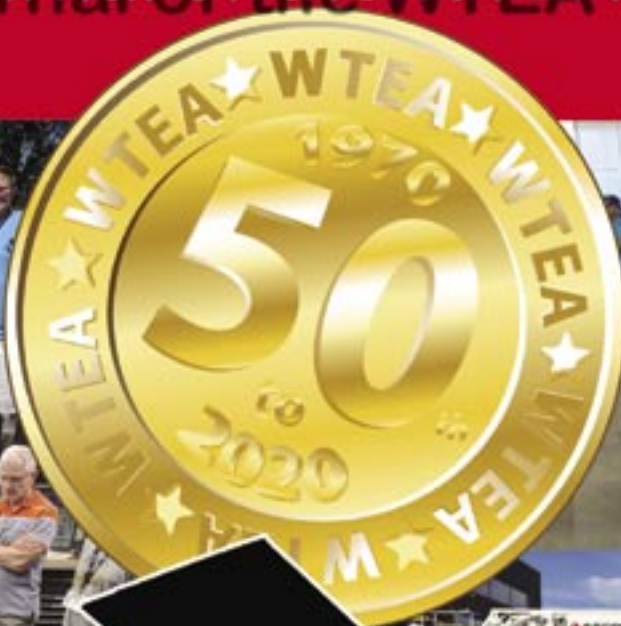


Interface

Journal of the WTEA

Volume 59
Number 1

Fall 2019



Preparing Today's Students for Tomorrow

Feature Articles:
Summer Workshops

WTEA



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TABLE OF CONTENTS

WTEA Board of Directors	2	WATDA Institute	15
President's Message	3	Conference Information	16
WTEA Board News & Calendar	4	Conference Registration	17
Vice-President's Message	5	Lifetime Achievement Award	18-19
Nominations	6	Middle School Prog of the Year	20-21
Executive Director	7	Mobil Learning	22-23
President-elect	9	SkillsUSA	24
Director Reports	10-11	UW-Platteville	25
Subscription Info	12	Rice Lake	26
Milwaukee Tool	13	Scholarship	27
Big Trucks Tour	14	Student Ambassador Program	28

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From the President's Desk

By Phil Bickelhaupt, WTEA President

20 years! Yes, that's right, this is the 20th school year of the 21st Century! So that means everyone of our current students was born in the 21st Century. Every single one of them was born after Google was launched as a company, meaning they truly have never lived without being able to "Google" it. Additionally, the iPod was born nearly 18 years ago on October 23, 2001. So kids have never lived in a time without an iPod either! WOW! It is just amazing that we are 20 years into the 21st Century. We are truly educating a new generation of learners that have been exposed to technology their whole lives! What an exciting time we are living in! Although, I must add, we still don't have flying cars for those "Back to the Future" aficionados out there, but we do have shoes that lace themselves!

Welcome back to the 2019-2020 school year! As I say every year, "Where did the summer go?" As many of you probably made some memories with your family this summer going on trips, vacations and outings, I have to share a fun "moment" that I experienced this summer on a trip to the Wisconsin Dells with my two daughters. This story directly relates to what I have prefaced above about kids growing up in a different age.

As most of us head somewhere for a getaway with our families, we decided to head to Mt. Olympus Waterpark for a day in the Dells. As we went online to book our tickets, I happened to come across a fairly decent deal that would allow us to stay overnight and then get access to the waterpark for the rest of the following day as well as the night of our stay. So, we decided to book the night! Of course, I didn't book a fancy room, just a room for us to simply "sleep" in. As we checked in and headed to our room (we were staying in one of the outer buildings not attached directly to Mt. Olympus) the kids were fairly excited as they had never stayed in a hotel with a door directly to the outside! As we opened the door to the room and entered, both my kids looked at this massive piece of plastic and glass sitting atop of the dresser. At the exact

same time both of them turned to me and said, "Dad, what the heck is that?" With a bit of a chuckle I said, "Well, that's the TV." To which they replied, "What? It is huge!



Why isn't it skinny? Can we watch it? How does it work? Why is it so big? Why isn't it hanging on the wall?" So of course, we had to fire it up. Once on and warmed up, we watched a little TV. For most of us that grew up in the non-high definition world, you can relate to the differences between those days and today. There is a difference, a big difference. After a few minutes of watching, my kids started asking those questions, "Dad, it is really hard to see. Can you make it clearer? How did you watch TV on this as a kid? It is really

small and hard to see." To which my response was, I didn't watch a lot of TV for that reason. I even told them we had a black and white one where we had to manually change the channel. As I reflected on the moment later that evening, it never dawned on me that neither of my kids (ages 7 and 10) had seen an old tube TV before. The story probably isn't as funny as the moment was, but it sure tells the sign of a different time that our youngsters are growing up in today.

As you start the school year, make sure to mark your calendars for the 51st Annual Conference, "Preparing Today's Students for Tomorrow" on March 4-6, 2020 at the Chula Vista Resort in Wisconsin Dells.

In closing, I would like to share one of my favorite quotes from the famous philosopher and school reformer, John Dewey. "If we teach today's students as we taught yesterday's, we rob them of tomorrow." This statement has never held more meaning than it does today. We need to teach our kids differently than when we were in school. We need to challenge them with "non-Googleable" questions, assignments and projects. My challenge to you is to do just that. As our conference theme states, "Preparing Today's Students for Tomorrow," now go out and do that! Take care and best of luck to you during the 2019-2020 school year!

WTEA BOARD NEWS

2019 WTEA Annual Membership Meeting Highlights

By Matt Schultz, WTEA Secretary/Treasurer

The following summary highlights the WTEA Annual Membership meeting held March 8, 2019 during the annual conference at Chula Vista in Wisconsin Dells.

- Board changes:
 - President-Elect: Dave Stroud
Ashwaubenon High School
 - Secretary/Treasurer: Matt Schultz
LakeView Technology Academy.
- Financial Report presented by Joe Ciontea.
- Transcript high school credits with local Technical College. Contact your technical college to get this opportunity for your students started.

- The WTEA is encouraging members to host a “High-Tech Weekend” in your area. Topics can include a wide variety of subjects; CNC, Lasers, 3-D printers, Carpentry, Auto, Machining, etc. For more information contact Matt Schultz or Joe Ciontea:
mjschut@kUSD.edu
jc.wtea@gmail.com
- The 2020 WTEA Spring Conference will be held March 4 - 6 at Chula Vista. “Preparing Today’s Students for Tomorrow” is the theme.
- 25 Year Award recipients were introduced and presented their award.

*For additional information about this meeting contact any member of the Board of Directors.
Complete minutes are available from Matt Schultz at mjschut@kUSD.edu.*

CALL FOR PRESENTERS

2020 Conference Theme:

“Preparing Today’s Students for Tomorrow”

51st Annual Spring Conference • March 4 - 6, 2020 • Chula Vista Resort, Wisconsin Dells

Presenter form must be submitted by December 1, 2019 by mail, website submission or e-mail.

