



FALL/WINTER 2017

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Exploring the World of Transportation

Academies of Racine: Growing Racine's Future Workforce

Page 4 — The Academies of Racine launched at RUSD's three comprehensive high schools; Case, Horlick and Park, in fall 2016. The Academies are designed to ensure students are better prepared for college and the regional workforce. This year, students will get the opportunity for hands-on learning as they dive deeper into the mechanics and aviation operating systems through the new aviation pathway.

Careers in Aviation

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See more on Page 4

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Navigating MSP Program

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West Salem Career Academy Provides Needed Training

Page 7 — Over the past three years, West Salem High School Career Academy has trained and educated over 60 high school students in the automotive and diesel mechanics field. The course enabled all these students to become Student Automotive Service Excellence (StudentASE) certified—a certification that provides endless opportunities for students pursuing a career in these areas.

West Salem High School

City Stadium Automotive® at East High to Offer Students 24 College Credits with New Partnership

Page 14 — “This partnership is a great opportunity for automotive students at Green Bay East High School to not only earn college credit but also be within three credits of earning a technical diploma in Automotive Maintenance while still working toward high school graduation.” The District expanded the automotive technician lab at East High School in 2015 to form City Stadium Automotive®.

Green Bay East High School

Badger High School Automotive

Page 16 — The mechanical skills of the Badger High School automotive program were put to good use recently in the repair of a vehicle to be donated to The Time Is Now to Help, a local charity helping the less fortunate. The vehicle, a 2000 Ford Taurus, donated by Badger Visual Arts teacher Michael Kern, needed significant repairs to its fuel system.

Badger High School, Lake Geneva

Plymouth High School Formula Car Takes First Place!

Page 17 — Plymouth High School took first in the Modified Class of the Formula High School challenge May 15–16. The Formula team is comprised of 20 students from all four grades, some of whom have not taken any tech ed classes. PHS first participated in Formula High School last year, where it took third in Stock Racing Class.

Plymouth High School

D.C. Everest Freshmen Lead Hands-On Rocket-Building Session for Fifth Graders

Page 6 — For three-and-a-half hours, fifth-grade students from Riverside Elementary became rocket scientists at the D.C. Everest Junior High Technology Lab — designing, sanding, molding, gluing, drying and assembling the various components of their unique rocket under the tutelage of Freshmen and their engineering and tech ed instructor Chad Brecke.

D.C. Everest School District

Transportation and Logistics Management

Page 8 — The Transportation and Logistics Management bachelors’ degree program was designed with the aid of business educators and industry leaders. The program is the only one its kind in Wisconsin and has been continuously growing since its inception in 1998. Students go on tours of five modes of transportation that serve the Twin Ports of Duluth-Superior which is as a Midwest transportation hub.

SCHS car show rolls in!

Page 14 — SCHS put on a car show May 19 for both classic and new model cars. The event has a number of classes that different cars can compete for the win. Antique, muscle, late model import, and custom are the classes to compete. The event shows cars from all over the state, so they may be sweet daily drivers or seldom Sunday cruisers, the show was bound to catch the eye of people that knew nothing about cars.

Shawano Community High School

Eleva-Strum’s Transportation Program Evolving Into a Student-Run Business

Page 18 — Eleva-Strum’s Tech Ed teacher Craig Cegielski continues his mission to turn his transportation program into one similar to the highly successful Cardinal Manufacturing program currently in place at the high school. While students in the Transportation Program are doing small repairs for now and are learning many aspects of running a business the goal is to have another successful endeavor operating in the Eleva-Strum Technical Education classrooms.

Eleva Strum High School

Just Add Water . . . New Teaching Tool Focuses on Engineering

Page 6 — Students at Prairie River Middle School in Merrill, WI have the opportunity to learn the engineering process while learning about underwater ROV’s and Great Lakes maritime history. In addition to the hands-on engineering activities, students are using 1:1 technology to learn about the history of ROVs and how they can be used.”

Prairie River Middle School, Merrill

Values vs. Priorities

Page 9 — We’re so very proud that Roehl drivers choose to treat safety as a value rather than a priority. By doing so, they recognize and behave in a way that shows that safety is important all the time and not simply a matter of convenience.

Quality in Highway Construction is a Top Priority

Page 13 — I am frequently asked by the public if we are building better highways today. My answer is absolutely we are! Not only are the materials, processes, specifications and methods better, but we are measuring the quality of our construction more completely. This is a great opportunity for the next generation!

