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Journal of the WTEA

Spring 2015

Volume 54 Number 3

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Gateway Technical College	12
Chicago Regional Council of Carpenters	13
First Technologies, Inc.	25
Goodheart-Willcox Publisher	27
STEM Academy	28
Madison Metropolitan School District	31
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Lab Midwest	Outside Back Cover

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TABLE OF CONTENTS

WTEA Board of Directors	2
President's Message	3
WTEA Board News	4
Vice-President's Message	5
District News	6-7
Announcements	9
SkillsUSA	10-11
UW-Parkside	12
UW-Stout	13
UW-Platteville	14
Conference Chair's Message	15
Conference Highlights	16-17
Awards	18-19
Lifetime Achievement Award	20-21
High School Program of the Year	22-23
Snap-on Raffle	24-25
STEM Partner Thank You	26
Dream Flight	27
Kennedy Middle School	29
Building Fuel Efficient Cars	30-31
Workshop	32

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On the Mountain Top

By Jesse Domer, WTEA President

Spring is upon us, and with that comes busy classrooms, competition season and open shop doors. With the many projects, tests, competitions and professional deadlines coming due – stress will build as well. It is at this time of year, I often find myself sweeping my shop regularly – it calms me and gives me an opportunity to stop thinking about everything else and focus on one thing at a time. I encourage you to take a moment this week to reach out to a colleague and remind them how great they are. Take a moment to reflect on the success you have had this year and reflect on your goals. Take time to de-stress with whatever works for you – sweeping the shop, fixing a machine, or jumping in the bass boat and going fishing with your kids.

I had the privilege of speaking to many of our great teachers from Wisconsin (and beyond) at the WTEA/ITEEA Convention last month. I could not be more proud to be from Wisconsin! What a great celebration we had. There are so many to thank for the amazing conference, including Pete McConnell, Bryan Albrecht and Joe Ciontea for their amazing leadership. Frank Steck, Ken



Starkman and Brent Kindred for their support in the background. Matt Schultz for the best Awards Banquet I have ever attended! Our WTEA Board of Directors for their time, commitment, and support. This was the best WTEA

convention I have ever attended and Wisconsin has raised the bar for future ITEEA Conferences. I hope you were able to attend and come away with fresh ideas from this wonderful opportunity.

The WTEA Executive Board is already looking to the future and keeping the ball rolling for our WTEA 2016 Convention – coming back to the Chula Vista Resort next February. I encourage you to put it on your calendars now, so you do not miss out! I also look forward to speaking more with you in the coming weeks, whether it is at

the SkillsUSA State Conference, the many Supermileage/Electrathon challenges around the state, or BattleBots at WCTC in May.

While we are wrapping up another school year soon, I look forward to another year leading the WTEA from the peaks of our profession, and seeing the many amazing opportunities around us.

Mark your calendars and plan now to attend

The 47th Annual WTEA Conference and Trade Show

“Technology and Engineering: Architects of the Future”

February 25-26, 2016

Chula Vista Resort - Wisconsin Dells, WI



Winter 2014 - 2015 WTEA Board Meeting Highlights

by Matt Schultz, WTEA Secretary/Treasurer

The following summary highlights the Winter WTEA Board of Directors' Meeting held January 17th at MSOE in Milwaukee.

- New Board Elections
 - o Steve Meyer, Brillion High School: President Elect
 - o Matthew Schultz, Lakeview Technology Academy: Secretary/Treasurer
- SkillsUSA has moved to a 3 day event in Madison, April 28-30 at the Alliant Energy Center.
- WEEVA Events:
 - o UW-Stout/TECA- April 17-18: Menomonie, WI
 - o FVTC/WIR- April 24-25: Appleton, WI
 - o UW-Platteville-May 1-2: Platteville, WI
 - o Road America, May 7-8: Elkhart Lake, WI
- Transcript high school credits with local Technical College. Contact your technical college to get this opportunity for your students started.

- Gateway Technical College Sumo-bot Competition April 30, 2015.
- 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, Canoe Building, etc. For more information contact Jesse Domer: domerj@watertown.k12.wi.us
- The WTEA district directors will be working with Wisconsin Technology Education teachers to update the "Master List" of technology teachers. Information being gathered includes teachers' names and positions at current schools.
- Doug MacKenzie, Interface Editor, is looking for more general members to submit articles. A ten dollar coupon will be rewarded for those members who get an article published in the Interface.

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

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's 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 Cointea, Executive Director and tell us who you wish to nominate, where to contact

them, and why you feel they deserve recognition from our association. All nominations must be sent by U.S. mail or by email. The awards banquet will be held as part of the WTEA annual conference.

Notes:

- Nominations must be received by November 15th to be considered for recognition the following spring.
- To be considered for recognition, the Technology Educator must be a current member of the WTEA and have a history of WTEA membership during the previous school year.
- For a detailed description of the awards, please visit our website or contact any board member.

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Carry it Forward

By Mike Cattellino, WTEA Vice-President

The 2015 ITEEA Conference in Milwaukee was a truly spectacular event in so many ways. From the perspective of being a WTEA board member, it was a fantastic opportunity to be a part of something that hasn't been in Wisconsin for many years. I feel very fortunate to have worked with the planning team and watched them lead Wisconsin through what some viewed as the best ITEEA conference in recent years. There are so many names that I would like to extend my sincere appreciation to, but I fear I would forget one and that would be unfair, so kudos to everyone that put this conference together!

What really amazed me was the relationships that everyone brought forward that made the conference what it was. The planning team spent a LOT of time making connections, reconnecting with past networks, and following up over and over to get things put together. It was an intense time, executed by some intense efforts. The displays of STEM Partnerships in the exhibit hall were a great example of the efforts made to make the conference special.

It was not only a great ITEEA conference, but the WTEA aspect of it was awesome as well. The WTEA portion of the conference was condensed to one day, but what a day! The project showcase was an amazing array of projects and ideas from students and teachers across

a wide range of topics. I know I could have spent more time looking all of that over, but there were other things that interested me as well.

Now that this year's conference is past, time to move on...or is it? I challenge those that went to this year's conference to carry the energy and momentum into the years to come. Next year the WTEA conference will return to WI Dells. I encourage you to get a neighbor district to the conference next year. Reach out and connect with several new teachers and summarize your experiences at the conference. Spread the good news one person at a time and before you know it we will outgrow the conference space in WI Dells. I believe that would be a great problem to have.

As we ponder our next year in the classroom, please consider what you can do to carry the momentum of your program forward. Talk to your principal and offer to host a district board meeting in your classroom/lab. I know I have talked with many of you about reaching out to your local business people. Take the leap and see what you land on. Reach out to the post-secondary schools in your area. They may have contacts that you can reach out to and build a relationship. Who knows, at the next conference YOU might have a STEM Partnership to display or discuss at a session.



- Dates to Remember -

April 28-29	42nd SkillsUSA State Conference	Madison, WI
May 15	WTEA Foundation Scholarship Application Deadline	
May 30	Southeast WI Carpentry Training Center Open House	Pewaukee, WI
June 22-26	51st Annual SkillsUSA Championships	Louisville, KY
July 7-10	Automotive Technology Summer Institute	Appleton, WI
October 28-30	Career Pathways Network National Conference	Dallas, TX
November 15	WTEA Award Nominations Due	
November 19-22	ACTE National Conference	New Orleans, LA
February 25-26, 2016	47th Annual WTEA Conference	Wisconsin Dells, WI
March 2-5, 2016	ITEEA Annual Conference	Washington, D.C.