Directly submit via online form at: http://www.wtea-wis.org/wordpress/?page_id=9699

E-mail: johnston@mwt.net • Phone: 608-689-3033

- Dates to Remember -

Oct. 1	Get Real Math Premiere	Green Bay, WI
Oct. 12 - 13	Career Pathways Network National Conference	Orlando, FL
Nov. 3 - 4	SkillsUSA WI Fall Leadership Conference	Wisconsin Dells, WI
Dec. 4 - 7	ACTE Career Tech National Conference	Anaheim, CA
December 22	Early Bird Deadline - WTEA Conference Registration	
Feb. 14 - 15	SkillsUSA WI State Team Works Competition	Milwaukee, WI
March 4 - 6, 2020	Celebrating our 51st Annual WTEA Conference	Wisconsin Dells, WI
March 11 - 14, 2020	ITEEA 82nd Annual Conference	Baltimore, MD
Apr. 28 - 29, 2020	SkillsUSA WI 47th Annual State Conference	Madison, WI
June 22 - 26, 2020	SkillsUSA 56th Annual National Conference	Louisville, KY

Two Words, “Thank You!”

By Bob Morehead, WTEA Vice-President

These words convey a message of gratitude and appreciation. They are short words, only eight letters total. They are easy to spell and even easier to say. Yet many times they are never said, written, or expressed.

A few years ago, prior to the SkillsUSA state conference, I had a question about a competition. So I sent out an email to the technical chair running the event. He replied and answered my questions. He then went on to write that he had been running this event for several years and has only ever received thank you cards one time. The email con-



tained a picture of two thank you cards that my students had written the previous year after placing in the top three for that event. A guy who I had never met, recognized my school on the email and connected it to the two cards sitting on his desk. I shared the picture with my students and I reminded them of how easy it was to do, but how much it means to others.

Take time this school year to make sure that you show your appreciation. It's just two little words.

Thank you!

Check your mailing label now!

Check the first line of the mailing label on the back cover of this magazine to see when your membership expires.

You may not receive the next important issue of the *Interface* unless your dues are paid beyond 2020.

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NOMINATIONS

Be Part of the WTEA Team



We are currently accepting nominations for the office of the WTEA Vice-President. This is your opportunity to serve your profession in a leadership position. The 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 three times per year; meetings are held both face to face and electronically as appropriate. If you have questions regarding this position, please contact WTEA President-Elect, Dave Stroud, at dstroud@ashwaubenonk12.org.

Vice-President

(2 year term): Spring 2020 - Spring 2022

Nominations should be sent to WTEA President-Elect, Dave Stroud, at dstroud@ashwaubenonk12.org.

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 mailed.

Nominations will be accepted until Friday, December 6, 2019.

The more members that are involved in the leadership of the WTEA, the stronger it becomes.

Please consider nominating yourself or someone else you feel could help to advance the mission of the WTEA.

Thank You!

WTEA Awards Nominations

Each spring the WTEA recognizes Technology Educators, Industry, and Technology Education Programs that have demonstrated outstanding achievement at our annual awards banquet held at the WTEA Spring Conference.

The WTEA needs your help, as educators, to identify these worthy teachers, programs, and other professionals that deserve recognition. The WTEA is looking for educators that are going above and beyond in their classroom. The WTEA has a variety of award categories that cover teachers, programs, and examples of classroom excellence. Members are encouraged to visit the WTEA Awards page on the website. There you will find the criteria for each award. 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, contact Matthew Schultz, Secretary/Treasurer or Joe Ciontea, Executive Director and tell us who you wish to nominate, where to contact them, and why you feel they deserve recognition from our association. You can also make a nomination on the WTEA website by visiting the Awards page. The awards ceremony will be March 4th, 2020 as an important part of our 51st Annual Conference celebration.



Notes:

- Nominations must be received by November 16th to be considered for recognition the following spring.
- Technology Educators must be a member of the WTEA to be considered for award recognition. However, recipients of the "Special Recognition Award" do not need to be members.
- For a detailed description of the awards, please visit our website or contact any board member.

Lakeview Technology Academy

Attn: Matthew J. Schultz

9449 88th Ave, Pleasant Prairie, WI 53158

mjschult@kUSD.edu

WTEA Awards Committee

Joe Ciontea

P.O. Box 531, Rhinelander, WI 54501

joe.ciontea@wtea-wis.org

WTEA EXECUTIVE DIRECTOR

From the Executive Director's Desk

By Joe Ciontea, WTEA Executive Director

By the time you read this the back to school in-service meetings should be completed, summer deliveries are unpacked, and you are busy teaching your students lab safety and new skills. I hope the transition from summer to the fall semester goes smoothly for you and your students. As you already know, our 50th annual conference was held last spring and the WTEA 50th birthday comes up next fall (new math). The association leadership met over the summer and worked on plans for the next 50 years of the association. Here are two of the items we discussed at length.

We are returning to Chula Vista in March where our conference has been held annually since the fall of 1996. We have explored other site options in Wisconsin Dells and other cities. Our decision to stay is based primarily upon two factors. 1) the central location and accessibility of the Dells is hard to replace in another city. 2) Because of our long history at Chula Vista we have perks in our contract that no one else will match - we have tried. Moving would raise your conference registration fee \$20, possibly more depending upon meals functions. Chula Vista is a family business and we are not just a customer but a close friend that is treated like family.

I have served the association in a variety of positions since 1988. I have served as your Executive Director since 1996; my responsibilities have grown and evolved a lot since then. I retired from full time employment in 2011 and somewhere down the road I will step down from this responsibility as well. When that happens, I will most likely be replaced by two people. The WTEA discussed the division of responsibilities and has decided to create an Office Coordinator position. Beginning this fall my wife, Jaye, will be using that title. She has been assisting me with data entry, and conference preparation almost from day one. She has been the lead person at the conference registration and check-in table for many years. Now you (or your district) may receive communications directly from her when processing membership and registration paperwork. There is no change in cost or expense to the WTEA but it lays the groundwork for two positions. Our membership records will move to the cloud so they can be accessed from multiple locations.

If you have any questions about these issues or other WTEA business, please contact me or any member of the Executive Committee.



Order Shirts With WTEA Logo

Clothing with the WTEA logo can be purchased at the WTEA eStore. Simply go to the WTEA website at wtea-wis.org and click on WTEA eStore under the main menu. There you will find a link to the Logo Merchandise page.



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WTEA PRESIDENT-ELECT

Now is the Time to Create Your Goals!

By Dave Stroud, WTEA President-Elect



At the beginning of each school year I like to take some time to set a few goals that I want to accomplish throughout the year. I believe that by creating goals for myself, it helps me focus my efforts and holds me accountable so that I accomplish them. For this school year I have set the following goals for myself:

- Contribute to each addition of the Interface.
- Present at this year's WTEA conference.
- Finish the Little Free Pantry service project that we are doing in conjunction with our Art Department.
- Host a professional development opportunity at Ashwaubenon High School focused on construction.
- Create a WTEA summer event for members and their families.

If you would like to create some goals for yourself, I can offer some suggestions to help you get started:

- Write an article for the Interface. A summary of a project you do with your students, a partnership you've built, or something you've learned in a graduate class or professional development could be useful to some of your colleagues.
- Present at this year's WTEA conference. Talk about something you're doing at your school, or a district initiative that you've incorporated into your program.
- Host a "High Tech Weekend" at your school. If you do something with your students that is cool, teach your colleagues how to do it so that more students can experience a great learning opportunity.
- Do a service project for your community. Students get excited and are more engaged when they know the projects they create will be used in the community they live in.
- Try a new project. Maybe you saw something cool in the Project Showcase at last year's WTEA conference. Reach out to the person that brought it and get some help incorporating it into your curriculum. If it turns out great, consider bringing it to the Project Showcase this year.

