

# INTERFACE

Volume 65 • No. 1 • Fall 2025

Journal of the WTEA

## Innovation in Action



### **SPECIAL FEATURE:**

- ◆ **SKILLSUSA Nationals Results**

### **Other Highlights:**

- ◆ **Longtime WTEA Partner  
First Technologies  
Under New Ownership**
- ◆ **TE Updates from Madison**





INTERNATIONAL TRAINING



LEARN MORE



## MEET THE FUTURE OF **ARTIFICIAL INTELLIGENCE** IN INDUSTRIAL EDUCATION

SMC has launched the first artificial intelligence training system for education.

### WHAT MAKES THE AIT-400 UNIQUE?

- ✓ Immersive platform for real-world AI training
- ✓ Create, train, and deploy AI models
- ✓ Key applications: computer vision recognition, acceleration prediction, outcome classification, vision-based validations
- ✓ Real industrial hardware: electric actuators, PLC, & more
- ✓ Intuitive interface accessible from any device



**Support Our  
 Interface  
 Advertisers!**

Big Systems  
 First Technologies  
 Gateway Technical College  
 Goodheart-Willcox Publisher  
 H2I Group  
 Inkworks  
 LAB Midwest  
 Machine Tool & Equipment  
 Wisconsin Technical  
 College System

*Cover Design  
 by Cheyenne Gaudynski  
 Sussex Hamilton HS*

**TABLE OF CONTENTS**

**Feature Article**

**14 SkillsUSA Nationals Results**

Wisconsin  
 Awarded the  
 State Standard of  
 Excellence - Gold!



**Other Highlights**

**7 Longtime WTEA Partner**

First Technologies  
 Acquired by  
 HCTC



**12 Updates from Madison**

Jake Mihm  
 Shares News on  
 Various TE Topics



- 2 WTEA Board of Directors
- 3 President's Message & WTEA Calendar
- 4 Vice President's Message
- 5 Exec. Director & Advisory Committee
- 6 Officer & Awards Nominations Info
- 7 First Technologies - New Ownership
- 9 2026 WTEA Conference Preview
- 10 Membership & Conf. Registration
- 11 New Board Members
- 12 Updates from Madison
- 14 SkillsUSA Nationals Results
- 16 Endurance Vehicles
- 18 2nd Annual Foundation Golf Outing
- 21 Hortonville HS Awards
- 22 Student Scholarships
- 23 Middle School Spotlight
- 24 Summer Teacher Tours
- 25 WATDA Teacher Training
- 26 Directors' Reports
- 27 Build Moto - Tomahawk HS
- 28 WTEA Supporters

**OPEN SOURCE SOLUTIONS**  
[open-sourcesolutions.com](http://open-sourcesolutions.com)

**THE FUTURE OF  
 ROBOTICS IS  
 OPEN-SOURCE**

Cost-Effective Industrial Automation  
 Programming & Integration Curriculum  
 Certification through ATMAE.org



LEARN MORE / SCHEDULE A DEMO



800.787.9717  
[firstteched.com](http://firstteched.com)  
[info@firstteched.com](mailto:info@firstteched.com)

# 2025-2026 WTEA Board of Directors



**PRESIDENT - Mike Paquette**  
(W) 715-582-3711 ext. 4380  
president.wtea@gmail.com  
Peshtigo Middle/High School



**V. PRESIDENT - Anna Vitale**  
(W) 920-262-1480  
vitalea@mywvusd.org  
Riverside MS, Watertown Schools



**SECRETARY/TREASURER  
Michael "Mac" Chopin**  
(W) 920-478-3633 Ext 4158  
machopin.wtea@gmail.com  
Waterloo High School



**PRESIDENT-ELECT  
Alan Mamerow**  
(C) 262-957-6022  
mameal@hamilton.k12.wi.us  
Hamilton School Dist., Sussex



**EXECUTIVE DIRECTOR  
Joe Ciontea**  
(C) 920-904-2747  
jc.wtea@gmail.com  
WTEA Office, 879 Oakwood Ln.  
Watertown, WI 53094



**OPERATIONS COORDINATOR  
Jesse Domer**  
(W) 920-262-7500 x6339  
jd.wtea@gmail.com  
Watertown High School



**EXHIBIT COORDINATOR  
Tom Barnhart**  
(W) 920-492-2955 Ext. 2089  
tb.wtea@gmail.com  
Ashwaubenon High School



**PROGRAM COORDINATOR  
Steven Johnston**  
(C) 608-386-1310  
sjwtea@gmail.com



**AWARDS COORDINATOR  
Matt Schultz**  
(W) 608-690-5100  
matt.schultz@tlabeloit.com  
The Lincoln Academy, Beloit



**WEBMASTER  
Michael Beranek**  
(C) 715-579-2273  
webmaster@wtea-wis.org



**DPI REPRESENTATIVE  
Jake Mihm**  
T & E Education Consultant  
Wis. Dept. of Public Instruction  
Wis. SkillsUSA State Director  
(W) 608-665-9254  
jake.mihm@dpi.wi.gov



**CESA REPRESENTATIVE  
Tom Martin**  
CESA #3, Fennimore, WI  
(W) 608-822-2154  
tmartin@cesa3.org



**UNIVERSITY REPRESENTATIVE  
Ed Wiegman**  
Asst Professor-Applied Engineering  
Technology Management  
UW-Platteville  
(W) 608-342-1187  
wiegmane@uwplatt.edu



**UNIVERSITY REPRESENTATIVE  
Mike Mills, Ed.D**  
Asst Professor-Tech Ed, UW-Stout  
(W) 715-232-5306  
millsmi@uwstout.edu



**TECHNICAL COLLEGE  
REPRESENTATIVE  
Roger Stanford**  
President, Western Tech College  
(W) Phone: 608-785-9100  
StanfordR@westerntc.edu



**WTEA ADVISORY  
COMMITTEE CHAIR  
Mike Cattellino**  
(C) 920-470-9425  
Michael.Cattellino@faithtechinc.com  
Faith Technologies, Inc.



**DISTRICT A DIRECTOR  
Emily Fransway**  
(C) 715-459-4120  
efransway1@ecasd.us  
Eau Claire North High School



**DISTRICT B DIRECTOR  
Brian Schiltz**  
(W) 715-453-2106  
schiltzb@myhatchets.org  
Tomahawk School District



**DISTRICT C DIRECTOR  
Brennen Mickelson**  
(W) 920-863-4262  
mickelsonb@denmark.k12wi.us  
School District of Denmark



**DISTRICT D DIRECTOR  
Jon Larson**  
(W) 920-788-7600  
jlarson@littlechute.k12.wi.us  
Little Chute High School



**DISTRICT E DIRECTOR  
Abe Graziano**  
(W) 414-768-6210 Ext 7315  
a.graziano@ocfsd.org  
Oak Creek High School



**DISTRICT F DIRECTOR  
Eric Sutkay**  
(W) 262-359-8155  
esutkay@kUSD.edu  
LakeView Tech. Academy, Kenosha



**DISTRICT G DIRECTOR  
Stephen Hadfield**  
(W) 715-884-6412 Ext. 310  
HadfiSte@pittsville.k12.wi.us  
Pittsville Area School District



**DISTRICT H DIRECTOR  
Art Pronschinske**  
(W) 608-943-6312 Ext. 2017  
apronschinske@igs.k12.wi.us  
Iowa-Grant School District



**DIRECTOR AT-LARGE  
Randy Way**  
(W) 608-246-6332  
RMWay@madisoncollege.edu  
Madison College



**DIRECTOR AT-LARGE  
Rebecca Dubois-Zeck**  
(C) 414-559-3055  
dubor@wawmsd.org  
Frank Lloyd Wright Intermediate  
West Allis



**DIRECTOR AT-LARGE  
Position Vacant**  
*\*Contact any board member  
if you are interested!*



**DIRECTOR AT-LARGE  
Heather Kiefer**  
(C) 262-707-0112  
heather.kiefer@slingerschools.org  
Slinger Middle School



**INTERFACE EDITOR  
Duane Apel**  
(C) 262-707-1044  
interface.wtea@gmail.com

**Our New Mailing Address:**



**WTEA**  
879 Oakwood Ln,  
Watertown, WI 53094

# PRESIDENT'S MESSAGE

## “Service” From the President

By Mike Paquette, WTEA President; Peshtigo Schools



SERVICE STOP. By the time you receive this, your summer inservice will be done and the 70-day break in the action will be over. As I am sure you have gleaned, I have another rally analogy: race service. You are probably like me and the rest of the teaching is throttle till the school year - summer comes with a break from time to refuel, rejuvenate, and rebuild. At a rally race they will drive usually two days straight, in stages where they go really fast and on roads where they need to obey the rules of the road. During this time teams have a time carved out for service. Service is where teams get to review driving footage, check cars over and make repairs, if necessary. Summer is my time to “service” my teaching career.

**“Summer is my time to “service” my teaching career. We need that momentary break in the action... Although, a teacher has a 70-day service stop, it seems like a mere 30 minutes.”**

Lots of things happen during the summer, on a personal and a teaching level. I need to recharge. I am going all out for nine months to try and give a good education to the students in my care. In summer I take time to stop being a teacher, or switch where I am being a teacher. This summer, like last summer, I worked at Camp Phillips, by Haugen, Wisconsin. I was still teaching welding, but this year I got to take kids on learning adventures in the woods. This is a great change from the norm, and chance to get away from the grind and look at things through a new perspective.

Sometimes I just need to be me. We need that momentary break in the action. We need a break, a rest, a moment to collect ourselves. I find it is often nice to sit and watch the world go by. Watch the ants, or the butterflies flit around. To marvel at the world around us, not the world we have made but the world that continues without our interven-



tion. It is nice to wonder.