TRANSPORTATION TODAY WI™

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Academies of Racine: Growing Racine's Future Workforce

Racine Unified School District's Academies of Racine are paving the way for career and college readiness



An airplane, donated to the school will be kept at the airport, with hangar space donated by DeltaHawk Engines of Racine. The hangar also has classroom space for students to utilize.

*Emily Neubauer
Senior Communication Specialist
Racine Unified School District*

Academies of Racine—Year One

The Academies of Racine launched at RUSD's three comprehensive high schools; Case, Horlick and Park, in fall 2016. The Academies are designed to ensure students are better prepared for college and the regional workforce.

In changing the curriculum, developing

small learning communities and better connecting with local businesses and organizations, the Academies are helping students graduate with a plan. Within the Academies are specific Pathways, such as Culinary Arts, Engineering, Marketing, Automotive Technology and Construction, among other specialty areas based on high-demand careers.

During their high school career, students can earn college credits or industry certifications as well as participate in internships, apprenticeships or job shadowing while still meeting their regular graduation requirements.

In fact, in the first year of the Academies of Racine:

- All 1,500 freshmen visited a college campus
- 180 business and community organizations committed to partnering with RUSD

- All 400+ high school teachers got the opportunity to engage with business and post-secondary partners

"When a student works on or does a project that engages both mind and heart they grow on a different level," Dan Thielen, Chief of Secondary Transformation said. "Overall, that makes that student retain information so much more."

Academies of Racine—Year Two

As high school education in RUSD transforms, so do the high schools.

This summer, Park High School underwent construction to build a brand new mechatronics lab. Mechatronics is a field of science within Industry 4.0 where students learn how machines talk to one another and analyze the data those machines provide. During this course, students get the opportunity to learn advanced manufacturing skills including how to program and troubleshoot computer-controlled machines.

Thanks to RUSD's business partnerships Park High School students will work directly with current manufacturing equipment including a programmable robotic arm donated to the school.

Across town at Horlick High School, junior Damon Young gets ready to board the

bus and head to the John H. Batten Airport. Sure, Young has been to the airport before, but he's never actually been on an airplane, until now.

The plane, donated by Eric Lyon of Marinette, WI, will be kept at the airport, with hangar space donated by DeltaHawk Engines of Racine. The hangar also has classroom space for students to utilize.

"It was so cool when we went to check out the plane we got to sit in the cockpit and learn about some of the major controls," Young said.

Young is part of Horlick High School's new Aviation Pathway. This year, students will get the opportunity for hands-on learning as they dive deeper into the mechanics and aviation operating systems through the new aviation pathway.

"We'll get to spend the year learning how airplanes work. Those are pretty rare skills to learn, especially in high school," Young said.

As the Academies of Racine grow, RUSD high school students are becoming more engaged in hands-on, relevant learning. They will graduate ready for whatever comes next — college or career.

www.rusd.org

What do you want to be when you grow up?

Careers in Aviation

*Ken Polovitz
Assistant Dean John D Odegard School for
Aerospace Science*

"Since you were old enough to understand the question, you have been asked, 'What do you want to be when you grow up?'" And, like most, you probably blurted out something that seemed really exciting and glamorous but really didn't have the first clue what it really was or how you become a fireman, rock star, ballet dancer or pilot. Now that you are older and wiser and considering your options after high school, the question now goes like this: "Where are you going to college and what are you going to major in?" And, you may be like most — still clueless and confused! Determining a career and selecting a college can be some of the most difficult decisions we ever make.

For almost twenty years as Assistant Dean for Student Services within the Odegard School of Aerospace Sciences at the University of North Dakota, I've been advising young people who are considering a career in Aviation. And, when asked what specifically they would like to do in aviation the vast majority respond: "Airline Pilot"! That's certainly

exciting and specific, but most have really no clue about how you become a professional pilot. Or, about the many other occupations within the industry like air traffic controllers, maintenance and avionics technicians, airport managers, military options, helicopter pilots, corporate pilots, airline operations managers and the list can go on and on. Like many career fields, the aviation industry is so large and diverse that it can leave many clueless and confused — again!

When considering a career within the aviation industry, it's best, in my opinion, to first turn toward those colleges and universities that have the degree options covering all or most of the occupations you should explore. This approach can help determine the quality of the school but just as importantly, allow you to explore and become more knowledgeable about the many, many occupations within the aviation industry—including becoming an airline pilot!