- Apply for a grant. If you're not sure how you are going to pay for trying one of these new ideas, maybe a grant could provide the funds to get the project done. A good one for those in Northeast Wisconsin is the WPS Innovative Educator Grant https://accel.wisconsinpublicservice.com/company/innovative_educator_grant.aspx

I hope everyone has a great start to their school year. If ever you have questions or concerns, or if you would like to become more involved with the WTEA, please don't hesitate to contact myself or your district director. Good luck!

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Submit articles and photos to Interface Editor
doug@wtea-wis.org

BIG IDEAS



DIRECTOR REPORTS

Touring Nolato: Finding Future Oriented, Responsible Manufacturing

Sylvia Tiala District A Director



Gary Frieberg, Operations Manager for Nolato in Baldwin, Wisconsin, led an amazing tour of their plant for WTEA District A Tech Ed teachers and counselors on Wednesday April 17. Nolato makes plastic parts for medical equipment using innovative injection molding techniques.

The plant is amazing! Manufacturing is done in clean rooms with filtered air. Raw materials are delivered through a series of stainless steel and plastic tubing. The automation, quality control process, and care in manufacturing were evident throughout the tour.

More importantly was the types of things the company was doing within the community. Nolato employs about 230 people. Julie Foss, Vice President of Finance and Accounting explained how Nolato worked with the local high schools in developing apprenticeship programs. Nolato splits shifts and has a variety of shifts to help accommodate high school students. The plan appears to work as there was a high school student who wrote code on a CNC mill that Nolato now uses for making parts. The company provides in-house training, works with technical colleges as well as UW-Stout and encourages workers to get more education.



Nolato is also looking at innovative ways to add value to their workers and the community as a whole. In addition to adding a fitness center for their employees to use after hours, Nolato is teaming up with four other companies to provide a free medical clinic for employees and the school district. This is truly an example of the idea of collective impacts where people and institutions come together and leverage multiple systems to deliver services beyond what any one company or institution could provide.



A special shout out goes to Randy Schullo of CESA 11 who helped coordinate the tour and Emily Fransway of Baldwin High School who arranged a tour of her labs as well.

Thanks everyone for a great time and great tours!



An Inspiring Tour!

Louis VandeHey, District C Director



Myself and several others attended the Big Trucks Tour on June 19th and 20th. Wow, what a great couple of days! It always amazes me how many great opportunities are out there for students seeking employment in the trades or higher education at a technical college. I will always recommend attending

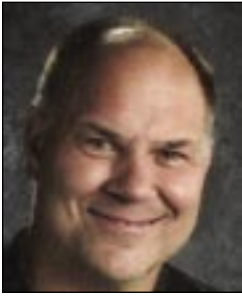
events such as this, especially if they are anywhere near where you teach. The networking opportunities are invaluable.

We tried to get a District C event lined up over the summer but it was hard to get enough people together with everyone's busy summer schedules. Pay attention to the Tech Ed listserve as the school year starts for a refreshed rescheduling of an event for teachers and local industry to network and create potential partnerships.



District E News

Doug Kugler, Director at Large



Greetings to all WTEA members and Technical Educators! I hope your summer was relaxing and restful. Just to send out a quick note to all teachers, new and old, I will be helping Alan Mamerow (District E Director) with any activities in our district. We both will keep you in the loop. I will help

Alan with updating our District E email. I know there might be a lot of new faces, so I will try to update the list ASAP. Please help us if we miss anyone and send us your information by emailing us at: mameal@hamilton.

k12.wi.us or dkugler@waukesha.k12.wi.us or call me at 262-271-6953. If you have changed jobs, please send us your new information and I will update it. Also, for all retired teachers in District E, if you want to be kept on the list, let us know.

I am going to try and set-up some get togethers (tours??) to start at around 4:30-5:00 P.M. and will attempt to have food/snacks for the meetings (subs, pizza, etc.). If any of you would be interested in hosting a meeting or have a business/industry tour, let us know. The meetings will be open to all Technology/Engineering teachers in our district and is not limited to WTEA members.

Hope you all have a great start to the school year!!

New Board Member

Barb Bauer, University Representative



My name is Barb Bauer and I am excited to serve on the WTEA board as the representative from UW-Stout where I currently serve as the program director. This position allows me to work with our current technology education students and understand the program.

Through our advisory board I am able to connect with key people in both education and

industry. These connections are needed to keep everyone moving forward to address the need for technology education teachers in our state.

A little more about myself: I have been involved in education for the past 28 years. I have taught at both the middle and high school level. I have three grown children and five grandchildren. When I am not working in the education field, I stay busy with family and my horses. I am an active competitor in the sport of barrel racing.

I am looking forward to serving on the WTEA board.

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SUBSCRIPTION



Interface School Subscription

The WTEA school (building or district) subscription provides you and your local colleagues with an opportunity to keep informed about technology education in Wisconsin. The more local technology educators you sign up, the more you save. An individual subscription is \$30, but you can sign up 6 people for only \$125 - that's a savings of \$55 (see fee schedule listed below). Each additional person beyond the initial 4 is only \$15.

How it works:

Complete the form below and list every technology educator in your building. If your department has teachers in more than one building, duplicate the form and provide us with the correct school address for each educator. That way separate buildings in the same school district can be combined to increase your savings. All names listed must be employees of the same school district. Tally the fees on the form and send it along with a check or school purchase order to the address on the bottom of the form. **To be eligible for all benefits of this special pricing, school subscriptions should be sent as soon as possible.**

What you get:

Each person receives: a personal copy of the *Interface*, all association mailings and notices, invitations to attend regional technology education meetings and workshops, unlimited access to the WTEA website, discounted admission to the association's annual technology education conference, and eligibility to receive all association awards (educator of the year, program of the year, award of excellence, 25 year award). All mailings will be sent to the school address on the form. This school year subscription will expire the following fall. This form will be published in the *Interface* each fall; it is also available on the WTEA website.

Please type or print all information. Duplicate this form as necessary.

School District _____ School Name _____

School Address _____

School City _____ State _____ Zip _____

Phone (_____) _____ School Fax _____

Local Technical College District (used for regional workshops and meeting invitations) _____

Local Tech. Ed. Contact (Dept. Chair, LVEC, etc.) _____

Email address of local Tech. Ed. contact _____

Name and email	# of years teaching	Fee
1 _____	_____	\$30
2 _____	_____	\$25
3 _____	_____	\$20
4 _____	_____	\$20
5 _____	_____	\$15

Each additional person is \$15 each; names and school address may be attached on a separate sheet.

Please note: The Interface is published 3 times per year: fall, winter and spring.

**Send this form with check or Purchase Order to: WTEA PO Box 531 Rhineland, WI 54501
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Milwaukee Tool has partnered with the WTEA and is donating tools to enhance the learning experience in your classroom. A pallet of tools will be shipped to your school directly from their distribution center in Olive Branch, Mississippi. The tools are in good working condition but are no longer considered saleable through their distribution partners.

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Since the company began in 1924, Milwaukee Tool has led the industry in both durability and performance. With an unwavering commitment to the trades, Milwaukee continues to lead with a focus on providing innovative, trade-specific solutions. If your school would like to participate in this program, please complete the registration form on the WTEA website.



Mr. Cook, Tech Ed teacher at LHS, stands in front of tools donated from Milwaukee Tool. This donation was made possible by a partnership between the Wisconsin Technology Education Association and Milwaukee Tool. Thank you to Milwaukee Tool for this donation to our students.