I take a moment to review the rules, the syllabus, to outline for the class. During the summer service I find it is good to review the notes. What do I need to adjust? What do I need to change to stay in step with current trends?

Although, a teacher has a 70-day service stop, it seems like a mere 30 minutes. Yesterday I was preparing to leave for scout camp, and as I write this I am preparing for the fall semester. With the summer service behind us, it is time to hop in our rooms and start up a new year and floor it till the end. Wishing you a great year!



**Mark Your Calendar**

**WTEA Officer Nominations Deadline**  
Nov. 5, 2025 ..... to Alan Mamerow

**WTEA Awards Nominations Deadline**  
Nov. 15, 2025 .....via the WTEA website

**State Conference - Presenters Deadline**  
Dec. 1, 2025 .....via the WTEA website

**High-Tech Weekend! (See p. 27)**  
Dec. 6, 2025 .....Little Chute HS

**Interface Articles DUE**  
Dec. 15, 2025 .....to Duane Apel

**WTEA Early-Bird Registration Deadline**  
Dec. 20, 2025 ..... WTEA website or U.S. Mail

**WTEA 57th Annual State Conference**  
March 11-13, 2026..... Wis. Dells, WI

**ITEEA National Conference**  
March 25-28, 2026.....Virginia Beach, VA

**SkillsUSA 53rd Annual State Conference**  
April 7-8, 2026 ..... Madison, WI

**SkillsUSA National Conference**  
June 1-5, 2026 .....Atlanta, GA

# VICE PRESIDENT'S REPORT

## Lots of Easily Accessible FREE Resources for TE

By Anna Vitale, WTEA Vice President; Riverside Middle School - Watertown



This summer there was a pile of library books in my living room: Everything you ever wanted to know about routers. I am determined to get better at using routers so I can offer new project ideas to my middle school students. I dug into this pile of books back in the spring (and just kept renewing or reborrowing them), along with watching hours of videos, both from DVD and YouTube (George Vondris-ka of the Woodworkers Guild is my new hero). I had full intentions that this was the summer I was going to go (semi-semi) pro with the router.

**“Have you checked out what’s on the WTEA website lately?”**  
**wtea-wis.org**

Well, it’s a week from school and the books were returned, unopened since May. Not one free day this summer to do more than glance yearningly at the books. Notes of project ideas and some digital project plans collected but not practiced, nor one example created.

All is not lost though, because as the new school year begins I know I can access all kinds of information to help me out with specific questions or project ideas!

Project Showcase at the annual WTEA Conference is the ultimate venue for sharing project ideas and I have years of pictures I can refer back to. It is a veritable treasure trove in the Showcase room displaying a huge variety of projects, activities and lessons. One of the wonderful things about Tech Ed teachers is that we share ideas and resources.

Which reminds me of the herculean task that the WTEA has been working on lately: updating, collecting, and developing a database of the latest lessons, resources and projects for our members.

Have you checked out what’s on the WTEA website lately? ([wtea-wis.org](http://wtea-wis.org)) Not sure what your login information is? Contact Joe Ciontea or one of the executive board members and we’ll help you out.

Once you log in to “Member Login,” go to the Resources tab and check out “Links for TEE.” First, on the “Links for TEE” page, you’ll find a link to the “WI Awesome” files, a shared space for Tech Ed teachers that has loads of information and resources. Further down, there are links for Communications/Engineering, Construction/Woodworking, Energy, Manufacturing, Transportation and more!

Under the Resources tab, you’ll also find curriculum resources, with a quick link at the top of the page to presenter downloads from past conferences. These presenta-

tions often include additional links to even more resources, ideas and projects.

Ben Morey’s (New Lisbon) 2025 presentation titled, “Ready Resources for the Tech Ed Tool Box,” is a great resource for middle school classes! And how about Bryce Jaglinski (New London), with his “So You Wanna Teach Electricity/Electronics,” or Chad Gagas (Rosholt) with three resources on Basic Home Maintenance in a small school?!

Do you have lessons, resources and project ideas that you would like to share with other teachers? It doesn’t have to be a perfectly written lesson plan (no review from a curriculum coordinator here!), but how about a project that your students get excited about? Drop it in the shared folder or send it to your local WTEA District Director and you can be a part of that team of Wisconsin Tech Ed teachers working together! Any questions, please contact me!

Learn More About WTEA:  
[wtea-wis.org](http://wtea-wis.org) • WTEA Facebook Group  
& YouTube at WTEA-Wisconsin

**OWN YOUR FUTURE**

70+ Career Programs  
**ENROLL TODAY!**

**GATEWAY**  
TECHNICAL COLLEGE  
GTC.EDU

# EXECUTIVE DIRECTOR'S MESSAGE

## A Relaxing Summer

By Joe Ciontea, WTEA Executive Director



Joe Ciontea and retired colleagues with their catch on Lake Erie.

I had a good summer! Golfing, fishing, working on projects around the house, and seeing a variety of bands, both local and national touring acts, in concert. My highlight was a fishing trip to Lake Erie with some retired colleagues from Fond du Lac. Two days on the lake and we caught our limit of walleyes in about two hours each day. We caught a total of 125 lbs. of walleyes in our two outings. I hope everyone has a great fall term!

**Attn All Members: Update Your Profile!**

Go to WTEA Website: [wtea-wis.org](http://wtea-wis.org)

Member Login / Edit Profile

Update your contact info and years of teaching.

Contact Joe Ciontea if you need assistance.



# FROM THE ADVISORY COMMITTEE CHAIR

## What/Who is the WTEA Business, Industry & Trades Advisory Committee?

By Mike Cattelino, WTEA Advisory Committee Chair



The WTEA Business, Industry, & Trades (BIT) Advisory Committee consists of members that represent businesses, industries, and trades that are connected to Technology & Engineering curricular areas. In the upcoming issues of the Interface, you will get to 'meet' the committee members. We will share our backgrounds and aspirations as it relates to the WTEA and its members.

Associated Builders & Contractors of Wisconsin is a multi-trade, state-wide construction association. In their membership they have over 1,000 construction companies, associate, and supplier members that range from small to large companies, and everything from general contractors to subcontractors. In addition, ABC of Wisconsin Apprenticeship has over 2,500 registered apprentices in 12 different construction trades throughout Wisconsin. ABC of Wisconsin is one of the largest chapters of the approximately 70 chapters of ABC across the country.

Elizabeth Roddy has been with ABC of Wisconsin for 22 years, starting out in the apprenticeship department - the first 10 years of her career with ABC of Wisconsin as an Apprenticeship Coordinator. This position involved working directly with the registered apprentice, companies, technical colleges, and the DWD-BAS staff to help run the apprenticeship.

In 2013, Elizabeth transitioned to her current role in workforce outreach. The lack of skilled workers is a top priority of ABC of Wisconsin members, and Elizabeth's role of spreading the word about careers in the construction industry and registered apprenticeships is a crucial one.

Elizabeth crosses the state presenting to high school students, participating in career events, serving on many different committees, including many youth apprenticeship steering committees, and working with various community organizations. Elizabeth also sits on the Board of Directors for the Latino Academy of Workforce Development and is the chair-elect for the Workforce Development Board of South Central Wisconsin's Board of Directors.

For many years Elizabeth has attended WTEA's State Conference as an exhibitor. She was honored and excited to be asked to serve on the WTEA Business, Industry, & Trades (BIT) Advisory Committee. Working with the teachers that directly impact the next generation of craft professionals is a passion for Elizabeth, and she looks forward to building connections with everyone. Feel free to reach out:



Elizabeth Roddy

**Elizabeth Roddy**

**Director of Workforce Outreach**

**Associated Builders & Contractors of Wisconsin**

**608-244-6056**

**[eroddy@abcwi.org](mailto:eroddy@abcwi.org)**



# NOMINATIONS: Officers & Awards

## Be Part of the WTEA Team

We are currently accepting nominations for the office of WTEA Vice President. This is your opportunity to serve your profession in a leadership position. The WTEA Board of Directors works together as a team to plan and coordinate professional development activities, give association awards and promote the advancement of our profession. The Board meets up to four times per year; meetings are held both face to face and virtually, as appropriate. The WTEA Executive Board also meets monthly virtually. If you have questions please contact any member of the WTEA Board of Directors.



### Vice President

(2-year term): Spring 2026 - Spring 2028

Send nominations to WTEA President-Elect, Alan Mamerow: [mameal@hamilton.k12.wi.us](mailto:mameal@hamilton.k12.wi.us)

### Nominations accepted until November 5, 2025

\*Ballots will be mailed to members approximately February 1st.

If candidates run unopposed, a unanimous ballot is cast by the Board and no paper ballots are sent to the association membership.

## WTEA Awards Nominations Needed



Each spring at our annual awards banquet, held at the WTEA Spring Conference, the WTEA recognizes technology educators, industry, and technology education programs that have demonstrated outstanding achievement. The WTEA needs your help as educators to identify these worthy teachers, programs, and other professions that deserve recognition.

The WTEA is looking for educators that are going above and beyond in their classroom. We have a variety of award categories that cover teachers, programs, and examples of classroom excellence.

As a profession we need to continue to recognize greatness in our profession! The WTEA Awards Banquet gives us that opportunity. The awards committee will contact the nominee and request information regarding the nominee's curriculum, achievements, and contributions to technology education, along with letters of endorsement.

TO NOMINATE A TEACHER, PROGRAM OR INDUSTRY visit the awards tab on WTEA website at [wtea-wis.org](http://wtea-wis.org). Nominations must be submitted via the WTEA website. The awards ceremony will be held Wednesday, March 11th, at the Chula Vista Resort during our 57th annual conference.