DISTRICT NEWS

District A

Sylvia Tiala



In mid-January plans for the WTEA/ITEEA conference in Milwaukee were in full swing. One of the key elements highlighted at this year's conference were the partnerships between business/industry and our K-12 school districts. Business and industries are very interested in reaching out to

educators. This was evident as Elisia Gonsowski, HR Generalist of Riverside Machine, collaborated with Jeff Sullivan, Associate Dean at Chippewa Valley Technical College, and Sylvia Tiala, UW-Stout/WTEA District Representative, to bring Technology Educators together to tour Riverside Machine. During the tour we were able to discuss the technical, mathematical, and scientific aspects of high-tech manufacturing. After the tour we took time to discuss the need for a skilled workforce. There

was a lot of enthusiasm to expose our STEM colleagues, counselors, and administrators to student opportunities in manufacturing careers. Thank you Riverside Machine for a great tour and to Jeff Sullivan for helping make this tour possible!



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DISTRICT NEWS

District G

Travis Ray



I would like to start this District G update by thanking Stoughton High School Technology Education teachers, Douglas Giese, Pat Hensen, and Brad Seehafer for offering their facilities as a host site for our meeting. As with anything outside the normal day, which can

be crazy in its own right, taking on the additional work to get ready for the meeting is greatly appreciated. For taking that on, I say Thank You.

The meeting was on February 19, 2015 and as always it was a great time to get together to see what was going on throughout the district. Updates were given on the upcoming WTEA/ITEEA conference. Brent gave an update from DPI. We also discussed the District G email list and encouraged anyone that knows someone that should be on the list but is not, to contact me and I will make sure they get added. Mike Roth (CHUMS – Sun Prairie) also

presented information on a service project that has his students making Freedom Pens for Honor Flight.

Upon conclusion of the meeting a tour was given of Stoughton High School's Tech Ed areas. Highlights were in the FAB Lab, wood shop, metals shop, and auto shop.

The meeting was well attended; 20-25 throughout the evening. Overall it was a great meeting with several conversations carried on by all in attendance about what is going on in our programs. As you read this, if you would like to be added to the email list for District G, please feel free to contact me at rayt@mcfdsd.org and I will make sure you get added to the list.



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ANNOUNCEMENTS

2015 Automotive Technology Summer Institute

Sponsored by the Foundation of the Wisconsin Auto & Truck Dealers Association

When: Tuesday, July 7, 2015 through Friday, July 10, 2015

Where: Fox Valley Technical College, Appleton

Cost: No registration fee -

Costs are paid by industry and education sponsors who support automotive technology education

Description: The summer institute will start off with an opening session featuring keynote speaker Chuck Zamora, author of "The Tools of Life." Afterwards, this year's attendees will have five tracks to choose from. Friday's schedule will feature four elective sessions.

Be sure to register early to get your first choice from the training opportunities listed below.

Breakfast and lunch will be provided each day.

There is an option for participants to earn graduate credits (fee required).

Tracks:

- 1 – Electrical & Engine Performance
- 2 – Automatic Transmissions
- 3 – Hybrids
- 4 – Lt. Duty Diesel
- 5 – MLR Training

Elective sessions: ABS (skid pad), AYES Reporting, Ag Bio Diesel, and NATEF Documentation

For Institute details, schedule & registration forms go to <http://watda.org/TeachTrain>



WTEA Foundation Scholarship

The WTEA Foundation is offering a \$1200 scholarship for a high school senior who commits to pursue a career as a K-12 Technology & Engineering educator.



Eligibility

- Spring 2015 high school graduate
- Wisconsin resident
- Enroll in technology education at UW-Platteville, UW-Stout, or Viterbo University and start the fall 2015 semester
- Submit completed application form and 250 word essay prior to May 15, 2015

Details of the scholarship and the application form can be found on the WTEA Foundation website at www.wteafoundation.org or scan the QR code.



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SkillsUSA Fall Conference

SkillsUSA Fall Conference is set for the 2015-16 school year! Mark your calendars for October 18 - 20, 2015 in Rosholt.

This year's officers reflect back on what exactly happened at Fall Conference 2014.

*By SkillsUSA Wisconsin 2014-2015 State President Sara Freimuth
and SkillsUSA Wisconsin 2014-2015 State Reporter Jared Behymer*

Along with the changing leaves, fall comes with changing and growing leaders at the SkillsUSA Wisconsin Fall Leadership Conference. Held October 15-17 at the Lions Camp in Rosholt, Wisconsin, SkillsUSA Fall Leadership Conference offered the opportunity for students to learn leadership skills and work with teachers and advisors to improve their local chapters.

The conference kicked off with Wisconsin's state officer team welcoming the attendees and performing Opening and Closing Ceremonies. The officers then presented various topics that would be useful to students and teachers throughout the conference, ranging from establishing S.M.A.R.T. goals, to developing a program of work, to forming committees and officer teams.

After learning about each officer position, the members were separated into different colored chapters and accompanied by advisors. In these color chapters, mixes of students and teachers from different areas across the state worked together to establish successful chapters.

Attendees started by electing officers from the membership to lead their color chapters. Once elected, these student-officers were instructed on how to fulfill their duties as newly elected officers. As they returned to their chapters, they held their first official meeting, where they formed committees including: Professional Development, Com-



munity Service, Employment, Fundraising, SkillsUSA Championships, Public Relations, and Social Activities. Creating committees and assigning chairs furthered each member's leadership ability and presented each a model that could be taken back to their own chapter as a guide. To end the night, the color chapters filled out their official membership roster and started thinking of ideas for activities in their committees.

After breakfast the next morning, chapters went back to work planning out their goals and finished their plans for community service projects, social activities, and fundraisers. Each chapter was then given time to hold an official business meeting, where members signed up for competitions and dues were set. Following lunch, the first Opening Ceremony was held by a color chapter. After the ceremony, chapters united once again to complete their community service projects, doing things to help the Lions Camp, such as switching summer activity equipment to winter equipment, power-washing boats and putting them away, and washing windows.



After all of the attendees worked hard, a snack was provided for them before they dove into preparing for competitions and working on chapter activities. A 45-minute slot for each chapter was provided to do a team building social activity, like completing a low ropes course or boating. This gave the students a break from their hard work and got them excited for competitions the next day.



Mark your calendar and plan now to attend the

SkillsUSA Fall Conference

October 18 - 20, 2015 • Rosholt, Wisconsin

After dinner, a brief overview of the rest of the night and the next day was given, and students were summoned from their chapter rooms to enjoy watching a movie together in the main hall and relax after a day's hard work.



The next morning students competed in a few of the many leadership contests SkillsUSA Wisconsin offers at district, regional, and state conferences, and then the awards ceremony took place. After saying good-byes and closing up the cabins, students and advisors had a safe trip home.

The color chapters gave students many valuable leadership skills and experiences to take back to their local chapters; they learned how to establish officer teams and committees, plan and organize events in those committees, work together as a team, and work together with people from all different backgrounds.