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Big Trucks Tour

By Mike Cattelino, Fox Valley Technical College and Angie Arneson, Seymour Middle school

June 19 and 20 was the “Big Trucks Tour” in Oshkosh and Appleton. Twenty-eight Technology and Engineering educators from across Wisconsin took part in the two-day event meant to highlight the business aspect and application of trucks made for defense and fire suppression. The Northeast Wisconsin Manufacturing Alliance along with Oshkosh Defense, Pierce Manufacturing and Fox Valley Technical College collaborated with the WTEA to make the event an eye-opening experience for the attendees.

The event started at Oshkosh Defense, an Oshkosh Corporation company, where the group toured their state-of-the-art e-coat priming system facility and assembly areas. There were many comments about the efficiency of the workflow, the cleanliness, and the positive attitudes of all the employees that they interacted with while on the tour. Everyone seemed comfortably busy! After the extensive tours, the group went to the Testing and Development area where a demonstration of the new Joint Light Tactical Vehicles (JLTV) took place - an impressive piece of equipment to say the least. Everyone also had the opportunity to ride in a JLTV, an experience that rivaled any rollercoaster.



After a very nice lunch at Oshkosh Defense the event moved to Pierce Manufacturing, an Oshkosh Corporation company, where they “build trucks that live up to your demands.” The tour at Pierce included the assembly facility, paint and finishing area, and the graphics area. Their “blue floor” building is where the firefighters come to review their trucks before they leave Pierce. Much like Oshkosh Defense, it’s an impressive assembly area especially considering that every truck is likely different. Pierce associates were also very accommodating and friendly as the groups walked through. The time at Pierce ended with some hands-on time and demonstrations of their fire-fighting equipment.

The day wrapped up with a session with the Oshkosh Corporation President & CEO, Wilson Jones. Wilson was

the opening keynote speaker at the 50th annual WTEA conference in March 2019. He talked about the company, the people, and the products of Oshkosh Corporation before some Q&A time. Many good ideas were shared about how other companies are or could do a similar event with schools - something for everyone to consider in the future. The Northeast Wisconsin Manufacturing Alliance shared information about their organization and membership and generously provided hospilities at the session.

On June 20, the same group of Technology and Engineering teachers had the privilege to tour the FVTC Public Safety Training Center (PSTC) in Appleton. PSTC provides vital hands-on tactile training for students and public safety professionals. Some of the training areas include firefighting, police, EMT, and crime scene investigation. The facility took 10 years to design and there was an incredible amount of detail addressed to think of every need for public safety. The facility provides real-life scenarios with real-life training areas including a Boeing 727, burn pods, forced entry building, indoor/outdoor firing ranges, train derailment and so much more. The facility has created amazing partnerships with area corporations including Pierce and Oshkosh Corporation. During the tour, we were able to take part in video interactive scenarios, operate a fire truck, and watch a fire department train on the grounds and so much more.



There are not enough people to fill the amount of jobs that will be opening, but we can help solve that problem by introducing our students to the different types of public safety jobs available to them. This tour absolutely opened my eyes to what is available to my students and I am thankful for those individuals that helped to make this tour a reality! Please check out FVTC and all of the amazing programs they offer - it may lead your students to a very bright future!

Automotive Technology Summer Institute 2019

By Dan Klecker, State Education Director, The Foundation of Wisconsin Automobile and Truck Dealers Association

This year's Summer Institute was centered around a theme of family, "A Family of Transportation Instructors." During this year's family gathering, we recognized a couple of ladies who have gone above and beyond in assisting automotive education in the state, awarded the Foundation's 2000th Scholarship, and presented top-notch technical training to a record number of Tech College and High School transportation instructors.

Madison College hosted our Summer Institute with President Dr. Jack E. Daniels III welcoming the participants to the college. Wisconsin Technical College System President, Dr. Morna Foy, gave an appreciative keynote address to the instructors for the outstanding work they do to prepare students for a successful career in the transportation industry. Foy's message emphasized the need for high school students to consider their career choices carefully: a recently released PayScale survey of 248,000 respondents indicated that two-thirds of employees reported regretting their choice of post-secondary education, specifically the subject(s) in which it was focused. Dr. Foy emphasized that the Wisconsin Technical College programs, including transportation, offer excellent, affordable, flexible education that leads to outstanding career opportunities. The WTCS has strong partnerships with industry and two and four-year institutions of higher education.

Concluding the opening welcome session at Madison College, the instructors spent some afternoon family time playing "Country Yard Games," then gathered at Harley-



Davidson of Madison for an evening reception. At that reception we recognized people critical to our mission of auto/truck education, notably Diane Kraus, director of the Dane County Youth Apprentice program from its launch in 1994 to her retirement in 2015. Because

of her leadership, hundreds of high school youth were mentored during a work experience at local auto and truck businesses in Dane county. Many of them are still working in the industry today. Her tireless efforts in recruiting students and businesses for transportation youth appren-

ticeship placements earned her the Foundation's "Extra Mile" award.

After awarding the 2000th Foundation scholarship to Brendan Franch (Madison Memorial HS graduate), who will be attending Madison College for Collision Repair, we also recognized the only person who has been involved in awarding every one of those scholarships for the past 27 years, the Foundation's own Julie Olson. As the Program Director, Julie has reviewed each of the thousands of scholarship applications during the 2000 award cycles we've completed. She has kept close tabs on the scholarship recipients as they completed their technical training. Julie was surprised with an "Extra Mile" award of her own, represented by a repurposed Frank Burany trophy from his days as a midget car racer.

Three days of technical training were started each morning by Madison College auto, collision and power equipment instructors covering topics of Handheld Small Engine Theory, Lab Scope Training, Air Conditioning, Final Drives and Differentials, and Paint Like a Pro. Afternoon sessions included Advanced Technology on STIHL Products, Heavy Duty Diesel by CSM Company, and New Vehicle Technologies by Ford Motor Company.



WATDA's CARS Curriculum was presented by its author, Carl Hader of Grafton HS, while Jerry Kobriger of Washington Park HS in Racine shared his Tool Distribution procedure with instructors. These two veteran automotive teachers continue to be valuable resources for new automotive instructors around the state.

An offsite tour of the CNG-powered county snowplows and methane cleaning station proved that the Dane County Landfill is not your typical refuse collection site. The Institute concluded with an informative tour of the Engine Research Center at UW-Madison.

Evaluations indicated this may have been the best Summer Institute ever! Thanks to the support of the Foundation and its sponsors, many new instructors were welcomed into our "Family of Transportation Instructors."



51st Annual Technology Education Conference & Trade Show

Tentative Conference Overview

Wednesday, March 4, 2020

5:30 - 8:00 p.m. Conference Registration

6:45 - 9:00 p.m. Awards Banquet

Thursday, March 5, 2020

7:30 a.m. – 3:00 p.m. Conference Registration
 7:00 a.m. – 10:00 a.m. Project Showcase Setup
 8:00 a.m. – 4:00 p.m. Trade Show
 9:00 a.m. – 3:30 p.m. Project Showcase
 8:55 a.m. – 9:05 a.m. General Welcome
 9:05 a.m. – 10:00 a.m. 1st General Session
 10:15 a.m. – 3:30 p.m. Concurrent Sessions
 7:00 p.m. – 9:30 p.m. President's Reception & Silent Auction



Thursday Keynote Speaker

Todd McLees
 Founder and CEO
 of Pendio Group

Friday, March 6, 2020

7:30 a.m. – 11:30 a.m. Conference Registration
 6:45 a.m. – 7:45 a.m. Early Riser Breakfast
 7:45 a.m. – 8:30 a.m. WTEA Membership Meeting
 8:45 a.m. – 12:15 p.m. Concurrent Sessions,
 Demonstrations & Project Showcase
 Automotive workshops/training at
 Easton Motors
 12:30 p.m. – 2:00 p.m. General Session/Luncheon
 2:15 p.m. – 3:30 p.m. WTEA Board Meeting