### \*Important Notes:

- **Nominations must be received by November 15th** to be considered for recognition the following spring.
- Technology Educators must be a member of the WTEA to be considered for award recognition, unless the award being nominated is "Special Recognition."
- For a detailed description of the awards please visit our website or contact any member of the board of directors.
- If you have any questions please send an email to: [awards1@wteafoundation.org](mailto:awards1@wteafoundation.org)

**Award Nominations  
DUE Nov. 15th**

### WTEA AWARDS

**Technology Educator of the Year  
M.S. Program of the Year  
H.S. Program of the Year  
Award of Excellence  
Inspire Award  
Special Recognition Award**

# LONGTIME WTEA PARTNER

## High Country Technology Consultants Partners With Bob Werner to Acquire First Technologies

### Official Press Release

[Brookfield, WI] — [May 16, 2025] – High Country Technology Consultants, led by principals Andy Ramseier and Charles Duarte, announced today that they are working with industry veteran Bob Werner to acquire First Technologies, a well-established technology solutions provider based in Wisconsin.

The acquisition will combine High Country Technology Consultants' (HCTC) expertise in technology integration with First Technologies' strong regional presence, enhancing capabilities in delivering cutting-edge solutions for education, manufacturing, and workforce development.

"This partnership is a natural fit," said Andy Ramseier, Principal at High Country Technology Consultants. "First Technologies has a long history of serving schools in Wisconsin, and together we can expand their legacy while introducing new opportunities for growth." Bob Werner agreed stating, "I have worked alongside High Country for the last 23 years as they have served CTE and STEM programs across the Rocky Mountain Region. As we combine forces, we are poised to serve more students and instructors across a significant portion of the U.S."

Charles Duarte, Principal at High Country Technology Consultants, added, "We are excited to collaborate with Bob and the First Technologies team. Our goal is ensure that customers across the region continue to benefit from the service Bob and First Technologies have provided for the last three decades.

The transaction is expected to strengthen service offerings, broaden geographic reach to cover 24% of the U.S., and create new value for clients across multiple education verticals.



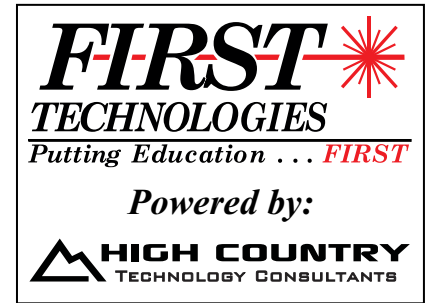
Charles Duarte

### About High Country Technology Consultants

High Country Technology Consultants is a leading provider of technology consulting and integration services, specializing in solutions for education, workforce development, and advanced manufacturing.

### About First Technologies

Based in Wisconsin, First Technologies is a trusted provider of technology and training solutions, serving schools, businesses, and organizations with innovative tools and expertise.



### Bob Werner Shares The Story of His Journey

In 1982 I started working for my father-in-law who was a mechanical engineer that specialized in automation, building one-of-a-kind machines to perform a specific manufacturing process. I had little background in any of the technology he used. In the next five years I learned about robotics, fluid power, vibratory feeder bowls, Allen Bradley PLCs, electrical circuits, and so much more. He produced the first pneumatic robot training system for education in 1984. That was my introduction to bringing technology to the classroom.

I later joined a Brookfield company named Voell Machinery. I gained experience supplying woodshops and metalshops with all of the machines and tools you typically equip those labs with. I spent a short time with another company before starting First Technologies in 1994. While working for Voell Machinery, I was taught how important service was to the educators we served. That is why you will find our tagline "Putting Education First...." as part of our logo.



Bob Werner

I also learned while working at Voell Machinery that the WTEA organization was the pathway to the teachers. The WTEA Conference, and being a partner, was important for communicating with teachers and finding out what their wants and needs were. First Technologies has committed to being that partner for 31 years!

Andy and Charles, the new owners of First Technologies, have had the same commitment in their business for over 15 years. Their tagline is, "We are the company that shows up." They are the company that walks through your door to partner with you on your path to success. The "new" First Technologies is stronger, younger, more technological, more energetic and more driven than ever to be your partner. I'll be here for two more years to assist with the transition. I am grateful to Andy and Charles for carrying on the First Technologies commitment to education here in Wisconsin. I am thankful to you for continuing to be our partner.

# WTEA TECH-ED BACK TO SCHOOL DEALS

H2I Group delivers top-quality STEAM products with professional installation, training, and ongoing support to ensure your success. From 3D printers to robotics and CNC tools, we're here to support hands-on learning opportunities in Wisconsin.



**BAMBU LAB 3D PRINTERS**  
EASY, COLORFUL, AND FUN!  
[CONTACT US FOR A QUOTE](#)



**FOREST SCIENTIFIC**  
CNC ROUTERS & PLASMA CUTTERS  
[CONTACT US FOR A QUOTE](#)



**INFENTO**  
ENGINEERING EDU KITS  
[CONTACT US FOR A QUOTE](#)



**ROLAND BN2-30**

Turn your ideas into stunning stickers, banners, wall art, window designs, T-shirts, and more right from your workspace. Whether you need compact convenience with the BN2-30 or powerhouse performance with the VG3 large-format printer-cutter, these machines handle it all.

[CONTACT US TO LEARN MORE](#)

Stratasys 3D printers equip students with real-world skills and prepare them for careers with leading organizations like NASA through the nationally recognized NOCTI Additive Manufacturing certification. Schools also have the option to add 3 or 5-year warranty and service contracts, along with a \$15,000 store credit for materials and other consumables bundle.

[CONTACT US TO LEARN MORE](#)





# Innovation in Action



## 57th Annual Technology Education Conference & Trade Show

### Tentative Conference Overview

#### Wednesday, March 11, 2026

5:30pm – 8:30pm..... Conference  
Pre-registration  
6:45pm – 9:00pm.....Awards Banquet

#### Thursday, March 12, 2026

7:30am – 3:00pm..... Conference Registration  
7:00am – 9:00am.....Project Showcase Setup  
8:00am – 4:00pm.....Trade Show  
9:00am – 3:30pm.....Project Showcase  
8:55am – 9:05am.....General Welcome  
9:05am – 10:00am.... 1st General Session  
10:15am – 3:30pm.... Concurrent Sessions

#### Thursday, March 12, 2026 (continued)

7:00pm – 9:00pm.....President's Reception

#### Friday, March 13, 2026

7:30am – 11:30am..... Conference Registration  
6:45am – 7:45am.....WTEA Breakfast  
7:45am – 8:30am..... WTEA Membership Mtg.  
8:45am – 12:15pm.....Concurrent Sessions,  
Demonstrations & Project Showcase  
12:30pm – 2:00pm.....2nd General Session &  
Luncheon  
2:15pm – 3:30pm.....WTEA Board Meeting



#### Thursday Keynote Speaker:

**Kylan Hastreiter**  
President  
Hastreiter Industries



#### Friday Keynote Speaker:

**Emily Laird**  
Artificial Intelligence  
Integration Technologist /  
Lecturer  
UW-Stout

**Session Topics Include:** Designing for Manufacturing, Virtual Foundry, Craftsman with Character, Redefining Readiness, Investment Casting, Graphics Classes and Business, Intro Welding Overview, Building Trades, Blacksmithing, Grant Writing, Automotive Curriculum, SkillsUSA, Robotics Programming K-12, Lab Safety, Aviation in Education, Keeping Students Engaged in the Shop, Building High-Mileage Vehicles, Project Showcase, SkillsUSA, Middle School Roundtable, New Teacher Boot Camp, and much more!

Help your students find their  
passion & fulfill their potential

COLLEGES & CAREERS  
wistechcolleges.org



### Chula Vista Resort



4031 River Road, Wisconsin Dells www.chulavistaresort.com

Toll Free Dedicated # for reservations 1-833-621-4953

*\*Ask for WTEA Conference Rate! See page 10 for details.*

# WTEA Membership Application & March 11-13 2026 Conference Registration

Membership year runs from September 1st through August 31st

Last Name \_\_\_\_\_ First Name \_\_\_\_\_

Home Phone (\_\_\_\_\_) \_\_\_\_\_ Local Tech College District \_\_\_\_\_ # years teaching \_\_\_\_\_

School Dist. \_\_\_\_\_ School Name \_\_\_\_\_

School Address \_\_\_\_\_

School City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_ E-mail: \_\_\_\_\_

**Check appropriate boxes below & total amount due.** (To pay fees with a credit card go to the WTEA website)

**Membership Fees:** [ ] 3 year membership - \$90.00 [ ] 1 year membership - \$35.00 \$ \_\_\_\_\_

**Spring Conference EARLY BIRD Registration** (Must be postmarked by December 20, 2025)  
[ ] \$150 members [ ] \$185 non-members \$ \_\_\_\_\_

**Spring Conference Registration** (After Postmarked date of December 20, 2025):  
[ ] \$180 members [ ] \$215 non-members \$ \_\_\_\_\_

**WTEA Awards Banquet** - Wed. Mar.11 (Tickets must be purchased in advance by March 3rd): [ ] \$35 \$ \_\_\_\_\_

[ ] Bill my school district - purchase order is attached [ ] Payment enclosed **Total \$** \_\_\_\_\_

Send completed form with payment or school purchase order to: **WTEA, 879 Oakwood Ln, Watertown, WI 53094**

Phone (920) 904-2747 • E-mail: [jd.wtea@gmail.com](mailto:jd.wtea@gmail.com)

If your school uses ACH payment please contact the WTEA for new bank routing.