But they were not the only ones doing the learning. The conference also gave teachers the chance to really observe their students' leadership styles, connect with other advisors, and see how members can create a smooth-running chapter on their own. For many of the advisors who attended, the conference also taught them to step back a



little more - to let students make mistakes and learn from them, rather than keep them on the right track all of the time.

Much like the autumn season, SkillsUSA Wisconsin's Fall Leadership Conference was a time of change. Throughout the conference, students and teachers from across the state experienced change - they opened their minds, changed their attitudes and thoughts on leadership, and grew as leaders - making this year's annual Fall Leadership Conference a great kickoff to the 2014-2015 school year.



Technology and Pre-Engineering Licensure Program

Enrollment Period Begins April 1, 2015

Individuals with a bachelor's degree who are considering a career change, or educators who are working on an emergency license and need to complete the licensing process are encouraged to enroll in the Technology and Pre-Engineering Licensure Program offered through the UW-Parkside. The enrollment period for courses that begin this summer will run from April 1 - 30.

The post-baccalaureate program was developed to meet the demand of increased openings for teachers in technical education from Early Childhood through grade 12. Educational practice and theory courses will be offered through UW-Parkside, which is partnering with technical colleges, including Gateway Technical College, to identify courses that will meet required technology competencies. Technology courses not offered through UW-Parkside need to be completed at a technical college.

When applying to the program, students can save time and money by having an assessment of their prior learning experiences completed. Past work, educational and military experiences will be examined to determine



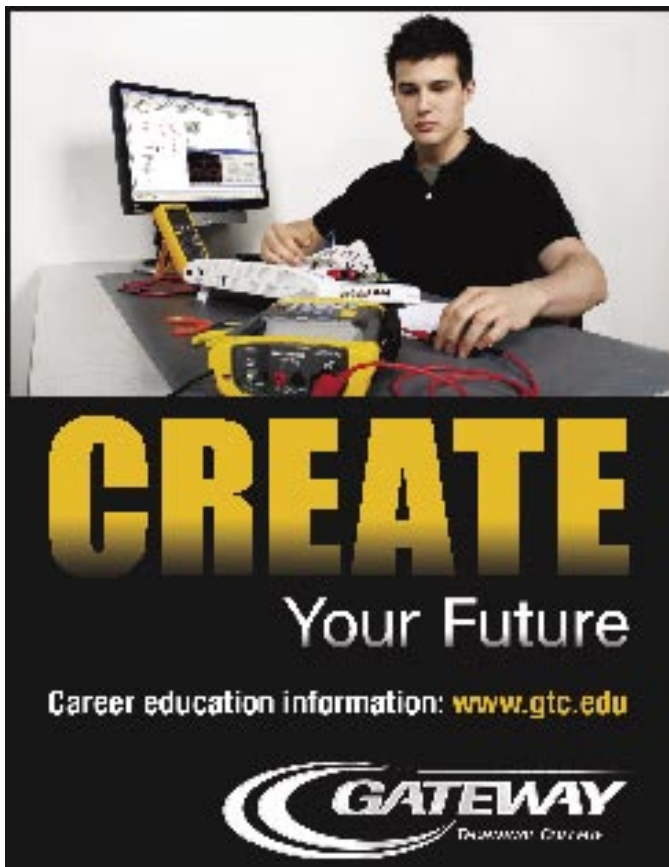
if they meet course competencies. For those on an emergency license, UW-Parkside will collaborate with school districts to provide an accelerated on-the-job program.

Erik Wolbach, who is currently enrolled in the program, teaches at South Milwaukee High School as a tech-ed teacher on an emergency license. He is certified in physics, math and physical science and wanted to add this additional licensure to fulfill requirements for his current position. "Parkside is unique because it gave me credit for my industry, military and prior teaching experience," Wolbach said. "I enjoyed the streamlined program; it sticks to the important aspects about being an educator." Aside from this being a time- and money-saving program for Wolbach, he also feels that the course work is immediately relevant to the work he is doing in the classroom. "As a tech-ed teacher, I get to build and create every day," he said. "This morning I was working with students to pour concrete to fill forms for the foundation of a model house and this afternoon I was working with my students to build electric guitars."

Why is the demand for tech-ed teachers growing so quickly? There has been an increase in numbers of students. More than two-thirds of Wisconsin high-school students (approximately 90,000) are taking Career and Technical Education courses. At the same time, due in part to the growing number of teacher retirements, there has been a decrease in the number of courses offered. Combine those elements with a reduction in licensure programs preparing technology and pre-engineering educators and the result is an unprecedented demand for tech-ed teachers.

UW-Parkside created the new program – the only post-baccalaureate licensure program in Wisconsin – as a solution to fill these vacancies. It was developed with working adults in mind by offering flexible course times on nights, weekends and over the summer, and with options including online and blended formats. "This is the best option I've found for a licensure program," Wolbach said, "especially if you are already working."

To find registration information, visit www.uwp.edu/tech-ed. For more information please contact, Mary Jo Jiter at 262-595-2063 or jiter@uwp.edu.



TEECA Represented at WTEA-ITEEA Conference

By UW-Stout Technology & Engineering Education Collegiate Association Members

This year, five UW-Stout students attended the joint WTEA-ITEEA Conference. Ranging from a second-semester freshman to a senior currently student teaching, we were a diverse group and all had different goals for what we wanted to take away from the conference. The majority of us had attended the WTEA conference in previous years and had a good idea what to expect. We attended many different breakout sessions on Wednesday, including: Grading for Learning in Technology and Engineering, SkillsUSA is on the Move, Apprenticeship: Filling the Skills Gap, and others. We also made sure to take a look at the project showcase and were able to take from it ideas of future projects that we may be able to implement when we become educators. In addition to the breakout sessions and project showcase, we attended the general session luncheon and gained valuable insights into the needs of today's industry leaders, and how we as future teachers are impacted, and also some of the inner workings of the WTEA as an organization.



UW-Stout TEECA Conference Attendees (From left) Nano Espenes, Alan Mamerow, Ben Edelburg, Zack Olsen Erik Hess (not pictured)

The rest of the week was a new experience, as none of us had ever attended an ITEEA conference before. We were not only impressed with the keynote speaker, but also amazed by the crowd that the conference drew. Having only attended WTEA before, it was fascinating to see programs from various states recognized for their accomplishments, and to realize that there were individuals from multiple countries all converging upon Milwaukee to spread their love and knowledge for Technology Education, and also to grow as teachers. One session that we all attended was the New Teacher Seminar, which gave us insight on what we can be doing our first few years of

teaching. The current student teacher in our group noted that the session reinforced some of the practices he was already doing and gave him new ideas for improvement.

Finally, we would like to thank all of the individuals who put in so much effort over the past year and more to make the joint conference a success. From the breakout sessions we attended to the project showcase and various booths in the exhibit hall, there was so much that we were able to take from the conference in ideas for projects, ideas for teaching methods, and new resources that we as future educators could use not only when we graduate, but also in many of our classes at Stout. The countless networking opportunities, talking to teachers and industry leaders from around the state and the country, helped us develop personally and professionally, and we are grateful for having had the opportunity to attend the WTEA/ITEEA joint conference this year.