Friday Keynote Speaker

Dorothy Walker
 Academic Dean, School
 of Technology & Applied
 Science, Milwaukee Area
 Technical College

Session Topics Include: Multimedia Design, Google Forms for Safety Tests and Grading, CNC Tips and Tricks, NC3 Certifications, Self Sustaining Construction Program, Harvesting Kinetic Energy from a Prosthetic Limb, Geometry in Construction, Tiny House Build, Cutting Wind Turbine Blades, Growing your Program, Referendums-What to Expect, Plumbing and Electrical Techniques, K-12 Energy Education Program (KEEP), Apprenticeships, Retirement Strategies, Innovation and Design, Automotive Technologies, Welding and Machining, Building High Mileage Vehicles, Project Showcase, Skills USA, Middle School Roundtable, Manufacturing Project Ideas, New Teacher Boot Camp, and much more!



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2020 Conference Highlights

March 4, 5, & 6



Awards Banquet - Wednesday Evening

Trade Show - Thursday



President's Reception & Silent Auction - Thursday



Keynote Speakers - Thursday & Friday

Educational Sessions - Thursday & Friday

Project Showcase - Thursday & Friday



Early-Riser Breakfast - Friday

WTEA Annual Membership Meeting - Friday

Colleague Networking - All 3 Days



To complete an electronic version of the WTEA membership/registration form, go to www.tinyurl.com/WTEA-Conf

WTEA Membership Application & 2020 Conference Registration Form

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 the appropriate boxes below and total amount due.

Membership Fees: [] 3 year membership - \$75.00 [] 1 year membership - \$30.00 \$ _____

Spring Conference EARLY BIRD Registration (Must be postmarked by December 22, 2019)

[] \$135 members [] \$165 non-members \$ _____

Spring Conference Registration (After December 22, 2019):

[] \$160 members [] \$190 non-members \$ _____

WTEA Awards Banquet (Wednesday, March 4, 2020) [] \$28 \$ _____

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

Send completed form with payment or school purchase order to: **WTEA, P.O. Box 531, Rhinelander, WI 54501**

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Please note new WTEA mailing address.

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

AWARD WINNER

2019 WTEA Lifetime Achievement Award

Michael Roth

Michael Roth was presented the WTEA Lifetime Achievement Award during the WTEA Awards Banquet on March 6, 2019 at the 50th WTEA Annual Conference.

Education & Certification

B.S. Degree UW-Platteville, 1977
LVEC Certification UW-Madison, 1986
220 Technology Education
293 & 299 Technology Occupations

Professional Experience

Current: Cardinal Heights Middle School 9th Grade TEE
Retired: Technology & Engineering Coordinator, Monona Grove High School
Teacher: Woodworking/Construction 14 yrs., Cooperative Education 14 yrs., Electronics 7 yrs, Engineering 6 yrs., Video/Multimedia Production 1 yr., Middle School Technology & Engineering, 1 yr.
School To Career Coordinator- MGSD, Fiscal Agent/ LVEC-Badger Consortium 2000-2002
Career/Software Consultant-Wisconsin Career Information System, U.W. Madison 1987-1989

Leadership, Awards & Recognition:

WTEA President 2006-2008
WTEA Past President
Epsilon Pi Tau
Teacher of the Year, MGHS Class of '95
WTEA District Director, 1997-2003
WTEA Award of Excellence-Work-Based Learning Program Instructor 1999
WTEA Award of Excellence-Engineering Technology Founder & Chairperson of MATT (Madison Area Technology Teachers)

Skills USA Contest Coordinator-Cabinetmaking Writing Team, Wisconsin Academic Standards for Technology Education

WTEA Program of the Year 2005
PLTW Lead Instructor and Local Coordinator
Woodwork Career Alliance (Wood Links)
Overload classes/Increased Enrollment/ Additional hours of preparation
Mastering new curriculum and content
Founding father of transition between Industrial Arts and Tech Ed

Dedication above & beyond - taught in unfamiliar areas to assist department in moving forward
Badger Honor Flight Instructor at CHUMS to teach students to turn pens for the flights (2008-present)
Mentor for training other Instructors how to turn pens 2017-present
WTEA Honor Flight Presenter and Facilitator 2017-2019
Adhere to high Standards regardless of unfamiliar curriculum assignments
Taught students to give back to their communities
Cancer survivor, mentor, role model, and volunteer at Camp Kesem

Since retiring in 2007 Michael Roth has contributed in three very significant areas above and beyond the classroom.

- 1 - Mike Roth returned to the classroom in 2008 and has been helping to rescue and facilitate strong and vibrant TEE programs in the state. In and of itself, this may not be considered a champion effort. However, with the shortage of qualified and talented tech ed teachers to fill these positions, you can understand his level of commitment and dedication to students and to the field.
- 2 - Upon reentering the field, Mike identified a need to teach students a pen turning operation that created a new volunteer program where the students turned pens and donated them to the Badger Honor Flight. These pens were delivered to the veterans during the mail call portion of the flight. The program gained notoriety and praise from community media and fellow instructors. The word got out about the program



and Mike opened his doors to educate and instruct other professionals to take this project concept back to their schools. He shared all of his resources, equipment, and supplies as well as reference and resource information to get the other programs up and running. He supplemented this instruction with three different presentations at the WTEA conference and other venues. He rallied a group of pen turning instructors at the WTEA spring conference and collectively taught close to 100 teachers how to turn pens. He has collaborated with other instructors to develop articles for the Interface as well as communicate with media, community contacts, and an array of donation resources that continue to be an internal part of this program that he has fostered through his example. At least three other programs are actively turning pens for veterans because of his leadership and mentoring for the effort that involves students, parents, instructors, veterans, administration, and other community members.

- 3 - Michael Roth is a cancer survivor. Daughters Katie and Melissa joined an organization that worked with treatment opportunities for children who have parents dealing with cancer. The girls got involved with Camp Kesem at the affiliate camp through the University of Minnesota. Mike was so proud of his daughters and

their willingness to contribute and give back, that he now attends the camp and teaches craft and wood-working activities to the participants at the camp for a week during the summer. He also makes projects that are donated and sold to raise money for Camp Kesem as another effort of dedication and volunteerism. There are a number of instructors and colleagues that have commented about not only this effort, but also Mike's courage and determination to beat the cancer that threatened to end all of his efforts.

Pete McConnell has said about Michael Roth, "Volunteerism and dedication are an expected part of many public servants. I live with that every day of my life. What I don't live with are the challenges and obstacles that Mike Roth has crossed to get to where he is today. I have witnessed first-hand the power of his selfless determination to leave this profession, this world, our Veterans, and his beloved family stronger because of who he is as a man, and dedicated professional."



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AWARD WINNER

2019 WTEA Middle School Program of the Year Hudson Middle School's Engineering Department



Members of the Department

Christopher Deleon

Aaron Harker

Jodie Bray

The Engineering Department's Mission

The Engineering Department's mission is to show students how the power of creativity, design, and hands-on building amplify the raw brilliance of youth, transform communities, and improve K-12 public education from within. Our programs teach rigorous design iteration, tinkering, applied arts and sciences, and vocational building skills to give young people the creative, technical, leadership tools necessary to make positive, long-lasting change in their lives and their communities.