**\*Room reservation: DEADLINE FOR CONFERENCE RATES - 2/18/2026**

**Room Rates:** Start at \$159

Toll Free Dedicated # for reservations 1-833-621-4953 • **2026 WTEA Conference Booking ID# K54188**

Chula Vista will also honor the state rate for single rooms upon request with appropriate documentation.

## NEW

# Desktop CNC Milling Machine

The new EDU Mini-Mill is a powerful, compact desktop CNC machine with industry-standard FANUC controls.

- ✓ Industry's go-to CNC control: FANUC
- ✓ Industrial machining capabilities
- ✓ Desktop size & price

It's the newest product in a strong lineup of CNC machines for education from LAB Midwest!



Scan the QR code to learn more about the EDU Mini-Mill and request a quote.



Only available through LAB Midwest | [info@labmidwest.com](mailto:info@labmidwest.com) | (414) 258-6415 | [www.labmidwest.com](http://www.labmidwest.com)

# WTEA BOARD OF DIRECTORS

---

## Board Welcomes Its Three New Members



### **Abe Graziano** **District E Director**

As a proud Tech Ed teacher, wrestling coach, Wisconsinite, and Brewers fan I'm thrilled to take on the new challenge as WTEA's District E Director! District E is the Waukesha County and Milwaukee area. For those of you who don't know me, here are a few of the key points. I grew up in Slinger where I was lucky enough to take many different Tech Ed classes. I attended UW-Platteville and earned a Technology Education and Manufacturing Management Degree. I then taught and coached for nine years in a medium-sized district before switching to my current job for the past four years at Oak Creek High School. I currently exclusively teach metalworking classes that include Welding 1 & 2 as well as Machining 1 & 2.

I hope that I'm able to have an impact as a member of the WTEA Board due to my ability to host events. I have hosted and run lots of different SkillsUSA competitions over the years. Those include the District 4 competition in 2019, the GTC regional welding competition at OCHS for the past three years, and I've been the state contest chair for Woodworking Display for eight years and running.

The first event I'll be hosting as a board member is the District E professional development opportunity on Friday, October 18th at Waukesha County Technical College. This is free and open to teachers from any district! I hope to see a lot of you there. Scan the QR code for more information and to sign up! Go Pack Go!



### **Randy Way** **Director At-Large**

Randy Way currently serves as the associate dean in the School of STEM at Madison College, where he manages an academic portfolio that seeks to explain what is known about nature – mathematics, physics, chemistry, and biology, and to build in learners the skills to exploit this knowledge through the disciplines of engineering, engineering technology, and industrial technology. A centerpiece of the school's work is the Associate of Science in Technology Education, which provides 2+2 pathways into Tech Ed with partner institutions, UW-Platteville and UW-Stout. Prior to his current role, Way served as faculty and program director at Madison College's Fire Academy. Way previously spent a decade as a middle school and high school Tech Ed teacher in the Oregon, Wisconsin school district. He's been a member of the WTEA since the late 1990's, frequently contributing articles to the *Interface* and sessions at the annual conference. When not at work, Way enjoys volunteering for the Oregon Area Fire/EMS District, camping, and working on vintage machinery.



### **Rebecca DuBois-Zeck** **Director At-Large**

Hi, my name is Rebecca DuBois-Zeck and I am one of your new WTEA At-Large Directors. I am from West Allis, Wisconsin. I received my Tech Ed degree from UW-Stout in 2002 and have been teaching Tech Ed off and on, in-between children and life since then. I am currently teaching at Frank Lloyd Wright Intermediate School in West Allis, where I have been since 2020.

I have been married for 22 years to Steve and we have three girls; Isabella, 20; Natalia, 18; and Ariana, 14. I am excited to see what I can do to help our great organization!



**Contact a board member if you are interested in supporting & growing Tech Ed in Wisconsin by joining the WTEA Board!**



# UPDATES FROM MADISON

## TEE Communications; Career Clusters; Regional Summits; & Why SkillsUSA Needs to Be in Every School



By Jake Mihm, DPI TEE Consultant & SkillsUSA State Director

### Greetings and Thanks

I would like to thank the WTEA for hosting a successful annual conference. My two favorite parts were the awards ceremony and addressing the aspiring future Technology Education teachers at a working lunch meeting on Thursday. The awards night is a touch of class that our distinguished professionals in the field deserve. To all of you who were recognized at the spring conference, congratulations, and thank you WTEA for your hospitality.



This year marks my 28th year in education and the start of my third year with the Department of Public Instruction serving as your technology and engineering consultant. This is a position that I hold dear and value to a high degree. I'm honored to represent Technology and Engineering Education as a viable career pathway choice and essential programming that belongs in all school districts. One of my primary goals this year is to offer educator support and networking opportunities provided through the work of the WTEA and DPI. We are looking to provide educator and classroom support throughout the school year. District directors, please consider reaching out to me in planning for your district meetings across the state. I'm happy to help prepare, give comments, or be a part of your meeting if welcomed - please consider. Educators, do you have questions? Looking for resources? Please let your district director or myself know so we can better serve you.

### TEE Communication

I understand that many miss our "Listserv" email platform. I have heard of folks wanting to move towards a "Facebook" communication site. This is not a service that I can provide. Please know that the transition to one-way communication from GovDelivery will continue to remain. I understand my messaging needs to be more consistent and I will work to at least provide quarterly updates utilizing the GovDelivery platform. The Team's "TEEChat" channel is a Microsoft platform that you have to sign into. My work is based on this platform and will no longer be supporting a variety of free and or non-authorized services for security measures. For those of you who have to sign

in separately, I apologize for the pain point, but it's very much like any other communication platform and has a lot more capabilities than our old listserv days. Please consider adapting to these new methods of communication: <https://dpi.wi.gov/te/listserv>

### DPI CTE Funding Request and Update

Despite a formal request from the Wisconsin DPI, dedicated funding for career and technical education was not included in the 2025-27 biennial budget signed by Governor Tony Evers. The DPI remains committed to advocating for sustained investment in CTE programs that provide Wisconsin students the opportunities to gain the skills and experiences needed for success. See: <https://dpi.wi.gov/news/releases/2024/underly-career-technical-education-cte-budget-proposal>

### New Cluster Framework AdvanceCTE

DPI is thoughtfully transitioning to the updated National Career Cluster Framework (14 clusters), and we want to reassure districts that this change will be gradual, well-supported, and minimally disruptive. This work is important, and DPI is committed to a transition that is deliberate, transparent, and responsive to local needs. DPI is participating in Advance CTE state leadership meetings and collaborating with other states to use best practices for transitioning to the new cluster framework. Adaptation and information on new cluster names will begin in fall of the 2026-27 school year.

### SkillsUSA 2025-26

Over the past year I have been working on a campaign to build awareness with business and industry, but also to help educate administration and school boards on the value Career and Technical Student Organizations (CTSOs) provide in their schools. SkillsUSA is our CTE organization that represents our Technology and Engineering course content area. I'm proud to say that we have stabilized our programming, made some quality hires, and I am pushing to move forward and grow in a meaningful way. Road blocks? Time, resources, money. These are the top reasons for schools not adopting or establishing a healthy CTSO in their schools. I could go on for a long time on this subject, but I feel that we have an issue that we need to address. I firmly believe that every Technology and Engineering program should offer a SkillsUSA chapter within their department. It is an INTRA-CURRICULAR program. It is NOT A CLUB or an after-school program.

*Continued on next page...*

Join Our  
**Technology & Engineering Update  
and TEEChat!**  
<https://dpi.wi.gov/te/listserv>

...Continued from page 12

**“...SkillsUSA belongs in every school district in the state.”**

We need to work on that perception and continue the paradigm shift within our educator field, with our administration and school boards; as well as emphasizing with business and industry that SkillsUSA belongs in every school district in the state. SkillsUSA can and should be happening in your classrooms. SkillsUSA is more than competing. It's developing the whole student from job readiness, career research, skill development, leadership opportunities and beyond. Yet only about 1 in 4 schools has a SkillsUSA chapter. Why? It's not a priority. I believe this should be an active component in our 220 licensing requirements. CTSOs are a quality component indicator as part of your Perkins V applications under the size, scope, and quality (SSQ). Funds from Perkins V can be utilized in certain capacities to meet needs identified in your Comprehensive Local Needs Assessment (CLNA). SkillsUSA is vetted through business and industry, written into Wisconsin legislation, and ties directly to career readiness and state standards. While SkillsUSA might not be the right fit for every student, every student should have the opportunity to join the organization at their school.

I also believe that the state should be funding these organizations. Unfortunately, the DPI's request for dedicated funding for career and technical education, including a special request for CTSOs, was not included in the 2025-27 biennial budget. I will continue to advocate for all of CTE and our CTSOs. For now, I ask those of you who have chapters to consider joining me to network and tell the good story of CTSOs impact in your community. Share with others the “Why?” you have SkillsUSA in your district. Please take a look at our updated website and opportunities at [www.skillsusa-wi.org](http://www.skillsusa-wi.org)

### SkillsUSA, DPI, & Industry Summits

I'm looking to make connections between the curriculum and I have some ideas as to how we can carry out some career pathway, cluster, and CTSO awareness/training. Personally, I will be hosting five regional “learning summits” at various SkillsUSA regional events where I'm hoping to bring in educators, businesses, and administration from the area of the host event to discuss career pathway, classroom connections to CTSOs, and business and industry needs. These will be held at various campuses that host our REGIONAL events - please consider engaging if you feel inclined. See regional competitions: <https://www.skillsusa-wi.org/wordpress/events/>

Please reach out with any questions, concerns, or if simply looking to network. I'm here to work with you.