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UW-Platteville Technology Education Students Enjoy ITEEA Conference

By Benjamin King & Steven Lee, UW-Platteville

I was first made aware of the WTEA/ITEEA conference while I attended last years WTEA conference. I was truly excited because I had such a great time at WTEA, attended amazing seminars, networked with other technology education teachers from around the state and attended the amazing "New teachers seminar". I also quickly came to the realization that ITEEA was more than likely going to be a once or twice event in my new career of technology education. When I found out how much the conference cost, it was quite a shock, especially for someone still attending school; so I was glad that WTEA/Platteville Technology Education Association was willing to front some of the cost of going.

Plans were made to attend starting way back in January. Hotel arrangements were made with the assistance of the Wisconsin Technology Education Association. Students Ben King and Steven Lee were lucky enough to secure space in Dr. Steck's room, while other students found lodging with family & friends throughout the metropolitan Milwaukee area.

The first day, myself and my roommate attended as many sessions as we could fit into our schedule, while still helping WTEA with some of the events they were hosting. The first day, we attended "Apprenticeship: Filling the Skills Gap with Tech Ed Training," "SkillsUSA is on the Move," "Essential short- and long-term financial strategies for educators," as well as the keynote with Dawn Tabat from Generac. All of these sessions were quite interesting. We toured the exhibits and I saw some of my own high school technology education teachers. Much to my and Steve's disappointment, the Harley-Davidson Steel Toe Tour was sold out.

Day two of the conference started with the keynote address by Mr. Nicholas T. Pinchuk, Chairman and CEO of Snap-on, Incorporated. Mr. Pinchuk's address was extremely interesting and inspiring. Steve commented, "If Mr. Pinchuk ever bled, it would be red, white, and blue."

When the exhibits opened at 11:00 AM, we found the exhibits to be quite interesting. We visited the virtual welding booth, where Steve beat me by two percent "welding." Another cool booth was the polar 3d printer, because I had never thought polar printing was an option, but the 3d flexible print material was also something I had

never seen before. I also found the booth from Watertown High School to be amazing, as well as the live CNC machining at the Tormach booth.

Thursday night was a special night for all Conference attendees, not only did we get to attend the Alumni Reception in the hotel bar, but we were able to watch the Wisconsin Badgers' come-from-behind victory over the University of Arizona in the NCAA Elite Eight. It was quite nice to catch up with former teachers of mine, as well as other Platteville graduates.

Friday started with the General Business meeting and presentation of awards to programs of the year. We were happy to see Mr. Duane Elfering of Barneveld High School receive the award for outstanding Teacher of the Year. Mr Elfering brought the Wisconsin Energy Efficient Vehicle Association to the UW-Platteville campus last year and returns May 1-2 for the second annual WEEVA competition in Platteville. I know Steve and I are excited to volunteer this year again at WEEVA!

Friday afternoon was a lot of fun, playing bean-bags and waiting for the raffle drawing for the Snap-On tool box. We really appreciated the lunch donated by Goodheart-Willcox, as we were able to keep Dr. Steck and Mr. Rimel company in the UW-P booth during lunch.

Overall, I thought it was a great experience. However, I thought some of the seminars were a bit too abstract when compared to my experience at WTEA last year. I was probably looking for more concrete "here are some things I'm doing in my classroom that I think can help you out" type seminars. We hope to see everyone next year at Chula Vista in the Dells, and remember, "It's a great day to be a Pioneer!"



WTEA/ITEEA CONFERENCE CHAIR

This message was sent by WTEA/ITEEA 2015 Conference Chair Mr. Pete McConnell to the WTEA Board of Directors. It should serve in this capacity as a communication to you as well as an invitation to support the WTEA and WTEA Foundation Leadership as we continue to forge a strong future for our organization.

A Great Conference

By Pete McConnell, Conference Chair

Good Morning All,

I have been digesting many congratulatory messages since I returned last week. Every comment sings praises of the numbers, the cooperation, the contacts, the awards ceremony, moving ITEEA forward, and how well we showed Wisconsin STEM Partnerships proud. It was fun to spend time with all of you at the the WTEA/ITEEA Combined Conference, Board Meetings, Alumni Reception, and the many different social events. I am Proud of all of you and your effort to do what you could do, when you could do it, and how you showed Wisconsin Proud! I think there are a couple of teaching moments that can not be ignored at this time.

- Sometimes it makes sense to stay out of the way and let a small power team lead us forward.
- Trust in your leadership.
- Listen to your young leaders as they discuss unique ways to "Brand the future."
- Although there were bumps in the road, ITEEA EXEC Staff Rocks!!
- Joe Ciontea is the heart and foundation, and Soul of this organization and he is willing to Mentor, Train, and Lead to move our Organization Forward. Take Advantage NOW!
- Dr. Bryan Albrecht (007) has set the bar High! He taught us how to make the contacts, develop a team that makes him look good, and provide an experience in Milwaukee that will have vendors, educators, administrators, and State Associations talking all over the country.
- Steve Johnston, Jeff Dowd, and Tom Barnhart did a fantastic job coordinating the WTEA Conference matrix, presenters, and communications with the Wisconsin STEM Partnership booths. There are countless efforts that happen behind the scenes annually and these board members provide a solid rock of support and guidance.



- Thank you to our schools, advisers and business partners that made our Wisconsin Stem Partnerships provide leadership for everyone who visited our Booths!

- Laurie Domer and Skills USA provided a class act with 15 Wayfinder Skills USA Students that wore a red coat Proud and Loud for Wisconsin (first time at an ITEEA Event).

- ITEEA Executive Director Steve Barbatos and Staff stood behind a plan that we crafted together. Not always easy to trust in a journey you have not traveled before, but we promised and he trusted. WIN-WIN!

- Matt Schultz and the Awards Committee. You call it a cry fest or whatever!!! The bottom line is your professional approach to showcasing Wisconsin's finest continues to

change the lives you touch (more than you will ever know).

- Jesse Domer has grown into a fine leader and champion for this organization and he is not afraid to lead us into the future. Thank you for your trust and commitment to us all.
- Finally - I hear you ask about what we should grab from this and use in the future to move us forward. The answer is step up and take charge! Bryan showed us what to do. Now you secure that methodology for the future so that valued partners can't wait to donate \$3000-\$5,000 every year to our foundation, or scholarship, or WTEA Banquet!! Use the youth in our organization and this positive example to spring-board solid plans for our continued success!

Thank you one and all for everything you offered and for the incredible support you dedicated to move this event and our two great organizations forward!! Keep the torch raised high. I will follow wherever you lead!

Your humble and gracious colleague,
Mr. Pete McConnell



Plan now to attend The 47th WTEA Annual Conference

February 25 & 26, 2016 • Chula Vista Resort • Wisconsin Dells

WTEA WTEA/ITEEA

Joint Conference



March 25 - 28, 2015

Milwaukee, Wisconsin

“Building Technology & Engineering STEM Partnerships”

Highlights



AWARDS

2015 WTEA Awards

Presented at the Awards Banquet - March 25, 2015



WTEA 25 Year Award

"For 25 Years of Service to Education"

Mark Baker	Jeff Bergman	James Buchanan
Doug Giese	Dale Koehler	Pat Lowery
Chuck Smet		Ken Starkman

Special Thanks

The WTEA would like to thank First Technologies, Inc.
for sponsoring the 25 Year Award.