It is very important that you find and explore degree options in professional flight—both airplane and helicopter, air traffic control, airport and aviation management, aviation systems management (maintenance/avionics/



dispatch), engineering, ROTC programs and the newest degree option, unmanned aerial systems (UAS) operations.

Collegiate aviation has become the main avenue for individuals to follow to as they consider establishing a career within the aviation industry.

Consequently, not only is it important to choose a school with comprehensive degree options, it's also very important to choose a university with a strong reputation within the

aviation industry. This, of course, gives you an advantage with job placement upon graduation.

So, what do you want to be when you grow up? Well, if you are considering a career in aviation, don't limit yourself to any single occupation or university. Explore the vastness of the industry and the comprehensive collegiate aviation programs that can enable you to lay a foundation for success."

What Did You Do Your Summer Before Your Senior Year in High School?



Well, if you were Josh Engberg of the Wisconsin Eagle's Nest program, you experienced life behind a spinning propeller. Shortly before ending his junior year at Westosha Central High School in Salem Wisconsin, Josh soloed Falcon One for the first time. This is the Eagle's Nest aircraft that he and other students help build in one year as part of an aviation STEM program at the high school. Josh, being part of the build team, was allowed to use the aircraft FREE for flight instruction.

Sorry, 1 little side story: Josh is an amazing "Stick & Rudder" pilot. He can pull off every flight maneuver perfect every time in any wind conditions at any airport. He flies with smooth and precise control over the aircraft at all times.

Having soloed the plane, Josh spent the rest of the summer flying and preparing for the FAA flight examination. Josh didn't spend all his times in the cockpit, he and 12 of his fellow Eagle's Nest students spent a week at Airventure 2017. This is an annual trip for all the Eagle's Nest students. In addition, Josh piloted the plane to AirVenture. Landing at AirVenture is NOT a small undertaking. AirVenture sees over

15,000 aircraft landing and departing in a span of a week. Josh did an amazing job adjusting his final approach while two other aircraft were still on the runway as Josh made his final checks for landing. Josh quickly adjusted his pitch and power to give the departing aircraft space to depart safely. He then landed the plane with a perfect landing.

Josh capped off his summer by earning his FAA Private Pilot license. On Aug 16th, after an hour long intense oral examination, Josh took off from Burlington Airport via runway 11 to show off his piloting skills. Josh flew a perfect flight exam (which was no big surprise to his flight instructor John Putra). This flight

Westosha Central High School STEM Aviation Program

Our STEM Aviation Program provides aviation education to high school students in grades 9–12, with 12 to 18 students participating per year. We have a workshop at Westosha Central High School in Paddock Lake, Wisconsin. Students gather weekly in this dedicated space for meetings, build sessions, and ground school. The Burlington Municipal Airport (KBUU) serves as home base for all flight operations. The first Van's RV-12 plane built by the Central High School STEM Aviation Club, Falcon One, is located at KBUU in a generously donated hangar. The program educates students in the principles of aircraft construction, physics of flight, and concepts of metallurgy — and we explore opportunities and careers in the aviation field.

This program meets the Natural Science Foundation (NSF) and the NASA Directorate by expanding the number of students involved in STEM education. This program will help

improve the STEM pipeline by including underserved and/or underrepresented students in the project. As part of the NSF goal, this program will provide training to young women and men to pursue a career in the aviation field. Our program uses a modified engineering design model process. This process is a STEM-driven, hands-on curriculum. We use the building of the Van's RV-12 aircraft as the activity to engage learners at every level, and provide real-world learning opportunities that expose students to careers in science and technology. Our program also stresses critical 21st century skills, such as communication and teamwork. Our curriculum involves both student-directed and teacher-led curricula to create a powerful and effective STEM experience.

falconaviation.org

earned Josh his wings. This is super rare to earn your wings at such a young age.

Oh by the way, Josh's skills are not limited to flying. Josh is an Honor student at Westosha Central High School and has already received a \$16,000 flight scholarship from one of the nation's premier flight schools. Josh plans to

pursue an aviation career.

Keep your wing level, nose high and throttle forward.

www.westosha.k12.wi.us

Navigating MSP Program



Many families who have children with autism avoid flying because they are unsure how their children will respond. In an effort to ease the anxiety associated with an airport visit and flying, the Metropolitan Airports Commission (MAC), Fraser and the Autism Society of Minnesota (AuSM) have teamed up to create the Navigating MSP Airport program. The program includes monthly events, all designed specifically for individuals with autism, that guide families through the steps of an airport visit, from walking in the door to finding their seats on a plane.