Curriculum

Our department utilizes the Project Lead the Way curriculum which is aligned with national and state engineering and science standards. As a department, our team has also established engineering priority standards which align with "Next Generation" Science Standards and Language Arts common core literacy standards.

Our department is continuously updating and revising our curriculum. However, we formally revise and rewrite our curriculum every three years. We meet on a weekly basis with our instructional coach to discuss how best to meet the learning needs of our students and to review the quality of our program.

Introduction to Engineering 6 explores Project Lead the Way concepts connected with problem solving, research, design, product development, and product redesign. Students will develop skills in measurement, basic drafting, shop and machine safety, utilization of machines, testing of CO2 car performance, and re-design a CO2 car.



Introduction to Engineering 7 builds upon students' 6th Grade experience, engaging students in learning concepts connected with problem solving, research, design, product development, and exploration of alternative energy sources.

Introduction to Computer Engineering 6 emphasizes utilizes coding, physical computing, and robotics to solve problems and creatively design products in a project-based environment. Students design, create, and market a product utilizing the Engineering Design Process. Students learn the basics of block coding and apply them to create an animated story using Scratch which supports the ELA writing standards for grade 6. Students also build a tank using Lego Mindstorm EV3 robotics and learn to control motors and sensors to complete tasks.

Introduction to Computer Engineering 7 builds on the knowledge from 6th grade. Students continue to apply the Engineering Design Process to create solutions to challenging problems. Students learn to create an app that will positively affect others using Code.org's App Lab. Students also utilize Code.org's Game Lab to create fun interactive experiences for others. Additionally, students utilize a wide array of Lego Mindstorm EV3 inputs and sensors to create a device that responds to its environment as it completes its task.



8th Grade Electives

Students enrolled in **Engineering and Technology/Biomedical** will engage in rigorous design iteration, tinkering, applied arts and sciences, and vocational building. These FUN "hands-on skills" give students the creative, technical, and leadership tools necessary to make positive, long-lasting change in their lives and their communities. A portion of this class will be exploring the biomedical sciences through hands-on projects and labs that require students to solve a variety of medical mysteries. Students investigate medical careers, vital signs, diagnosis and treatment of diseases, as well as human body systems such as the nervous system.

Genetic testing for hereditary diseases and DNA crime scene analysis put the students in the place of real life medical detectives. Engineering and Technology uses the national Project Lead the Way curriculum that combines a rigorous academic curriculum with a hands-on approach.

Electronics and Engineering Design is a fun hands-on one trimester course that introduces students to engineering design complete with animation and basic electronics/circuitry design. During this class, students will be able to see their designs come to life by taking advantage of the two 3D printers. Students will also learn how electricity is controlled by electronic circuits and components and how to solder on a circuit board. Electronics and Engineering Design uses the national Project Lead the Way curriculum that combines a rigorous academic curriculum with a hands-on approach.

Students enrolled in **Space Technology and Robotics** will explore what it is like to live and work in the micro-gravity environment of space and how space technology affects our everyday lives here on earth using a fun hands-on approach. Students will also study robotics/robotic programming and how robotics plays an important role in our everyday lives. In the robotic unit, students will build and program robots to perform various tasks. Space Technology & Robotics uses the national Project Lead the Way curriculum that combines a rigorous academic curriculum with a hands-on approach and curriculum developed by NASA. Space Technology and Robotics is a member of the NASA Explorer Schools Program.

Computer Engineering 8 serves to deepen students' knowledge of coding, robotics, and physical computing. Students construct circuits using Circuit Playgrounds to solve challenging tasks incorporating servo motors, LED lights, light and temperature sensors, and piezo speakers. Students transition from block coding into text-based coding languages such as Python. They use breadboards and a variety of both digital and analog inputs and outputs to design and build circuits with Arduino microprocessors and modify code to creatively solve problems. Students also design and build with Lego Mindstorm EV3 robotics kits. The class incorporates elements of PLTW's Computer Science for Innovators and Makers as well as Code.org's Computer Science Discoveries.



Program Facilities

Our Engineering Department consists of three classrooms that offer students a variety of different settings to explore engineering and technology. We have a converted "Shop" classroom which is now the home to our exploratory 6th and 7th grade "Engineering Exploratory" classes and our elective "Engineering and Biomedical" classes. In this classroom, students have access to all of the equipment necessary to have a successful middle school biomedical program along with the traditional "shop" tools such as band saws, drill presses and sanders.

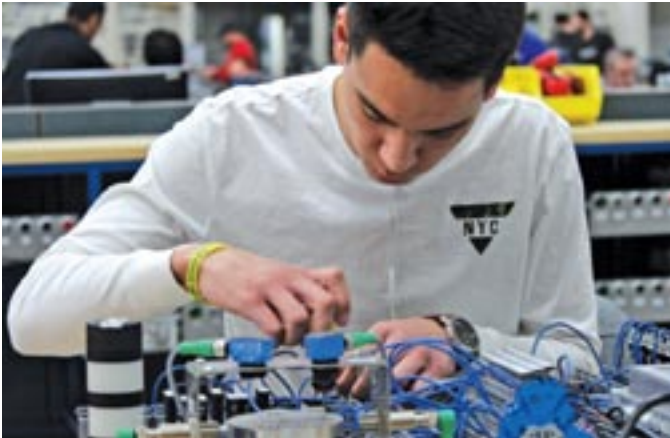
Our elective Electronics, Engineering Design, Space Technology and Robotics classes along with 6th and 7th grade "Engineering Exploratory" classes are taught in one of the other rooms in our department. In this classroom, students have desktop computers that are used for their engineering design class as well as access to 3D printers. Students also have access to electronic equipment such as soldering irons and multimeters and robotics kits. Besides the equipment available, as students work, they are surrounded by examples of past student projects and posters of students that have won awards and honors for projects that they have worked on in this classroom. In order to give students some different seating options, they have access to flexible seating options that include standing tables and various kinds of chairs and stools.

The third classroom in our department is a new "Computer Engineering" classroom in which our 8th grade elective Computer Engineering class and 6th and 7th grade Computer Engineering exploratory classes are taught. Students use their chromebooks to utilize web-based coding tools such as Scratch and Code.org's App and Game Labs. Students also program Lego's Mindstorm EV3 robots to complete tasks ranging from simple mazes with basic tank builds to more complex open-ended problems involving sensors, inputs, and design. Students also utilize physical computing skills by building and programming with Circuit Playgrounds and Arduinos.

Mobile Learning: Modular Unit Brings Training to Students, Employees

By MaryBeth Matzek, *Insight on Manufacturing Staff Writer*

(This article originally ran in the March 2019 issue of Insight on Manufacturing)



While Northeast Wisconsin Technical College has taken some of its trainings directly to employers and schools for several years, people still had to travel to campus to learn some skills including electro-mechanical coursework. The program's instructors decided to change that by creating mobile modular trainers.

The trainers - trademarked under the Mobile Modular name - were featured at SXSW (South by Southwest) EDU in Austin, Texas, earlier this year, exposing the portable training devices to more people.

Before the trainers were created, students or employees came to the Green Bay campus to learn electromechanical skills.

"The equipment was too big to take out into the community," says Andy Herson, one of the instructors who helped create the trainers. "We were able to make something using standard industrial components affixed to metal plates that could be carried place to place and connected together to simulate electro-mechanical systems."