**MACHINE TOOL & EQUIPMENT, INC.**  
145536 COUNTY RD. U WAUSAU, WI 54401  
PH: (715)675.6309 FAX: (715)675.5647  
WWW.MACHINETOOLWI.COM

Logos and brands shown: NEWALL, SUMMIT, CHICAGO, NATIONAL, TENNESMITH, SawStop, HYD-MECH, The Rock Solid Solution, KENT USA, Ellis MFG. COMPANY, INC., POWERMATIC.

\*CALL FOR SCHOOL SPECIALS\*

# SKILLSUSA NATIONALS RESULTS

## 34 Wisconsin Schools Compete in Atlanta

By Jamie Birchman, Wisconsin SkillsUSA Event Coordinator



Wisconsin had 34 middle and high schools represented at the SkillsUSA National Leadership and Skills Conference in Atlanta, Georgia, June 23-27, 2025. That included 90 contestants in 58 different competitions. The event brought together more than 19,000 attendees, including students, instructors, industry partners, government officials, administrators and more. The highlight of the NLSC is the SkillsUSA Championships, where more than 6,700 state champions competed for national gold, silver and bronze medals in 114 skilled and leadership competitions.

Other highlights included the largest technical education trade show in the nation in SkillsUSA TECHSPO, an exciting opening session, leadership training, workshops and seminars, and an awards ceremony filled with tears of joy!



### State Officers in Attendance

- **Shellyn Nash (President):**  
LakeView Technology Academy
- **Lucas Varela (Vice President):**  
Waunakee High School
- **Leah Missig (Secretary):**  
New Glarus High School
- **Aanya Panchal (District 5 Vice President):**  
Lakeview Technology Academy
- **Mallory McCullick (District 6 Vice President):**  
Wauzeka-Steuben High School



Welding Fabrication



Wisconsin State Officers at Nationals



Facilithon Competition

### Wisconsin Competitors at 2025 Nationals

Academies of Racine Mitchell School
Case High School - Racine
Chetek-Weyerhauser High School
Chippewa Falls Senior High School
D C Everest High School
Delavan-Darien High School
Gifford School - Racine
Grafton High School
Hamilton High School - Sussex
Hartford Union High School
Howards Grove High School
KTEC - Kenosha
LakeView Tech Academy - Pleasant Prairie
Little Chute High School
Mineral Point High School
Monona Grove High School
Oconto Falls High School
Patrick Marsh Middle School - Sun Prairie
Phelps High School
Preble High School - Green Bay
Pulaski Community High School
Riverside Middle School - Watertown
Shawano High School
Slinger High School
Spooner High School
St. Croix Falls High School
Watertown High School
Waunakee Middle School
WCTC / High School Students
Webster High School
West Bend High School
Whitnall High School
William Horlick High School - Racine
Wisconsin Dells High School

**Wisconsin Awarded the State Standard of Excellence - GOLD LEVEL**

Continued on next page...

...Continued from page 14



**Webster HS: Gold Medal  
Automated Manufacturing Technology;  
Advisor - Roy Ward.**



**Phelps HS: Gold Medal  
Chapter Display;  
Advisor - Dustin Spink**



**Whitnall HS (Greenfield): Gold Medal  
Computer Programming  
Advisor - Jeff Lemmer.**



**Hartford Union HS: Gold Medal  
Facilithon – Leadership in  
Facility Management;  
Advisor - Brad Dzikowski.**

*\*Awards photos Courtesy of SkillsUSA*

**4th PLACE FINISHES:**

- Green Bay Preble HS: CNC 2-Axis Turning Programmer
- Watertown HS: Robotics - Urban Search and Rescue, (Team)
- West Bend HS: Extemp. Speaking

Interested in Joining SkillsUSA?  
**Go to: [skillsusa-wi.org](http://skillsusa-wi.org)**

# 2025-26 SkillsUSA EVENTS CALENDAR

## Welding Challenges

- Fox Valley Technical College: Oshkosh..... Sept. 30, 2025
- Mid-State Technical College: Stevens Point..... Oct. 17, 2025
- Blackhawk Technical College: Janesville..... Oct. 24, 2025

## ELEVATE (Virtual Event by our National Office)

Local Chapter Officer Training..... Oct. 8, 2025

## Fall Leadership Conference

Holiday Inn: Stevens Point ..... Nov. 16-17, 2025

## District Competitions

- District 1: Unity HS..... Nov. 6, 2025
- District 2: ..... TBA
- District 3: Pulaski HS..... Dec. 3, 2025
- District 4: Beloit Memorial HS..... Nov. 3, 2025
- District 5: Slinger HS..... TBA

## Regional Competitions

- Fox Valley Technical College: Appleton..... Jan. 23, 2026
- UW-Platteville: Platteville ..... Jan. 30, 2026
- Northcentral Technical College: Wausau ..... Feb. 6, 2026
- Gateway Technical College (IMET Center): Sturtevant ..... Feb 13, 2026
- UW-Stout: Menomonie..... Feb 26-27, 2026

**53rd Annual State Leadership & Skills Conference:** Madison  
Alliant Energy Center & Madison Area Technical College ..... April 7-8, 2026

**National Leadership & Skills Conference**  
Atlanta, GA ..... June 1-5, 2026

**\*SkillsUSA Membership Deadline..... March 1, 2026**



**Wauunakee Middle School: Silver Medal  
Team Engineering Challenge;  
Advisor - Dave Burgard.**



**Chippewa Falls Senior HS: Bronze Medal  
Welding Fabrication  
Advisor - Tim Pomietto.**



**Wisconsin Middle & High  
Schools Recognized for  
Increased Membership!**



**Chapter Display**



**Everyone needs a  
break occasionally!**



## Manufacturing Endurance Vehicles Using A “Hybrid” System of Instruction

By Matt Schultz, WTEA Awards Coordinator; The Lincoln Academy



### The Switch From Traditional to Hybrid Instruction

If you are thinking of modifying your current super-mileage vehicle class, or creating a new engaging manufacturing class, think about manufacturing a small car for endurance. I have been an advisor for CUSA (Challenge USA) for 15 years. ChallengeUSA is the organi-



zation that hosts events for students to test the endurance vehicles they build in class. In my years of experience I have helped hundreds of students design, fabricate and test over 35 cars. In those 15 years I have let the students design their own vehicles from the ground up. It hasn't been till recently that I switched my program over to run like a hybrid manufacturing project, “slash,” design project. I call this system a “hybrid” because I am still giving kids the opportunity to be creative and problem-solve. But I streamlined the process of making the car by providing them a set of plans. Let me break it down.

### Streamlining the Process

Students are provided with a vehicle configuration blueprint. This blueprint provides students with a car frame, steering system plan and drivetrain plan. I also provide a mono body to the class as a car body.

Students spend the first three weeks of class fabricating the frame. They have to bend and notch a round tube



following a detailed set of blueprints. There are some variations in the car frame based on

the student's size. For the most part though the students build the exact same frame as their peers on the team. This allows for a few advantages. We are now able to use jigs and fixtures when fabricating and assembling the frame. We can now use templates and cutting jigs. We can perform a lot of repeatability when we are cutting, bending and notching difficult frame members. The frame controls so much of the vehicle steering and drivetrain that streamlining this component now allows for future components, like the steering and drivetrain to be the same.

From a grading and classroom management perspective, I am now able to create rubrics for students to follow that have the same consistent checks, tolerances and outcomes. Turning the car build from a design process into a manufacturing process has simplified, not only the grading, but the flow of building the frame. It has made everything simpler.

The steering system, which is known to be complicated, can now be taught correctly the first time, rather than relying on trial and error to get acronym steering angles correct. I do teach how the steering angles were derived. I provide students with a schematic of the steering knuckle and king pin inclination angle and we go over the calculations that indicated the design. This way they understand it and see why these components were designed the way they are. Students in my CNC Class fabricate the steering knuckle and steering spindle. It is a CNC lathe and mill project. My CNC class will make 20 at a time, this way we can have extras. We will never need this many, but it allows for any tolerance issues to be sorted out. With the steering components the same, now cutting out parts on the fiber laser makes light work of what used to be a month-long process. We are able to cut our brake caliper holder and weld it on the forks with ease, a process that used to



Continued on next page...

...Continued from page 16

rely so much on alignment.

As for the drivetrains, again we rely on our laser to cut out plates to assemble. This improves the process so much, especially with alignment. Once they are cut and welded together we install the drivetrain which includes the motor, controller and battery. This process that used to take months, now only takes days. Not to mention, the parts are all correct because they have been used before and modified to make them fit correctly.

### Advanced Classes Work on Redesigning



Now I know what you are thinking, your kids are basically just relying on CNC and technology and your new “hybrid” class has taken the real learning away from the project. That is when year two comes in. Yes, in year one students are not designing as much on the car, They

are more focused on fabrication and assembly. In year two, students pick a component of the car in which they want to improve. Improving a system usually involves a redesign, prototyping, and experiencing some trial and error. So far our teams have redesigned entire drive trains, steering systems, braking systems, and the frame. Basically everything on the current car models has gone through a redesign process led by the second and third level students. When these modifications happen, the cars all change and evolve.

### Other Advantages to the Hybrid Approach



I love this “hybrid process” because it gets kids in my other classes supporting the team and creating more interest in super-mileage vehicles (SMV). Another huge advantage to this model is that I only have to buy one

set of hardware for the cars. That’s right, I buy only one style motor, controller, brake, wheels, and seat belt. All my nuts and bolts are the same. I have extras of car parts at races in case we crash and need to rebuild a system.

To get to this point took some time. It also meant temporarily removing some creative control from the class. They get it back in years two and three, but why not teach the kids to build the cars right in year one, from the get-go?

