
- **Immersive workshops:** engage in hands on activities, product demonstrations, and project-based learning sessions.
- **Vibrant energy in Virginia Beach:** explore where learning meets relaxation, and inspiration is just steps from the beach.

💡 New This Year

A smarter schedule that puts the best content when the most people are in the room - Wednesday afternoon through Friday evening.

⏰ Save the Date

Dates: March 25-28, 2026
Location: Virginia Beach Convention Center
Audience: Nearly 1,000 technology, engineering, and STEM educators from across the U.S. and beyond
Theme: Making Waves - Forces Advancing Technology, Engineering, and STEM Education

Early-Bird Rates through December 5th

- Full Registration (includes most meals): $579 Members | $695 Nonmembers
- A la Carte Registration: $419 Members | $535 Nonmembers
- Student Registration: $199 Members | $249 Nonmembers

Scan or visit www.iteea.org/2026 to preregister now!

"ITEEA's Annual Conference gives me time to be with other like-minded teachers and get other perspectives on the best way to teach technology and engineering education and merge them with my own. - Zach Glennon, Tech Ed Teacher

Know a great vendor for ITEEA 2026? Submit the company name, contact, and email to kkadow@iteea.org by December 5th for a chance to win a $50 Amazon Gift Card!