Herson and some of his colleagues - all trained engineers who are now teaching at NWTC - worked on the Mobile Modular trainers for about two years. They not only designed and developed the tools, but then tested them to make sure they worked. A third-party manufacturer makes the trainers based on the original prototype and design.

The units weigh about 50 pounds, which makes it easier to move them to various locations, and do not require

any special electrical wiring. The trainer includes different modular components that can be connected quickly and easily to expand skills training without additional cost.

Herson says manufacturers using the trainers are able to save on training costs and space. "They are easy to move and use, so any available space can easily become a training location - businesses don't need to have a separate training room," he says.

Along with the trainers, Herson and his fellow instructors created a curriculum that can be used in a classroom, one-on-one training, online or self-paced training programs. "It's very hands-on and is flexible enough to integrate into existing training systems and curriculum," he says.

Not only do businesses and schools in NWTC's coverage area use the devices for training sessions, other learning institutions also purchase them for their own training programs.

"The response to the trainers has been very good," Herson says. "They can be used in a lot of settings - schools and workplaces - to teach certain skills."

Dave Stroud, a technology and engineering instructor at Ashwaubenon High School, says the trainers are necessary for his students to complete its Automation and Electricity class. Students can take two of four courses during a nine-week term - Automation 1, Automation 2, Fluids 1: Basic Pneumatics, and DC1: Introduction. If they enjoy the class, students can take it again so they can complete the other two courses.

"The trainers are needed for the lab work that's involved in all of the classes," Stroud says. The trainers "give students an authentic experience using devices that they will not only see if they choose to attend NWTC but will also see in the industry. Exposing students to these technologies has opened their eyes to many high-paying, in-demand opportunities that exist in manufacturing in Northeast Wisconsin."

Ashwaubenon's classes are articulated with NWTC, which allows the students the opportunity to earn college credit while still in high school.

Herson says the trainers also are popular with businesses since they bring the training directly to them instead of having employees travel to the NWTC campus. “They can put these out in a conference room and have all the training right there,” he says.

There are trainers available for: automation, control devices, pneumatics, variable frequency drive (VFD), servo motion, human machine interface (HMI), an Allen-Bradley Compact Logix PLC trainer, an Allen-Bradley Control Logix PLC trainer and an Allen-Bradley Micro Logix PLC trainer. The trainers are made from industry-standard components designed to simulate industrial systems. They can be stored on racks that can hold multiple units, making it convenient to transport them from site to site and store them.

NWTC also has a trailer it can take to different locations for either training or to expose community members or students to possible careers in the electro-mechanical industry. The trailer includes the Mobile Modular trainers, 12 student workstations and one instructor station. When parked at a community event, the trailer provides visitors with an up-close look at not only the trainers, but also an opportunity to see how they work. “We’ve had it all over. It’s been a great tool,” Herson says.

NWTC also has Mobile Modular trainers at its Marinette campus for students and businesses to use. “We have had a lot of positive response to having them located there,” Herson says. “The trainers’ design provides superior training and repeatable results.”

Stroud says the trainers are one tool that Ashwaubenton High School is using to create a pipeline from high school to postsecondary education, which will lead to more workers for the region’s manufacturing sector.

“Students pick up on the technologies quickly and are always looking for additional challenges,” he says. “The trainers are great because they allow me to witness lights going on in students’ minds and on the trainers at the same time. It’s really cool!”



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Wisconsin Well Represented at National Conference

The SkillsUSA Championships, held in Louisville, Kentucky, took place June 26-27 as part of the SkillsUSA 55th annual National Leadership and Skills Conference (NLSC). The conference is a showcase of career and technical education students. During the week, more than 6,400 outstanding career and technical education students, consisting of state contest winners, competed in 103 different trade, technical and leadership fields. This is the largest skill competition in the world.

National Medalists from Wisconsin

Gold Medal

Job Skill Demonstration Open Middle School

Riverside Middle School

Silver Medal

Collision Repair

Freedom High School

Team Engineering Challenge Middle School

Cardinal Heights Middle School

Chapter Display

Watertown High School

Bronze Medal

Screen Printing

Wausau East High School

Pin Design Middle School

Muskego Lakes Middle School

National Top Ten Wisconsin Placements

Broadcast News Production

West Bend High School

Motorcycle Service Technology

West Bend High School

Television Production

West Bend High School

Cabinetmaking

Union Grove Union High School

Sheet Metal

Union Grove Union High School

Automated Manufacturing Technology

Watertown High School

Welding Sculpture

Wautoma High School

Power Equipment Technology

Webster High School

Job Interview

Oshkosh North High School

Job Skill Demonstration Middle School

Riverside Middle School

Employment Application Process

New Berlin West High School

Electronics Technology

Oregon High School

Job Skill Demonstration Open

Elkhorn High School

Related Technical Math

Elkhorn High School

Robotics Urban Search and Rescue

Riverside Middle School

Team Works

Barneveld High School

Photography

Bay Port High School

Marine Service Technology

Hartford Union High School

Thank you to all our chapters, advisors, students, partners, and volunteers for making Wisconsin proud.



Industrial Studies Faculty Help High School Students Explore STEM Careers

University of Wisconsin-Platteville faculty participated in Declaration Day at Racine Unified School District's Park High School, helping students explore science, technology, engineering and mathematics (STEM) fields and careers.

Park High School, which has an enrollment of 1,400 students, celebrates a Declaration Day for students to officially declare their area of study and select an Academy and Pathway for their high school career. Closely aligned with STEM programs, the Academy and Pathway programs are novel programs implemented at Park High School where minority enrollments are prevalent – 35% African-American, 31% Hispanic-Latino, and 70% Economically Disadvantaged – according to the Wisconsin Department of Public Instruction.

Two faculty members from UW-Platteville's Department of Industrial Studies – Dr. Travis Sossaman, coordinator of the Plastics and Materials program, and Dr. Gamini, coordinator of the Electronics, Automation and Robotics program – were given the opportunity to address more than 500 attendees, including students and parents, celebrating Declaration Day. They highlighted high-quality STEM learning and engagement opportunities that are a game-changer for young people in disenfranchised communities who might otherwise not have access to pathways to the fast-growing STEM economy. They also emphasized the success in the modern economy that requires a wide set of skills, including STEM knowledge, digital literacy, leadership, and strong problem-solving and team-building abilities. All students were encouraged to utilize the given opportunities to develop highly adaptable skills early and often, to ensure they are better prepared to take on challenges and opportunities throughout their lives and careers and reach their full potential.

Gretchen Bockenbauer, lecturer in the UW-Platteville Building Construction Management program, joined Sossaman and Gamini in a teleconference with the STEM students to discuss options and programs at the university. Sossaman and Gamini also conducted two hands-on classes for junior and senior high school students utilizing industry standard Allen Bradley Rockwell Automation Programmable Logic Controllers (PLCs) where the students wrote Ladder Logic programs. The students experienced how PLCs execute reprograms, read inputs and produce outputs. This allowed Sossaman and Gamini to provide readily adaptable resources for STEM programs to schools that reach underserved and underrepresented students, engaging them in exciting STEM learning.

The visit was coordinated by Nicole Ryan, UW-Platteville regional admission advisor, and Dr. Jeffrey Wilkins, Park High School professional school counselor, supported by Racine Unified School District Superintendent Dr. Eric Gallien and Academy Principal William O'Malley.

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Middle School SkillsUSA: Preparing for Leadership in the World of Work

By Steve Hoersten, Rice Lake Middle School

Rice Lake Middle School has a long tradition of students participating in SkillsUSA. Our club has a membership each year of 40+ students grades 6-8, who participate in a wide range of activities during the school year. Activities include engineering competitions, community clean-up, field trips, maker night projects, mentoring 5th grade students (and teachers) in more maker nights, and doing fundraising projects.