Future Technology Educator Scholarship

Alan Mamerow
U.W.-Stout



WTEA Special Recognition Award

*"For Contributions and Service
as the WTEA President"*

Greg Groom
Lake Geneva



WTEA Award of Excellence

"For Exemplary Achievement in Technology Education"

Jay Abitz - Freedom High School
Steve Kmosena - Mosinee High School
Paul Martell - Elkhorn Area High School
Bob Morehead - Chetek-Weyerhaeuser Schools
Mark Vrieze - Ben Franklin Jr High, Stevens Point



WTEA Special Recognition Award

"For Contributions & Service to Technology Education"

Kim Kaukl - River Valley High School
Warren Kruase - Nicolet Technical College
David Polashek - Oconto Falls Public Schools
Brian Tomac - Foth Production Solutions
Plastic Ingenuity - represented by Gene Schoohs



Community Service Award

"For Outstanding Achievement in Service Learning"

Ashwaubenon High School
Sponsored by Goodheart-Willcox Publisher

Special Thanks

The WTEA Foundation would like to thank the Awards Banquet sponsors:

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Middle School Program of the Year

*"Outstanding Middle School
Technology Education Program"*

Kromrey Middle School - Middleton-Cross Plains
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High School Program of the Year

*"Outstanding High School
Technology Education Program"*

Lakeview Technology Academy, Kenosha
Sponsored by Goodheart-Willcox Publisher



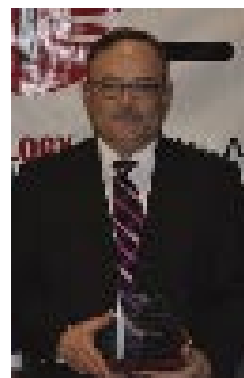
Technology Educator of the Year

*"For Outstanding Contributions
to Technology Education"*

Craig Cegielski - Elva-Strum Schools
Sponsored by Goodheart-Willcox Publisher

Lifetime Achievement Award

*"For Distinguished Achievement
and Leadership
in Technology Education"*
Pete McConnell



ITEEA National Integrated STEM Award

*Presented at the
ITEEA General Session
on March 26*

Dan Ariens
Ariens Company Chairman & CEO



ITEEA Program Excellence Award

Presented at the ITEEA General Session on March 26
Wausau West High School

ITEEA Teacher Excellence Award

*Presented at the
ITEEA General Session
on March 27*
Duane Elfring
Barneveld High School



LIFETIME ACHIEVEMENT

Lifetime Achievement Award Recipient

Pete McConnell

Pete McConnell was awarded the WTEA Lifetime Achievement Award at the association's annual awards banquet on Wednesday, March 25, 2015. The Lifetime Achievement Award was established in 2001 to recognize an individual whose career demonstrates a commitment to our profession that goes beyond the classroom and their own students. Pete is the eighth professional educator to receive this award from the WTEA. The following is the acceptance speech made by Pete at the awards banquet.

I am honored and humbled to accept the Lifetime Achievement Award from the WTEA. It is with great pride that I accept this award. I had been contemplating that evening for a while and I wanted to leave a mark on that moment in time. I have been asking the questions "What represents a Lifetime of Achievement?" "At what point did the journey begin?" "Was it the decision to become an Industrial Arts teacher and go to the greatest Industrial Arts college in the State of Wisconsin at Platteville, or was it the decision to embrace the challenge and change of Technology Education?" "Should I lead or should I follow?" "What will define me as a good teacher and mentor for my students?" "How will I learn to move them forward in their learning?"

The answers to these decisions were crafted by the dear friends and colleagues that were embarking on similar journeys. We went to High Tech Weekends and learned about Transportation, Construction, Communication, and Manufacturing. We learned about VICA from Dick Kitzmann and learned how to create curriculum for Bryan Albrecht and the

DPI. We would beg, borrow, and steal as we learned how to stick a floppy disk into a Macintosh. I even rode a bull at a Little Britches Rodeo and cooked hot dogs to raise

money to buy technology education equipment for my lab. Vendors were our friends because we had to learn new skills and software programs like DOS and Matc Cad, Robots, Lasers, and Lego Blocks. We sat around the camp fire, drank too many cold ones, and invented the new world of Technology Education with our dreams, aspirations, and energy. Sometimes we spent way too much time away from home as we stayed at work too late, traveled around the country, and consequently left those that we love behind to raise our children and save a plate of food for us to nuke when we got home.

I have been supported not only by the people who tease me the most, but also by those who believe in me and in Technology Education. Barbara and the boys always knew how much I loved to be a good teacher and have always without doubt been a devoted, loving and supportive family. There are children in this world that are in a better place because of that love and devotion and for that I am deeply and forever grateful.

My administrators, teaching partners, mentors, WTEA members and families, dear friends and supporters are too numerous to name, but know that your belief in me has allowed me to see the good in our profession and continue to strive to make it better with each day and each student I worked with. I believe in Technology Education, the WTEA, SkillsUSA, and the continued development and support of strong teacher education programs that will continue to launch the new future of Technology and Engineering teachers. I do not submit to the negativity of



Previous WTEA Lifetime Achievement Award Recipients

Len Sterry
April 2002

M. James Bensen
March 2004

Jeff Dowd
March 2005

Fred Schroedl
March 2007

Doug MacKenzie
March 2008

Dennis Skurulsky
March 2012

Carl Hader
March 2013

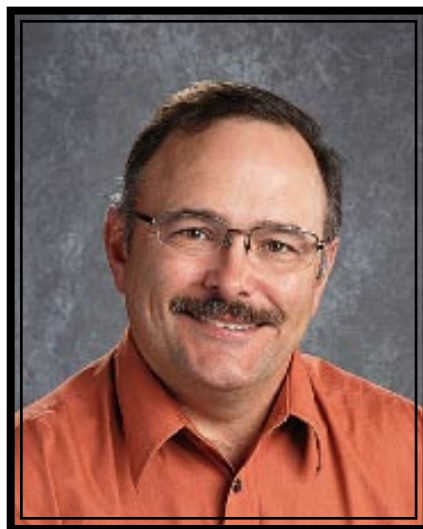
politics and trends in the lack of support for education. I have always believed that teaching is a noble and necessary endeavor. Our children deserve our fortitude and constant watch so that Technology Education remains important, relevant, and rigorous in each and every school in every community across this great nation. Please continue in your work and with your passion to be an advocate for children, education, and making something that matters with your hands and mind. Teach students to lead and to learn. Encourage them to teach and to share with others.

I don't know if I have defined a lifetime, but I know that I am not done trying to make it mean something. There is too much teacher left inside of me that needs to get out and change the lives of young people. With the support of my family and friends, I am planning to return to the classroom this coming fall as a Middle School Technology and Engineering Educator at Prairie River

Middle School in Merrill, Wisconsin. I am honored and blessed to have an opportunity to continue to share my passion in the classroom. If you see any cool activities for middle school curriculums, I would love for you to share them with me. I am excited to add new teaching tools and tricks to my tool box so that I can excite learning and generate a dedication to learning.