During the Navigating MSP Airport event, families will have the opportunity to familiarize themselves with airport and travel

procedures. Children will practice entering the airport, obtain a security pass, go through screening at a TSA security checkpoint and walk through the airport to a boarding gate. To culminate their experience, children and their families will board an aircraft and find their seats. Please note that the aircraft will remain on the ground.

In addition to preparing families for a positive travel experience, the Navigating MSP Airport program also will provide a valuable training and awareness opportunity for airport, airline and TSA personnel to learn how to accommodate children with autism and other special needs.

Families are invited to participate in any of the Navigating MSP Airport event sessions, scheduled for the first Saturday of every month. Join MAC, Fraser and AuSM for a fun, safe practice run, while learning from airport personnel what works and what doesn't work to make your travel experience efficient and less stressful.

www.ausm.org/events/ausm-events/navigating-msp-airport.html

Solo Success!



Rachel has been a great student with an even better attitude. She's benefitted from flying with her father, Jim Senft the Central High School Eagles Program Director, and has a good base of air sense and ability. She's been a quick learner and over the past month has overcome some 'lazy rudder feet' to become a very consistent pilot.

We have had some great Wisconsin weather this summer and the 29th of August was no exception, light easterly winds at 4 knots, broken deck at 4000, and unlimited visibility. After meeting up late afternoon to cover a few remaining topics and her pre-solo exam we left for a quick dual session. I made sure

to keep quiet and keep my hands and feet well clear as she completed three traffic patterns. We did a go-around and a simulated engine failure on downwind which she handled perfectly. We taxied in, shut down, and filled out the mandatory endorsements.

I gave Rachel a few words of last minute advice. First, don't get creative, do things just as you have been trained to do and everything will go perfect. 2nd, the airplane would be lighter without me and will act a little different, be ready for it. And lastly, no matter what happens on the approach if it doesn't look good, go-around. It was a little late in the evening, I mentioned she had time for three circuits, and off she went.

I sat outside and watched the first landing. She made a beautiful approach to runway 11 at KBUU with a textbook landing. Quick stop to clean up and off she went for the second circuit.

I was really proud of Rachel the second trip around. We've preached that good approaches make good landings. She appeared to come in a little flat on the approach, she didn't like what she saw on the approach and executed a go-around . . . Awesome decision! Rachel finished her last traffic pattern and taxied in . . . success.

www.westosha.k12.wi.us

Just Add Water . . . New Teaching Tool Focuses on Engineering



Lynn Kurth and Marie Zhuikov
 Prairie River Middle School
 Merrill Area Public Schools

Students in Lynn Kurth's science class at Prairie River Middle School in Merrill, WI have the opportunity to learn the engineering process while learning about underwater ROVs (remotely operated vehicles) and Great Lakes maritime history. With help

from a Wisconsin Public Service's Innovative Educator grant and Wisconsin Sea Grant, Kurth developed a series of lessons called ROVe (Remotely Operating Vehicles and Engineering) in order to provide her students with a rich learning experience aligned to engineering principles found in the NGSS (Next Generation Science Standards).

Prior to developing ROVe, Kurth found that other programs that use ROVs were too lengthy for the amount of time she had within the curriculum and logistically difficult when considering her limited access to her school's swimming pool. Her ROVe unit provides the lesson plan and equipment necessary for teachers to carry out the engineering design process with their students as they build their own simple ROVs within a regular classroom while using common classroom supplies and a small children's pool.

“Throughout the ROVe unit, technology is used as a tool to enhance student engagement,” Kurth notes, “I have all of my students' full attention the minute they see the swimming pool filled with water and the small motors that we use as part of the engineering design process.”

Innovation and the use of technology has become a hallmark of Prairie River Middle School with the full and enthusiastic support of the school's administration. Throughout the ROVe unit, technology is used as a tool to enhance student engagement. Kurth notes, “I have all of my students' full attention the minute they see the swimming pool

filled with water and the small motors that we use as part of the engineering design process. And, in addition to the hands-on engineering activities, students are engaged in collaborative work while using 1:1 technology to learn about the history of ROVs and how they can be used.”

Kurth is currently working with Tori Kiefer, a maritime archaeologist with the Wisconsin Historical Society on developing phase two of the ROVe unit, which will involve the use of the Trident, a new

ROV developed by OpenROV. It will have a separate curriculum, which will focus on Wisconsin shipwrecks and will require access to a pool or a pond.