I strongly encourage this “hybrid” style of classroom where you mix manufacturing with creative design. It has proven to be extremely effective in my classroom. I also encourage you, if not already competing in CUSA, to reach out and learn how to get a program going at your school.

**Find my contact info on page 2 of this issue. For more info and upcoming events, check out the CUSA website!**

## Exciting New Edition for Today's Automotive Students



We Support  
**ASE** Education Foundation

Correlated to all three levels of the latest  
ASE Education Foundation Task Lists

**G-W**  
PUBLISHER



Please contact Kathy Moehle  
kmoehle@g-w.com • 708.821.6545

Request a  
sample today!



**INKWORKS**  
UNIQUE DIGITAL & OFFSET SOLUTIONS

Meeting  
your  
Printing  
Needs!

www.inkworkspainting.com



# 2nd Annual WTEA Foundation Charity Golf Outing

*By Alan Mamerow, WTEA Foundation Golf Outing Chairman*

On July 31st, WTEA members and partners once again took to the links at Wild Rock Golf Club in Wisconsin Dells for a day of entertainment, fun, camaraderie, and a wide range of good and bad golf. A huge thank you to all golfers, sponsors, and course staff for making the event great!

Following a record year of scholarship applications and awards, the WTEA Foundation was able to again raise over \$2,000 in support of their mission to support STEM Education in Wisconsin and the next generation of Technology and Engineering teachers. This effort was especially supported by our outing sponsors:

- Associated Builders and Contractors of Wisconsin
- NorthEast Wisconsin Manufacturing Alliance
- SkillsUSA Wisconsin
- STEM101

Mark your calendars now for the 2026 outing, which will be held on Thursday, July 30, 2026. We look forward to seeing you there! For more information about the event, visit [wteafoundation.org/golf-outing](http://wteafoundation.org/golf-outing) or reach out to Alan Mamerow at [golf@wteafoundation.org](mailto:golf@wteafoundation.org)



The First Technologies F-Troop team crushing it off the tee box



Waiting patiently...



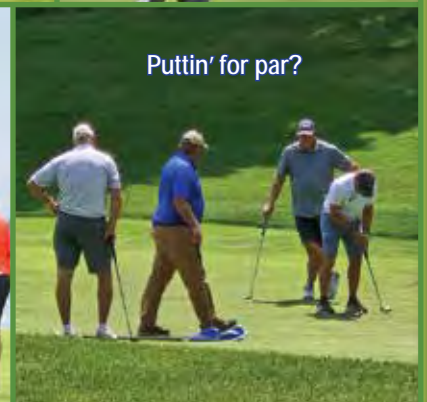
What a swing!



Even the Wild Rock staff joined in the fun!



The Sussex Hamilton team enjoying a great day at Wild Rock



Puttin' for par?

Join Us July 30th, 2026  
for the  
WTEA Foundation's  
3rd Annual  
Charity Golf Event!



The STEM101 Team.



G-Troop Team 1: Tom Barnhardt, Eric Sutkay,  
Matt Schultz, and Stephen Hadfield



Eric Sutkay, spending more time in the  
rough than the fairway?!

## DESIGN CONTEST

### Students: Design Our Next Cover!

## INTERFACE

### Cover Design Contest

**ATTN: Tech Ed instructors!**  
**- WE NEED YOUR HELP -**

- What:** *Interface* Magazine 3rd annual cover design contest for your students.
- Why:** To provide students real-world design experience!
- When:** Designs DUE in December 2025 with winning design to be used beginning with 2026 spring *Interface* issue.
- How:** Email *Interface* editor, Duane Apel, at [interface.wtea@gmail.com](mailto:interface.wtea@gmail.com) for specific criteria, magazine spec's, & exact dates.
- Award:** \$50 awarded to the winner, and name and photo included in magazine.
- Theme:** The WTEA theme (to be used on the cover) will be announced by Nov. 1st

Scotchman

USA MADE

BEST IN THE BUSINESS WARRANTY

10% EDUCATIONAL DISCOUNT

CONTACT: RANDY & TRAVIS

**MACHINE TOOL & EQUIPMENT, INC.**

(715)675.6309 • WAUSAU, WI • WWW.MACHINETOOLWI.COM

**Mark Your Calendar!**  
57th Annual WTEA State Conference  
March 11-13, 2026

# Ignite Creativity: Professional Print & Apparel Solutions



## HP Print & Cut Combo Solution

Fast, flexible and built for busy schools

One workflow from print to cut keeps projects moving and student time productive. Instant-dry Latex prints let you laminate or cut right away, with simple operation. Print your school's decals, stickers, floor graphics, wall decals and banners in school.

**VALUE BUY**  
Epson SureColor F2270/F1070



## Epson V1070 Desktop Flatbed Printer

Bring custom merchandise to life on campus

Create on-demand plaques, coasters, phone cases and more with vivid UV color. Compact, easy to use, and supports white ink plus gloss or matte varnish for premium finishes.



## Epson SureColor F2270/F1070 DGT & DTF Printer

One printer, endless apparel possibilities

Run DTG and DTF from a single device for fast spirit-wear production. Quick setup, consistent quality across fabrics and simple upkeep to reduce downtime.



## HP Z6/Z9+ 24" & 44" Printers

Precision and photo quality for posters, maps and art

Fits perfectly in classroom spaces. Print posters, indoor banners, photos, canvas, maps, drawings, charts and student artwork with sharp detail and durable, water and fade resistant color.

Supporting Wisconsin schools with equipment, training, supplies and service for 30+ years



[WWW.BIGSYS.COM](http://WWW.BIGSYS.COM)

Call 888-244-4177 or email [info@bigsys.com](mailto:info@bigsys.com) to schedule a demonstration. Our certified specialists will help you **PRINT BRILLIANT!**

# PARTNERSHIPS PAYING OFF

## Hortonville Receives AZCO and American Welding Society Awards

By Brandon Radtke, Hortonville High School TE Instructor

**H**ortonville High school was awarded the AZCO Tools for the Trades grant and the AWS - Fox Valley donation. These are both pretty new awards that are going to continue on a yearly basis so I wanted to share some things that I think have helped our program over the years. My hope is that this article helps someone out there with their own program and professional development.

When creating my submission for these awards, both wanted to know a few things. First, what am I teaching? Hortonville's welding program is made up of five different welding classes that total over 400 hours of instruction. As students progress through the program they learn about various processes such as GMAW, SMAW, and GTAW on various metals. In addition, they learn a little about various metal fabrication concepts, measurement, blueprint reading, etc.



***"This past school year we had over 300 students enrolled in welding courses... This program could not function the way it does without all the connections that have been made over the years."***

Students can also receive up to seven credits at Fox Valley Technical College, including a 5-credit certificate. The second question is how many students would this money impact? This past school year we had over 300 students enrolled in welding courses. As a result, we ran 20 sections of welding last year. We are on a block schedule with four 85-minute periods per day, so we ran all four blocks for all four quarters along with a 0-hour before school to accommodate all 20 sections. Next year will look very similar as we are running 19 sections.

I've heard concerns over the years that if teachers run dual credit in their classes that their enrollment will drop. If it's not done properly, I agree. Dual credit classes get deep into content real quick. My opinion is if you introduce it too quickly you will burn your students out. Students have to figure out if they like what you're teaching them before they really commit to in-depth content and highly skilled lab work/projects. The first two

classes in my program (90 hours) have zero hours of dual credit. The next class (125 hours)

has only 27 hours of dual credit instruction. My 4th and 5th level courses are where the content gets heavy. By that time, students have been with me for over 200 hours. They like it enough to take a 4th and 5th class with me. They're ready for the in-depth and difficult content I'm about to ask them to do. I always get enough students to run a few sections of these upper level courses so the way I see it this only helps my numbers. Your administration might also be more willing to run smaller classes if dual credit and/or Act 59 grant dollars are attached to the classes.

The last question is, what will you use the money for? For me this was easy. I catch flack for spending the most in my department, but there's always something to improve on. Whether that's buying a new piece of fab equipment, like a press brake, or purchasing another reliable welder that can do AC TIG and SMAW. There is always something I could use.

This program could not function the way it does without all the connections that have been made over the years. Thank you to our business partners such as AZCO, Miller Electric, Pierce Manufacturing, and various UA 400 and SMART 18 contractors that have supported us. In addition, thank you to AZZ Inc, New London Fabrication, Seagrave Fire Apparatus, Steel King, and now Fireline Sprinkler for allowing me to learn on the job as a welder working for you during the summer over the past eight years. I've been able to incorporate so many things into my classes that you do at your companies. Last, is the partnership with Fox Valley Technical College. I can't thank all of the instructors in the welding department enough for the support I've received from you.

Hopefully this helps someone out there. Have a great school year!



## WTEA SCHOLARSHIP

### Watertown HS Graduate Awarded WTEA Foundation Future Technology Educator Scholarship



*Submitted by Joe Ciontea, Secretary - WTEA Foundation*

Gabe Domer, a June graduate from Watertown High School, was selected to receive the 2025 WTEA Foundation's \$1,000 Future Technology Educator Scholarship. Gabe is enrolled as a Technology Education major at UW-Stout. His application essay follows.