Please know how truly grateful and honored I am to be recognized by this association and to be among the many fine award recipients this year. Thank you for your continued support and let me know how I can continue to help you or support you in any way. Thank you and God bless you.



HIGH SCHOOL PROGRAM OF THE YEAR

The WTEA is proud to honor Lakeview Technology Academy as our 2015 High School Program of the Year.

Lakeview Technology Academy

By Matthew J. Schultz

Lakeview Technology Academy is a specialty high school preparing students to enter the field of engineering or higher level technology. Lakeview opened in the fall of 1997. Lakeview has a unique partnership with the Kenosha Area Business Alliance (KABA), WISPARK Corporation, Gateway Technical College, Marquette University College of Engineering, and the Kenosha Unified School District. Lakeview students earn the equivalent of one year of technical college credits and/or one semester of college of engineering credits upon graduation.

Since opening in 1997 the school has undergone some major changes and modifications. The school now focuses on three main tracks; Information Technology, Bio-Medical Engineering and Mechanical Engineering. These three tracks are integrated to allow for a cross categorical learning experience.

The technology education department is the largest department at Lakeview. The team consists of four full time KUSD (Kenosha Unified School District) employees and one full time Gateway Technical College Instructors. Depending on the semester and the classes offered, there are up to two more Gateway Instructors teaching classes.



What makes Lakeview so special can be broken down into five main points. One is the partnership with Gateway. Students can take college classes for dual credit and have the opportunity to leave high school with an Associate Degree. Gateway classes are also taught in the

evenings at Lakeview to adults, in the same labs that the high school students are using during the day. The labs are first class, offering students an array of industry standard equipment. Some of this equipment includes; 7 Fanuc Robots, 5 Inteletek CNC mills, 5 Inteletek CNC lathes, a Bridgeport EZ path Mill, a Freyer MC-10 CNC mill, Bosh Hydraulics and Pneumatics trainers, several Jobmaster Stations and lastly a Metrology Lab. Students spend their junior and senior labs in “Big Blue” the name coined to the lab, due to its blue paint scheme.

The second key to Lakeview’s success is the small size. Lakeview is slightly over capacity right now with about 420 students. The school was designed to house 380 students, but due to the overwhelming number of applicants, Lakeview has to take more students than designed. Having a small school setting allows for students to take classes with the same teachers, sometimes up to four or five times. This allows for a strong connection between students and teachers. Lakeview, being a technology academy, requires students to take a minimum of two tech credits a year along with their other courses.



The third key to Lakeview’s success is their tight knit tech department. The four KUSD instructors along with the Gateway Instructor work closely together on projects both in and outside of class. Class curriculum and projects often extend from one class to another, tying in multiple

competencies. The five teachers all have their own skill sets that are valuable to making up a strong team. Masters in digital electronics, machining, engineering, CADD systems, and CNC/Robotics offering a wide array of abilities to the students. The team members rely on each other in their areas of experience.



The fourth key is the strong offerings of technology equipment Lakeview has. Lakeview works hard with local industry and relies strongly on grants to keep up-to-date with the growing technology demand. The school has two laser engravers (one being the largest in the state in a school setting), four 3D printers (two being industry standard U-Prints), as well as a 4x4 plasma table, plastic injection molders, CNC equipment, enough VEX to build a small army, and countless other pieces of equipment. The school offers three different CAD softwares and certifications. The list goes on, and so do the opportunities for students.



If you are not receiving the Technology Educators listserve postings, you can sign up by contacting Brent Kindred at: brent.kindred@dpi.wi.gov

The fifth and final key to Lakeview's success is the after school student organizations. Four teachers are mentors in the many after school clubs. Lakeview offers: Skills USA, Summo-bots, Underwater Robotics, and a Super-mileage vehicle and electrathon team. The four teachers mentor, advise and donate countless hours to these clubs. The experiences and success of the clubs draw many students to the program. Students who have an interest in engineering, fabrication, and student leadership now have an avenue to do so.

Lakeview will continue to offer rich hands-on experience for their students. The program owes a lot of the success to school principal William Hittman, who is an avid supporter and believer in the program. Other people who are instrumental in Lakeview's success are Marsha Nelson, CTE Coordinator, and Bryan Albrecht, Gateway President and supporter of Lakeview Clubs. Most importantly, Lakeview would not be the great school it is today without the students' hard work, dedication and drive.



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TOOLBOX RAFFLE

ITEEA Snap-on Toolbox Raffle Prize Donated to the Boy Scouts

By Bryan Albrecht, Gateway Technical College

The excitement of the ITEEA Snap-on Toolbox raffle drew hundreds of participants and created a focus for the importance of technical and technology education. When the winning ticket was drawn it went to a long time supporter of our association Mr. Dale Kirchner, President of LAB Midwest. Dale has been generous in his philanthropic support for the WTEA and the WTEA Foundation over the years. What you may not know is that Dale is also an avid supporter of the Boy Scouts of America. When it came down to deciding what to do with the \$33,500 set of tools donated by Snap-on as the top raffle prize, Dale was quick to say that he thought they should go to an organization that could inspire future generations of youth in technical education. In typical scouting fashion, Dale met with his sons to discuss where to donate the tools. Together they determined that the Boy Scouts would benefit greatly from the tools and proceeded to donate the entire set to the Three Harbors Council of the Boy Scouts, Southeast Wisconsin. Dale's sons, Matthew and Mark,

are Eagle Scouts and Noah is an Eagle Scout candidate. It should also be noted that Mark's son Levi is also in the pipeline of Kirchners to be a future scout. A special plaque was attached to the toolbox by Snap-on in recognition of the Kirchner Family donation. It reads:

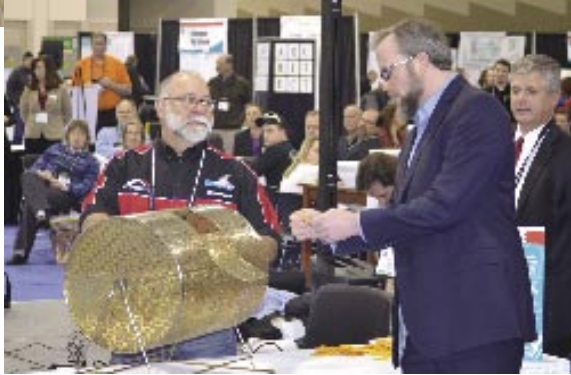
**Donated in the spirit of scouting by
Matthew Kirchner, Eagle Scout,
Mark Kirchner, Eagle Scout,
Noah Kirchner, Eagle Scout Candidate and
Levi Kirchner, Future Scout,
in honor of their parents and grandparents,
Dale and Dollie Kirchner,
for leading an inspiring scouting family.**

Congratulations Dale and thank you for your generous donation to scouting.

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The Wisconsin Technology Education Association thanks the many business, education and community partners that helped to bring the ITEEA Annual Conference to Milwaukee, WI.

THANK YOU!

On behalf of the WTEA Board of Directors and the hundreds of WTEA/ITEEA conference participants, a very big thank you to all our sponsors, education, business, and industry partners that made this year's conference a big success. Your participation was the reason we were able to support so many teachers and administrators attending the conference. The energy created by all the STEM Partnership exhibits added to the excitement and demonstrated to the nation the spirit of Wisconsin Technology and Engineering Education. Thank you for your dedication, time and financial investment in the WTEA. We appreciate you.