Kurth's ROVe unit is being published as kit for educators by Wisconsin Sea Grant with help from a grant from the Wisconsin Environmental Education Board.

Wisconsin residents can borrow a ROVe Pack for free from the Wisconsin Water Library at UW-Madison. The pack contains a build-your-own ROV kit, an inflatable pool and Kurth's teacher guide. All teachers need to provide is water for the pool! The ROVe Pack will be delivered to a local library via the Library Delivery Network of Wisconsin.

For more information, visit <http://www.seagrants.wisc.edu/home/Default.aspx?tabid=653>.

www.maps.k12.wi.us

D.C. Everest Freshmen Lead Hands-On Rocket-Building Session for Fifth Graders



Michelle Rothmeyer, contributing writer for D.C. Everest School District

For three-and-a-half hours, fifth-grade students from Riverside Elementary became rocket scientists at the D.C. Everest Junior High Technology Lab — designing, sanding, molding, gluing, drying and assembling the various components of their unique rocket under the tutelage of Freshmen and their engineering and tech ed instructor Chad Brecke. The session began with a lesson in physics, engineering, aeronautics, design, math and creativity from Mr. Brecke. The fifth graders were then given the freedom to choose the design of their nose cone, the shape of their fins and the size of the rocket itself — and then set out to create each critical section of

the rocket with the assistance of mentors.

The mentors included Wisconsin Valley Woodturners Tony Kopchinski and Mike Banderob. The woodturners were responsible for handcrafting each student's chosen nose cone design using a wood lathe. Fifth grade teacher Gretchen Lorge noted the importance of students learning from community members. “By working with Tony and Mike, the students were able to see the real-life applications of what they learn in school. It becomes apparent that the skills learned through education are beneficial in real-world careers.”

Students also visited a number of other hands-on design stations where freshmen members of Mr. Brecke's Tech Ed classes were ready to assist. The freshmen helped students

puzzle through their options — which nose cone would help their rocket fly true? Which fins would ensure a straight flight? How would the length of the rocket affect velocity? Mrs. Lorge noted how eager her students were to learn from the freshmen and how well the freshmen answered the students' questions. “The older students were able to articulate concepts in a way that the fifth graders easily understood and because of that my students were very eager to work with the freshmen and didn't hesitate to ask questions.” Adds Mr. Brecke, “It's not often that Junior High students have the opportunity to mentor others about knowledge and skills they have gained in class. Mentorship empowers both the mentor and the younger student. Often the younger students will ask a question and want to try something in a different way than a Junior High student may have thought possible, and the older student gives it some thought and can say, “I don't see why not, let's try it.” Bringing students together breaks down a lot of barriers because the students are not being judged or graded — they're just working together to meet a challenge.”

The hands-on rocket-building mentorship session was a big success. Mrs. Lorge noted how much fun the students had building the rockets and taking ownership of their own design, which made them “more eager to shoot off their rockets. It was a great science lesson on variables. Some of the materials were a ‘constant,’ but some of the aspects of the

rocket were student-driven. Those variables allows for great conversation and learning about thrust, weigh, velocity and its effect on the rockets.” Better yet, the students will bear witness to those lessons when they shoot off the rockets at Riverside Elementary.

A bystander to the lesson would have noted the noise and activity. From the outside, it might have looked rather chaotic. But that, notes Mr. Brecke, is where experiential learning takes place. “All kids are curious and we need to work hard to tap into that curiosity. Learning is messy and hands-on projects are a great way to get students to embrace that mess.” He concludes, “This session has repercussions beyond the hands-on work with design and calculations to determine whether their rockets will be stable prior to launch. It's up to each individual to dig as deep as they want to go. For some students this may very likely be the only rocket they will ever make, while others might take it up as a hobby or a potential career. As teachers, we typically only have students for one year and we need to help them make the most of that year and understand that they can take knowledge and experiences and apply them to other scenarios. Students learn to ask questions of themselves and what they've learned, and then decide if they want to explore an interest further.”

www.dce.k12.wi.us

West Salem Career Academy Provides Needed Training



One of 2 groups of last years automotive class that focused on the ASE Task, Engine Repair. These students removed this engine from a donated scrap vehicle, and then completed a tear-down and diagnosis of the problem. Instructor Matt Nagy (Pischke Motors) talks the students through the activity.