*I intend to enter the field of education because from a young age I have always been able to catch onto things quickly and then be able to help others. Over the past two years of high school I have fallen in love with the wood and metal shop. I am familiar with every machine and am able to operate every machine with proficiency. During my senior year I spent three months at the local middle school helping out Anna Vitale as my mentor in her shop classes. Being able to work closely with middle schoolers was an experience I will never forget. Once they have an idea there is very little that can get in their way from getting that done. While there, I had the opportunity to teach a lesson on isometric views. I want to be able to show my passion and love for these shops to others, showing them all the wonderful opportunities that lie there if they just take the first steps into the shop and see. My dad actually inspired me to be a Tech Ed teacher. At first I disliked the idea of having him as a teacher but then I took one of his classes my junior year and after that I just kept taking them, realizing how fun they were. I didn't want to leave the shop, taking as many as I could my senior year.*

## INDUSTRY SCHOLARSHIP

### Precision Metalforming Association Offers Scholarships



*By Alan Mamerow, WTEA President-Elect & Education Liason, PMA Wisconsin*

Instructors, do you have seniors this year or recent graduates from your program that are enrolled in courses related to metalforming, tool and die, or welding? Consider directing them to this year's scholarship opportunity!

The Precision Metalforming Association Educational Foundation (PMAEF), in cooperation with PMA Wisconsin, is offering scholarships of \$500 to \$3,000 to individuals seeking a career in the metalforming industry. Each award is for one year and will be granted based on academic merit. Post-secondary students may reapply for consideration the following year.

#### **In order to be eligible:**

- The applicant must be a high school senior or current post-secondary student.
  - Must be enrolled in metalforming/manufacturing/technology/engineering program; trades/job training/apprenticeship or machining; CNC; tool and die; welding or stamping certificate program, or an accredited institution with 20 or more contact hours.
- The applicant must have a minimum of one manufacturing related course in high school.
- The applicant must be pursuing further education for a career related to manufacturing in a post-secondary educational institute, trade/tech school, or apprenticeship program.

#### **Applicants will need:**

- 250 to 500-word personal statement with the focus around manufacturing experiences.
  - Topics to consider include career plans, long-range aspirations, special achievements and honors, employment experience and why you think you'd be a good recipient of the award.
- Two letters of recommendation:
  - One from your technology and engineering teacher or instructor;
  - One from a recent or current employer.
- A grade point average of 2.0 or better.

To apply, have students fill out the educational scholarship application form at <https://pmaef.submit.com/>.

**\*Applications will open on October 1, 2025 and close on February 1, 2026.**

# MIDDLE SCHOOL SPOTLIGHT

## Emergency Sub Plans, Lesson Sharing, and More...

By Heather Kiefer, WTEA Director At-Large; Slinger Middle School



### Middle School Survey Winner!

As promised, those that completed the survey by June 1st earned a chance to win a free WTEA membership for the 2025-26 school year. Congratulations to our winner, Stephanie Spilde, from Indian Mound Middle School in the McFarland School District!

### WTEA Annual Conference March 11-13, 2026

Mark your calendars! Now is the perfect time to start thinking about presenting a session or collecting projects to share in the Project Showcase during the annual WTEA conference. You all have a wealth of knowledge and inspiration to share. If you're not feeling ready to present a full session, you can also consider bringing something to share during our Middle School Roundtable session. Last year we had an excellent group in attendance, great informal conversation, and a ton of ideas shared. This year let's take it to the next level by adding some "show" to our "tell". Bring along a project example, photos, hand-outs, links, example materials, resources, etc - anything you wish someone would have showed or shared with you!

### What's Your "Emergency" Sub Plan?

We all know sub plans in a hands-on setting need to be written differently depending on who will be coming in to cover our classes. I hope you all have at least one rock star sub that is willing and qualified to keep your lessons running safely if you are out. The unfortunate reality though, is that there will likely be a time this year that you need to have a Plan B ready to go. Below are two of my favorites that students really enjoy!

### Hour of Code: <https://hourofcode.com/us/learn>

Code.org offers a huge selection of hundreds of FREE coding tutorials. You and your students can use the comprehensive search feature to easily find activities to fit a variety of topics, interests, and skill levels. Since students do not need to set up accounts, they can just click and get started immediately. I either pick an activity I want the class to do, or let students choose. At the end of class I have students show a classmate what they accomplished and complete a short reflection to share with me what they learned to hold



them accountable. The Code.org website has a wealth of resources for teachers that extend far beyond the Hour of Code activities.



### Mark Rober: <https://www.youtube.com/@MarkRober/videos>

Years ago a student shared a Mark Rober video link with me and I've been hooked ever since. Now a popular YouTuber, Mark Rober is a former Apple and NASA engineer and was on the team that developed the Curiosity Mars Rover. His videos push limits in an over-the-top motivational yet educational way.

The "Rock Skip Robot" video breaks down the engineering process and the series of squirrel videos are definitely student favorites. New videos are added frequently and I find most to be middle school appropriate, but it's always good practice to preview first.

### Your Turn to Share

Do you have a great go-to sub plan lesson? Scan this QR code or use the link to share your favorites through a google form. WTEA Shared Sub Plan Lessons Form:



<https://forms.gle/EH2qz87vP8TsvDGL9>  
Please include links and a short description. I'll compile the list and email it out to those who contribute and all of you already in our Middle School Teacher Directory. If you're a high school teacher and we've caught your attention, you can definitely participate as well! **Please complete the form by December 24, 2025**, to be included. I'll email the resource out in January, so it's available second semester and also share it during the Middle School Roundtable session at the Spring WTEA Conference.

### Keep Those Phones Handy

We'd love to highlight the amazing Tech Ed and STEM things happening across Wisconsin in your middle school classrooms. Consider submitting a photo or two showcasing an event, project, or your students in action. Photos or articles can be emailed to [interface.wtea@gmail.com](mailto:interface.wtea@gmail.com). Type "Middle School Photos" in the subject line and include a short description or caption including your name and school name. Your students would love to see their faces on this page in the spring issue!

# SUMMER TEACHER TOUR

## TE Instructors Visit Georgia-Pacific and Nature's Way Facilities

By Ann Franz, Executive Director - NEW Manufacturing Alliance



The NEW Manufacturing Alliance hosted the Vitamins & Toilet Paper Tours and Dialogue on June 12, 2025. The program is an annual event that the organization hosts in partnership with WTEA. This year's program included a tour of Nature's Way and Georgia-Pacific plants in Green Bay. Nature's Way is a manufacturer of vitamins and supplements, and Georgia-Pacific manufactures toilet paper and paper towel at the Green Bay plant.

Ann Franz, executive director of the NEWMA organization shared, "We have hosted this



Tech Ed instructors learn about facility operations at vitamin and supplement manufacturer, Nature's Way.



event over the past several years as a 'thank you' from the NEW Manufacturing Alliance for the important role Tech Ed teachers have in the lives of their students." Tour attendee, WTEA Executive Director Joe Ciontea, added, "Another wonderful summer event coordinated by the NEWMA. I witnessed some fascinating examples of technology in action!"

Recent plant tours have featured aerospace, boats and trucks.

For more information about the NEW Manufacturing Alliance go to [www.newmgalliance.org](http://www.newmgalliance.org).



## DISCOVER AI

AN EMERGING TECH LEARNING LAB

AI is impacting every career field.

Prepare your students for the AI-driven workforce with a ready-to-go, scalable learning lab that teaches real-world applications of AI in STEM & CTE fields.

- ✓ Turn-key and fully scalable
- ✓ Student-driven, applied learning
- ✓ No AI expertise needed: full curriculum and educator support



LEARN MORE & GET STARTED TODAY



Available exclusively through LAB Midwest  
[www.labmidwest.com](http://www.labmidwest.com) | [info@labmidwest.com](mailto:info@labmidwest.com)

# DIRECTOR'S REPORT

## Reflections On A Great Summer As The Focus Turns To Fall

By Eric Sutkay, WTEA District F Director; LakeView Technology Academy



By the time you read this, the school year will be off to a great start! Another summer is in the books and it is off to the races. This past summer was very memorable. I spent a lot of time in northern Wisconsin at a piece of property I recently purchased. With the help of several other tech teachers from around the state, I was able to build a nice carport over my camper to help protect it from the elements. Mostly work, but there was some playtime in there as well, including boating, golfing and fishing. What a great time spent with friends in our profession. This summer I also spent time with family, traveling to D.C., several Brewers and Kingfish games with the kids, a few visits to the dragstrip, and of course the county fair! As far as district news goes, I know there were some new positions filled within the district as well as maybe a few that are still open. Last school year we ended with a tour at Badger High School in Lake Geneva, and this fall I hope to start that back up. Please look for communications in your email about upcoming district meetings. If you are willing to host something, feel free to reach out and we can get something planned ([esutkay@kUSD.edu](mailto:esutkay@kUSD.edu)). As always, I hope everyone has a great year and I look forward to meeting up throughout the school year!

# TRANSPORTATION TEACHER TRAINING

## WATDA Foundation: Another Great Summer Training Session

By Brent Kindred, Vice President - WATDA Foundation

For over 25 years the WATDA Foundation has provided summer training to transportation teachers. In July we held an outstanding, multiday event; thank you to Aaron Troxell (State Education Manager) for your leadership. Thank you so much to the host, Madison College, and the dedicated instructors. Some of the highlights:

- FREE for any transportation teachers to attend.
- New transportation teacher boot camp. (1 – 3 years in the classroom).
- Hands-on training with disassembly & assembly of engines and transmissions.

- Evening social / supper at Madison Axe. This is a relaxing time for teachers to talk and collaborate.
- Ice cream social for everyone to enjoy on a warm July day. Who doesn't like ice cream on a warm day?
- Manufacturer presentations from; Consulab, Nissan, ACDelco, Generac, etc...
- High-quality, high-impact presentations from Madison College staff.

Please let me or Aaron know if you have any questions.

[bkindred@watda.org](mailto:bkindred@watda.org)

[atroxell@watda.org](mailto:atroxell@watda.org)



## DIRECTOR'S REPORTS

### Altimeters, Not Pedometers: A Fresh Look at Grading

By Randy Way, WTEA Director At-Large; Madison College



This fall, in addition to my regular administrative duties, I'll be back in the classroom to teach a class for the first time in nine years. I've spent the summer thinking about teaching practice, particularly about grading. Grading is a tough problem. The grading system was devised to sort students – a purpose that is generally at odds with our objective of success for all.