Two of our most important activities are a spring and fall field trip. In the spring, we visit educational institutions such as universities or technical colleges. We take time to visit these institutions to inform students of what is possible in post-secondary education. Recently, we were very fortunate to receive a tour of UW-Stout from Dr. Sylvia Tiala along with Michaela Guerrini, a student in the technology education program. Because females are underrepresented in STEM careers, it was great to have tour guides with which the girls could identify. We were able to visit many different labs at UW-Stout as well as an in depth discussion and demonstration in their Fab Lab. The students had a great time learning about what UW-Stout has to offer as well as what student life is like from an actual student. Below are pictures from our tour.



RLMS SkillsUSA on UW-Stout campus



**Michaela Guerrini explaining UW-Stout labs
to SkillsUSA members**

Each fall, we tour local industries and students get a feel for the career options available close to home. Rice Lake is a rural community but we have some industries that engage in business on a global scale. Some of the businesses we have toured include Henry Firearms, Rice Lake Weighing, Thomas Precision, Marshfield Medical Center, Cardinal Glass, and Barron County Electric.



Visiting the solar field at Barron County Electric



Funding for our SkillsUSA club is independent of the school district and we raise money through a number of different activities. Our members design and sell 8th grade shirts/hoodies that include the names of all 8th grade students. We also sell Valentine Carnations that students buy for each other to be delivered on Valentine's Day. In addition, we sell custom engraved tumblers to staff and community members with our newly acquired laser engraver in the STEM Lab.

We are fortunate to live in a region that provides our SkillsUSA group a host of opportunities for learning about education and careers in technically skilled fields. For those middle school (or high school) teachers interested, I highly recommend taking a tour with your students of UW-Stout. The students will see many great labs as well as having the experience of being on a college campus.

SCHOLARSHIP

Will Vanden Heuvel To Receive WTEA Scholarship

Will Vanden Heuvel, will receive the WTEA Foundation scholarship as he starts his post-secondary education at UW-Stout this fall. He is a June graduate of Little Chute Pathways Academy and is pursuing a degree in Technology Education. The following is the essay he submitted with his scholarship application.

Ever since I was a child I have been interested in building, creating, and making things with my hands. Whether I was asking my parents permission to tighten all of the door knobs in the house, learning to knit a cap, or constructing a snare trap in my backyard out of rope that I found in my garage, I've had a passion for understanding how things work. As a freshman in high school, my shop teacher, Jon Larson, invited me to join SkillsUSA. During that first year I competed in model rocketry. Throughout the design of the model rocket, assembly, then eventually testing it on the high school football field, I formed a bond with Mr. Larson. The next year I competed in additive manufacturing. That year, my partner and I took first in our state and went on to compete at the national level.

During this time I continued to appreciate Mr. Larson's advice and friendship. My senior year I decided to



take on a bigger role in SkillsUSA and became a board member. I've taken classes related to wood-working, metal-working, drafting, and engineering throughout my high school career. My enjoyment of these classes

helped me realize I want to pursue a degree in technology education.

In addition to my required coursework, I have had the opportunity to be a teacher aid for Mr. Larson. Under his guidance he has shown me what being a technology education teacher entails.

An advertisement for Epilog Laser systems. The background is blue with white splatters. At the top left, the text "LASER IT!" is in large white letters, followed by "Cut it. Engrave it. Mark it." in smaller white letters. Below this, it says "Laser Engraving, Cutting and Marking Systems from Epilog Laser". Further down, a paragraph reads: "From creating and personalizing 3D models, to engraving photos on keychains, to marking high-tech gadgets, our laser systems create the products you see here and more!". In the center, there is a white Epilog Laser machine with the "zing LASER" logo. In front of it are several examples of laser-processed items: a wooden model of a helicopter, a keychain with a car image, and a smartphone with a cartoon character engraved on it. At the bottom left is the "FIRST TECHNOLOGIES INC." logo with the tagline "Putting Education ... FIRST" and the website "www.firsttech.com" and phone number "1.800.787.9717". At the bottom right is the "EPILOG LASER" logo and the text "Contact Us Today! MADEINUSA".

WTEA Student Ambassador Program

By Matt Schultz, LakeView Technology Academy

Every year more and more of Wisconsin's fine educators are leaving the teaching field and entering industry, or pursuing other careers outside of the classroom. There is an obvious shortage of 220 qualified teachers. The state has tried to temporarily solve this problem by offering alternative licensure for industry experienced people interested in pursuing a career in education. Last year UW-Stout's and UW-Platteville's numbers were up with graduating potential teachers, however there is still not enough qualified educators to teach in our classrooms. With schools closing tech ed programs, we need to act now more than ever. In an attempt to resolve this shortage, the WTEA is proud to announce the "WTEA Student Ambassador Program." The WSAP is simple - as teachers we need to look into our classroom and empower students that show potential as a future technology education teacher. This could be students serving as Teacher's Assistants for you, or maybe students who love to help their peers in the classroom. We as educators can influence a student who never thought of himself or herself as a potential teacher. The WTEA has developed a program to help these potential teachers enter into the world of teaching. Here is a quick breakdown of the program. Once a student, or students have been approached, they will register with the WTEA Student Ambassador Program and fill out some paperwork and gain permission from their guardians. Then their voyage begins. WSAP students will begin to take on extra responsibilities in your classroom.

During the year, WSAP students will be preparing a lesson to teach to a class of their choice. This lesson will be prepared and include lecture material, labwork or project and an assessment. The purpose of this experience is to provide students with an opportunity to teach a class. A rubric of the teaching lesson will be provided and an outline to follow provided by the UW system. Mentoring teachers will help students with this process and final materials will be provided to the WSAP board of directors at the WTEA for review, and points will go towards the end of the year scholarship.

UW-Stout and UW-Platteville will be hosting a private visitation day on their campus for the WSAP stu-

dents. This private visit will include tours of the facilities, a question and answer session by a panel of current Technology Education students and instructors, and an information session by the Department of Admissions and Finance from the college. Each visit will provide WSAP students with a glimpse of their potential institution.

Next, WSAP students are required to complete 20 hours of community service in activities related to Technology Education. Examples of these hours would include but are not limited to the following: volunteering at a local SkillsUSA event, Challenge USA event, or First Robotics event. The purpose of the volunteering requirement is to give WSAP students an experience similar to what we as educators do to help run or operate the event.

WSAP students and mentors will be invited to the WTEA Conference on Thursday, March 5th for a few hours to attend breakout sessions, tour our trade show floor, and see the keynote speaker as well as be honored by Wisconsin educators for their interest in a future as a Technology Education Instructor.

At the end of the school year, two students will be selected to receive a scholarship to their selected institution. The selection will be based on the multiple events and experiences the students participate in throughout the year.

This initiative is only going to be a success if classroom tech ed instructors make a valiant effort to reach out to their students. So many great kids walk through our classes that possess what I consider the "Gift" to be high quality educators. The time is now for us to recognize those students, mentor them on their journey and empower them to be Wisconsin Technology Educators. Please visit the link below to learn more about this amazing program for our students. This program will run both semesters and university visits are being scheduled for the winter-spring season of 2020. If you have any questions please contact Matt Schultz at mjschult@kUSD.edu.

Check out the WTEA Home Page
www.wtea-wis.org





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