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Milwaukee Public Schools
Milwaukee School of Engineering
Minnesota Technology and Engineering Education Association
Moraine Park Technical College
National Coalition of Advanced Technology Centers

National Coalition of Certification Centers (NC3)
National Occupational Competency Testing Institute
The N.E.W. Manufacturing Alliance
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Racine Unified School District
Snap-on, Inc.
Southwest Wisconsin Technical College
STEM Academy
Three Harbors Council of Boy Scouts
Three Lakes High School
Trane
Union Grove High School
Univ. of Wisconsin-Milwaukee
University of Wisconsin-Parkside
University of Wisconsin-Platteville
University of Wisconsin-Stout
The Water Council

Watertown High School
Waukesha County Technical College
Waupaca Foundry
Western Technical College
Wisconsin Association of School Boards
Wisconsin Automobile and Truck Dealers Association
Wisconsin Built
Wisconsin Department of Public Instruction
Wisconsin Energy Efficient Vehicle Association
Wisconsin Indianhead Technical College
Wisconsin Manufacturers and Commerce
Wisconsin Regional Training Partnership
Wisconsin SkillsUSA
Wisconsin Technical College District Boards Association
Wisconsin Technical College System
Wisconsin Technology Education Association
WTEA Foundation





Founder of Dream Flight USA Foundation Will Retire From Wausau School District Will Dedicate Efforts to STEM Shuttle Program!

Sharon Ryan, the Chairwoman of the Board and founder of the Dream Flight USA Foundation, will be devoting more of her energies to the STEM Shuttle program in the near future. Mrs. Ryan has informed the Wausau School District that she will retire at the end of the current school year. While a full-time teacher, Mrs. Ryan limited her work with the foundation to weekends and summers.



Mrs. Ryan earned several distinguished honors during her teaching career, including the prestigious Presidential Award for Science and Math, and the Elementary Teacher of the Year award in Wisconsin. Her original Dream Flight program in the Wausau School District drew the attention of and was visited by ABC

Television's Good Morning America program. The popular Dream Flight Wausau ran for 10 years before being dropped by the Wausau School District citing the lack of funding.

Sharon then founded the Dream Flight USA Foundation in 2003. After assembling a board of directors, the foundation purchased a modern motor coach to become what is now known as the STEM Shuttle. The vehicle contains a dazzling display of hands-on work stations reflecting STEM: Science, Technology, Engineering, and Math.

In June of 2006, the STEM Shuttle made its first mission, appropriately, to the Deke Slayton AirFest in La Crosse, WI. Slayton, a WI native, was one of the original US Astronauts. Since then, the Spirit of Education STEM Shuttle has traveled throughout Wisconsin, visiting schools and community events.

An estimated 50,000 students have been challenged by the hands-on activities on board the vehicle since its inaugural shuttle mission. Even more people have toured the unique vehicle in communities throughout the region during fly-ins, shuttle open houses, parades, and the

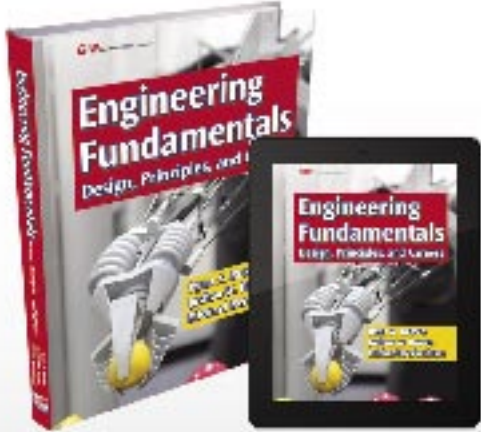
EAA AirVenture in Oshkosh. The shuttle has also visited schools and events in Illinois, Iowa, and Upper Michigan.

Now the teacher, who "gives students space to learn," plans to join the foundation's team of On Board Teachers and travel to schools during the school year. Sharon will continue to make the annual trip to the EAA in Oshkosh, where she teams with other teachers during AirVenture week, conducting hands-on activities for students.

For the past 6 summers, the STEM Shuttle has been open for tours during AirVenture in Oshkosh. Because the shuttle attracts several thousand visitors during the event, it was impossible to offer youngsters the hands-on activities on board the vehicle. Sharon developed the shuttle's hands-on learning section in a nearby hangar to accommodate the students attending KidVenture, a growing component of AirVenture.

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Kennedy Middle School Technology/Engineering Program Represents STEM Education

by Jeff Thielke, Kennedy Middle School



Kennedy Middle School's Project Lead The Way Pre-Engineering Program (Germantown, Wisconsin), was invited to represent STEM Education at the 94th Annual State Education Convention at the Wisconsin Center in Milwaukee. Only 14 schools from across Wisconsin were selected to be highlighted at this event.

Instructors Jeff Thielke and John Parrish selected Jossie Coulthurst (8th grade), Jordan Edwards (8th grade), Mira Watson (8th grade), Morgan Fleisner (8th grade) and Matt Kohn (7th grade) to showcase their PLTW projects, discussed STEM Education and their experiences in the Pre-Engineering program; to School Board Members and Administrators from across Wisconsin.

KMS Technology/Engineering students have demonstrated that they are up to the challenges this nationally accredited curriculum demands. PLTW incorporates Science of Technology activities involving problem solving, critical thinking, design, prototype development, testing and re-designing.

PLTW's Curriculum: - (Goal)

Align key learning concepts to National learning standards, including:

- Day-by-day lessons
- Course vocabulary
- Instructional resources including numerous presentations
- Support and enrichment activities
- Evaluation and assessment tools aligned to the key concepts.

Students Learn "Real World" Skills: - (Why)

- Cope with "failure" and try again, communicate – verbally and in writing
- Manage Time to meet deadlines
- Have fun while working hard
- Think creatively and critically to solve problems
- Solve Problems
- Understand and practice professional conduct
- Analyze information
- Understand how research is conducted and funded
- Work in Teams.

The Focus of PLTW is Problem-Based Learning: - (Evolution)

- Students do authentic real-world work both individually and in teams
- Learning is contextual – not a disjointed series of concepts
- Expectations are clearly articulated
- Activities have predictable outcomes and problems have unpredictable results.

PLTW Expectations: - (Importance)

- Understanding technology as a tool for problem solving
- Understanding the scientific process, engineering problem solving, and the application of technology
- Getting prepared for the rigor of high school and college level engineering or technology programs
- Understanding technological systems as they interface with other systems
- Use the principles of mathematics in their application to problem solving
- Communicate effectively using reading, writing, listening and speaking
- Demonstrate the ability to work in groups and teams



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Building Fuel Efficient Cars; Projects Beyond Achieving Mileage

By Matthew J. Schultz, Lakeview Technology Academy

Lakeview is in their fifth year building fuel efficient vehicles. The club has grown exponentially in the past five years. From a humble beginning of just two team members, a 500 dollar budget, and building 90 percent of the vehicle from recycled bicycle frame parts, the team now has ten team members, over twenty business and industry partners, and is building with materials far beyond “bike parts.”