One of my tactics when faced with a tough problem is to try to find an analogy - a similar problem that's already been solved. I don't purport here to have solved grading, but I'm hoping that an analogy drawn from chemistry might help us at least develop clearer thinking and ask better questions.

Grading is (or ought to be) a system of measurement. For scientists, things measured fall into two broad categories: state- and non-state- variables. State variables are a snapshot in time. It doesn't matter how we arrived at them, so they are also called path-independent variables. Think about distance as the crow flies – the straight-line displacement between two points. Non-state variables are affected by the path to get to the current value, hence being known as path-dependent variables – for example, the driving distance between two points on the map.

Sometimes displacement and distance are pretty close – imagine a straight shot up U.S. Hwy 51 from Beloit to Boulder Junction. Sometimes they can be quite different - a drive through the driftless with its winding switchbacks can result in distances that are much longer than the displacement the crow experiences when flying from A to B.

So, what does any of this have to do with grading? Consider for a moment students working to develop competency, which is like climbing to the summit of a mountain. Grading is our way of expressing how much progress the learner has made in their attempt to scale the peak.

We could measure their progress toward the peak using a pedometer, counting the number of steps they've taken in their journey. The pedometer makes a path-dependent measurement. Students will take different paths through the content. Some might choose a frontal assault on the vertical face of the mountain, some might take a more meandering route to the top. The pedometer isn't going to disclose their vertical displacement up the moun-

---

**“What would this look like in grading? It would mean measuring results, not effort.... a major culture shift in education.”**

---

tain, it's going to tell us the horizontal distance their steps have covered. Now consider the altimeter. The altimeter returns a path-independent measurement of the learner's vertical displacement, irrespective of the number of steps it took to arrive at that height.

What would this look like in grading? It would mean measuring results, not effort. When my school board decreed that homework should not be included in the final grade calculation, teachers were apoplectic; we're not allowed to assign homework anymore was a common refrain. I think that's an overreaction. The board didn't say don't assign homework, nor did they say don't grade homework. They simply said, don't use that path-dependent data in your calculation of the final path-independent grade.

Moving from counting steps on the journey to measuring elevation gained is going to be a major culture shift in education, and we've been at it a while, but it's what we owe our students – to forget the pedometer and to trust the altimeter.

---

### Woods Lab Remodeling Project

By Ed Wiegman, WTEA University Representative; UW-Platteville



Over the summer, UW-Platteville's Applied Engineering Technology Management Department, which houses the Technology & Engineering program, started an extensive remodel of the woods lab. Removal of outdated equipment and the purchase of multiple new pieces of equipment is underway. Highlighting the renovation is the purchase of a 4' x 8' ShopSabre CNC Router table with vacuum table, automatic tool changer and upgraded VFD spindle.

Other improvements in the renovation plan is the purchase of a dedicated laser engraver and 3D printer to create a Tech Ed student workspace to provide direct hands-on experience with all of the Makerspace/Fab Lab equipment commonly found in Tech Ed classrooms around the state. The TE student workspace will include an existing vinyl cutter to go along with the laser engraver and 3D printer.



The workspace will provide our Tech Ed Majors the ability to get together and learn from each other in a brand new space built for them.

# DIRECTOR'S REPORT

## Tomahawk Students Successfully Build and Display Motorcycle at Car and Motorcycle Show

By Brian Schiltz, District B Director, Tomahawk School District



The Hatchet Choppers, a team of students from Tomahawk High School, had their motorcycle on display at the Central Wisconsin Rod and Bike Show at the Bull Falls Harley-Davidson in Rothschild this summer. Even though it was not part of the official contest the bike captured first place in the Modern category. The bike, built by students, was part of a statewide motorcycle building contest.

Jim Brown, a Harley-Davidson engineer and BUILD Moto mentor, represented the Hatchet Choppers at this event. Brown and BUILD Moto advisor, Brian Schiltz, recognized it as an excellent opportunity for the team. It was also a great way to network with other bike enthusiasts and a chance to show the community what type of learning is occurring in the Tomahawk School District.

### What is Build Moto?

Teams of six students from local high schools are organized to design and rebuild a motorcycle to American Motorcycle Association (AMA) flat track racing standards. Each team has one faculty advisor from their school and three additional mentors.

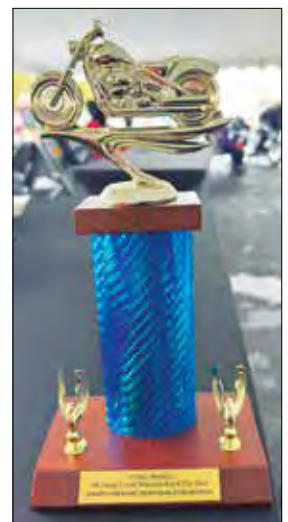
BUILD's mission is to provide students an opportunity to learn technical skills including design, welding, fabrication, repair, machining, media, and more through motorcycle fabrication. **For more info check out:** <https://buildmoto.com>.



Tomahawk High School's BUILD Moto team students with advisor Brian Schiltz-far left; Harley-Davidson mentor Jim Brown-3rd from left; and Harley-Davidson mentor Steve Gregorie-far right.



The bike sports a hockey puck as part of the brake pedal. Harley-Davidson mentor, Jim Brown is a WIAA hockey official and the Tomahawk boys hockey team is the WIAA defending state champion!



Tomahawk High School's trophy for capturing first place in the "Modern" division at the 8th Annual Central Wisconsin Rod & Bike Show.



The winning bike parked in front of a list of the generous Hatchet Choppers sponsors.



WTEA High-Tech Weekend!  
Laser Engraving - 3D Mapmaking

Dec. 6th, 2025

Little Chute HS

SAVE THE DATE!

More Info to Come...

## Please Support Our Generous Advertisers!

Big Systems  
bigsys.com

First Technologies, Inc.  
firstteched.com

Foundation of WATDA  
watda.org/foundation

Gateway Technical College  
gtc.edu



Goodheart Willcox Publisher  
g-w.com

LAB Midwest  
labmidwest.com

Machine Tool & Equipment  
machinetoolwi.com

H2I Group  
H2igroup.com



WTEA Foundation  
wteafoundation.org



# TORMACH<sup>®</sup>

Tormach is a Wisconsin-based company

LEARN MORE



**We do what the big boys do,  
at a fraction of the cost!**

**Purchase your Tormach CNC products  
from **First Technologies**  
and receive these added benefits:**

- \* Full assembly & installation
- \* On-site product training and technical support
- \* Integration with existing design software

**FIRST**   
**TECHNOLOGIES**  
Putting Education ... **FIRST**

**800.787.9717**

**www.firstteched.com**



TEE  
Communications

Stay in Contact With Your TEE Colleagues Across the State!  
Join the Technology & Engineering Update and TEEChat:  
<https://dpi.wi.gov/te/listserv>

**Interface**, the journal of the Wisconsin Technology Education Association, is published & mailed from Stoughton, Wisconsin, three times a year and is distributed to members of the WTEA. Individual subscriptions available at \$35 per year. For subscription information, back issues, or reprints please send requests to [jc.wtea@gmail.com](mailto:jc.wtea@gmail.com). Articles for publication should be sent to editor, Duane Apel, at [interface.wtea@gmail.com](mailto:interface.wtea@gmail.com). Copyright (c) 2025. All rights reserved. Limited reproduction rights are granted to current members of the WTEA.

**WTEA Refund Policy:** The WTEA Membership fee is not refundable. The WTEA School Subscription fee is not refundable, but is transferable to other staff in the same school district. The portion of the non-member conference registration fee equal to the amount of the WTEA membership fee is non-refundable. Refunds for conference registration and/or Awards Banquet must be received by U.S. mail or by email at least 15 days prior to the event. Exhibit space canceled after Jan. 10th will be subject to a \$100 cancellation fee. No refunds will be given for exhibit cancellations within 45 days of the event.

**FIRST**   
**TECHNOLOGIES**  
Putting Education ... **FIRST**  
800.787.9717  
firsteched.com

 **CONSULAB**  
**EV-400**



Click here to learn more!



The EV-400 EV High-Voltage Safety Trainer represents a fully functional Battery Electric Vehicle (BEV) in a compact classroom sized package.

**FIRST**   
**TECHNOLOGIES**  
Putting Education ... **FIRST**

CONTACT US FOR ALL OF YOUR TECH ED NEEDS!  
800.787.9717 • firsteched.com • info@firsteched.com

The Epilog Laser systems are safe and easy to learn...  
perfect for your classroom!

  
**EpilogLaser**



**FEATURES**

- IRIS Camera Positioning
- Touchscreen
- Safeguard Features
- Air Assist
- CO<sub>2</sub> Waveguide Tubes
- Made in the USA



800.787.9717 • firsteched.com • info@firsteched.com

**FIRST**   
**TECHNOLOGIES**  
Putting Education ... **FIRST**

WTEA  
879 Oakwood Ln.  
Watertown, WI 53094  
CHANGE SERVICE REQUESTED

PRSR.T. STD.  
U.S. POSTAGE  
PAID  
Permit #1  
Madison, WI

# A **PODCAST** MADE FOR CAREER & TECHNICAL EDUCATORS



Best practices from K-12 and higher education nationwide

Insights from the world's largest & most innovative employers

Trends, success stories and insights that will help you build an amazing CTE program!



Browse all episodes on [TechEdPodcast.com](https://TechEdPodcast.com)



**The TechEd**  
Podcast