Achieving mileage has always been the goal of the competition. Building cars lighter, with minimal rolling resistance has always been a push to the students. This year the focus has expanded. Yes, I want my club to achieve optimum mileage, but I also want them to utilize the cool technology our school has to offer. The team has set out to work on a few major projects that might not give them optimum mileage but will definitely challenge their creative and ingenuitive abilities.

“3d Printed Parts”

Lakeview has recently received some stellar grants and support from local industry to purchase state of the art industry standard 3d printers. Students are having opportunities in every Tech Class to use the printers. The club decided to use the printers for a number of creative solutions.



Fabricating mirrors has always been a challenge for our teams. Mirrors on the car must be mounted securely in position, but they also must have the ability to adjust. The team this year designed and printed mirrors that allow for minimum air resistance. The team manipulated an “Octopus Style Adjustable Tripod” to allow the mirror to pivot within the housing.



On the electric car, the team 3D printed custom handle grips that allow for a secure hold, as well as a special mount, custom fit for the electric motor’s throttle. What was once in the past secured to the handle by pipe clamps, now has a custom fit that ergonomically allows for ease and precision while driving.



“Back-up Cameras”

Visibility has always been a concern of mine as an advisor. Having the ability to remove any blind spots on the



car has been a goal of mine and my students. This year the team has incorporated “back-up cameras” as a solution. The team has designed and built custom camera mounts that are air resistant and allow for easy mounting to the vehicles. The team also designed and built custom 3d printed

monitor housings. These custom built monitor housings are now easily secured to the electric car’s dashboard. The monitors are positioned in the vehicle to limit the drivers need to take his eyes off the road. Eye travel has lessened from 127 degrees left to right, to now less than 30 degrees up and down. The cameras shed some light on common blind spots. Powered by an alternative power source the camera system will not affect the team’s performance in the electric challenge.



“Micro-processing Technology”

The team has incorporated micro-processors into both vehicles this year. The team’s gas car is using an Arduino



Uno, along with a servo motor and a thumb switch to create a digital “gas pedal.” No longer does the team have to rely on a foot controlled throttle to power the car. The team designed a thumb throttle that is mounted to the vehicle’s steering wheel. Using an Arduino



and writing specific code, the team can adjust the sensitivity of the throttle, in essence having more control over how much fuel is being used.

The team's electric car is designed with a telemetry system powered also by an Arduino. The team is using wireless communications and Arduino to send live data from the cars "Cycle Analyst" to stream live data back to the pits for team members to analyze in real time. With the addition of onboard cameras and the ability to stream live specs on current pull & voltage drops, the team can "fine tune" their driving methods to enhance performance.

"EDM Custom Hub Adapter"

Last year the team partnered with local industry supporters "Formed by Design," "Bio-Fab Technologies," and "Owens Manufacturing"



to create a hub adapter that fits snugly around the spline of a bicycle hub. The hub adapter is also designed to easily change sprockets at the track quickly. The key aspect to the design of the adapter is the EDM (Electrical Discharged Machining) spline pattern. Never before has the team been able to achieve such precision and

strength in a hub adapter. The team's high output, 72 volt, 3 phase, brushless motor puts out an insane amount of instant torque. The hub adapter allows for the strength needed to turn a wheel without damaging the adapter. The adapter has been so successful that the team partnered up with the three companies again to offer it for sale to other Wisconsin WEEVA members.

"Fiber-glass"

The team this year decided to take the plunge and make a fiberglass body for the electric car. In years past, bodies consisted of boat shrink wrap, plexi-glass, sheet metal,



and airplane fabric. The decision to try fiberglass came after

attending a WEEVA workshop, where Kimberly High School's instructor, Kevin Janota, gave a thorough demonstration on the "How To's" in fiber-glassing. The team made a digital model of the vehicle's frame, and from there they were able to make a digital body wrapping around the frame. We then

exported the body to "Autodesk 123 Make," a program that allowed us to splice the body



into multiple interlocking sections. We then took those full-scale sections and assembled them to make a "mold" of our body. We used our laser to cut out



sections of the spliced body onto cardboard. Once the body was put together, like pieces of a 3D puzzle, the team used strips of 3/4" foam to make a shell around the mold that would then be wrapped in fiberglass.

The neat thing about this project was the use of the multiple technologies. Autodesk Inventor and 123 Make were vital in this process. The use of the laser table made cutting all the pieces to size and scale much easier and more accurate.

"In the future"

This year has sparked a creative fire in my students, as the use of lasers, 3d printers, CNC equipment, EDM, Plasma table, and micro-processors have inspired countless achievable ideas. The team plans next year to use an Arduino to control a hybrid vehicle. The focus of the Fuel Efficient Vehicle is to get optimum mileage, but it makes sense to explore other engineering projects along the way.

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WORKSHOP

Manufacturing & Engineering Tech Ed Workshop

9:00 am - 5:00 pm Wednesday, June 24 & Thursday, June 25 at Lakeview Technology Academy

By Eric Sutkay, Lakeview Technology Academy

Course Outline:

In this 15 hour workshop attendees will work towards the design and engineering of a product for manufacture. Attendees will utilize manual lathes, mills, lasers, 3D printer, cnc plasma cutter and additional cnc equipment (time permitting). Please indicate on registration form which machine/s you would be interested in learning about to help gauge the project interest.

Pre-requisite:

It is preferred that attendees have some prior knowledge and work with CAD or Inventor. This will aid in the design aspect and allow for greater work with the different machines and creativity levels of the individual project.

College Credit:

We are working with UW-Parkside to offer undergraduate/graduate credits for teachers attending the workshop. Please see Parkside contact included at the end of this article for additional information.

Materials Supplied:

Lakeview will supply computers with AutoDesk Inventor, AutoDesk, AutoCAD, Corel Draw, TorchCAD & TorchCAM, 7 manual mills, 7 manual lathes, 2 lasers, CNC plasma table and tooling.

Supplied by Attendee:

- You may choose to bring your own laptop with design software but compatibility is not guaranteed.
- Course form and fee (\$50) - Also credit forms and fees for college credit
- Jump Drive 2 gig min.

Course Location:

Lakeview Tech. Academy, 9449 88th Ave.
Pleasant Prairie, WI 53158

Course Contact:

Eric Sutkay
Tech & Engineering Instr.
Wk: (262) 359-8972
C: (262) 210-1808

Parkside Contact:

Marisella Malacara Wood
malacarm@uwp.edu
(262)595-2753
Fax: 262-595-2265

Registration Form

Manufacturing & Engineering Workshop

Lakeview Technology Academy, Pleasant Prairie, WI • June 24 - 25 • 9pm - 5pm each day

Name _____ School _____

School District _____

Mailing Address _____

Contact Phone Number _____ Email Address _____

\$50 Registration fee check enclosed _____ P.O. Number _____

Please contact for Credit Card Payments • Please make checks payable to the WTEA.

Please indicate which equipment you are most interested in learning about.

- ☐ Manual Mills and Lathes
- ☐ CNC Plasma
- ☐ Laser
- ☐ 3D Printer
- ☐ Combination of all available

Please send all Registration Forms to:

Eric Sutkay
9449 88th Ave.
Pleasant Prairie, WI 53158
Phone: 262-359-8972
FAX 262-359-8159

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