West Salem School District

Over the past three years, West Salem High School Career Academy has trained and educated over 60 high school students in the automotive and diesel mechanics field. The course enabled all these students to become Student Automotive Service Excellence (StudentASE) certified—a certification that provides endless opportunities for students pursuing a career in these areas. In July of this year, classes started for the fourth consecutive year, and will graduate an additional 25 students in the spring of 2018.

During the 2013-2014 school year, the program commenced with assistance from the state of Wisconsin's Department of Workforce Development (DWD) Blueprint for Prosperity Grant. These grants are awarded to school districts that provide high school students with an industry certification program in a career field with a high demand.

The West Salem School District received the grant from the state again the following school year, however DWD rules prevented the district from receiving it a third time, so a decision had to be made on whether to cut the program, or to continue it with sole funding from the district. The West Salem School Board and District Administrator Troy Gunderson acknowledged the continued need for automotive and diesel technicians, and allocated funds for continued operation of the course.

The class, which takes place at West Salem High School in the automotive shop, enrolls students from numerous other area school districts that recognize the advantages of the program. They attend one class period, one night a week, for four hours each night. Approximately half of the students in the program come from other school districts including Onalaska, Holmen, Melrose-Mindoro, Sparta, Bangor, Gale-Ettrick-Trempealeau, and Tomah.

Paul Liethen, the lead instructor of the

Career Academy, accredits local auto and truck dealerships for the strength of the program. These businesses contribute to the program by providing instructors, tools and equipment, facilities, and internship opportunities for students in the Career Academy. The internships take advantage of another DWD program, the Youth Apprenticeship Program, which allows students to gain further training and hands-on experience in the automotive and diesel areas. The internships are built into the student's school schedule for approximately three hours each day. In addition to being paid an hourly wage, interns take advantage of scholarships provided by the businesses they work for.

Riley Miller, a graduate from the first



Students in last years Diesel Medium/Heavy Truck class did a complete brake job on a 2000 Peterbilt tractor. This was a valuable experience for the students, and a money saving opportunity for local farmer, Scott Roesler. Roesler purchased all the parts and materials, and to the delight of students and staff, provided a steak dinner for everyone upon completion of the project!

Academy class, was also a Youth Apprentice at a local John Deere dealership. Miller received a scholarship to attend a specialized training program at the John Deere Training center at Ames Iowa. He will complete the training program this spring, and be working full time as a John Deere trained technician. After six years of working, his entire cost of education will be reimbursed. "I am not sure what I would be doing now if it wasn't for the Career Academy. It allowed me to discover something that I really like, and with the Youth Apprenticeship program I was able to experience it, and ultimately get my college education paid for. I am very grateful for this opportunity!" Miller stated.

Caleb Corcoran, a student at Holmen High School and second year Academy student, became a Youth Apprentice at a Ford dealership in Onalaska during his senior year. As an apprentice, Caleb applied the skills that he learned at the Academy, and also received a scholarship from his employer. Caleb recently graduated from a technical college, where specialized Ford Training takes place.

The Career Academy has been a superb asset to many students and businesses in the local area and hopes to continue having an impact on the lives of students interested in automotive and diesel mechanics.

The relationships that are formed between instructor and students has proven to be another strength of the program. As part of the curriculum, students get a chance to work with instructors that also work during the day as certified automotive and diesel technicians. Jared Novak, graduate of the 2nd Career Academy class, stated "During my Junior year



Diesel (Medium/Heavy Truck) students learn how to remove and replace semi tires at "Industry Partner" Degenhardt Tire in West Salem. Students are provided classroom instruction, but the majority of instruction takes place in the school's auto lab or in local shops. Each student is encouraged to complete all hands on activities!!

I learned so much from the night class Instructors, then when I had an opportunity to work as a Youth Apprentice, I jumped at the chance to work with Eric Chant (at that time an automotive technician and night class instructor)."

Steve Kemp has been a Career Academy Diesel Instructor since the start of the program 4 years ago and is also the service manager for a heavy duty truck dealership. He currently has 3 Career Academy graduates working in his shop while they attend a diesel program at a nearby technical college. "I am able to get to know the kids, and they get to know me during the night class. This familiarity makes it easier for both the student and the business to move into a working relationship".

Liethen emphasizes that this environment would not be possible without the assistance of the businesses that agree to assist with the Career Academy. "Local auto dealers have also been key supporters of the Automotive Program. They have provided instructors and Internship opportunities, they have opened their doors for the night classes to obtain specialized training on the latest and greatest equipment.

The major advantage of this program is that it gives students not only StudentASE certification, but needed experience, as students develop their careers after high school. Another important benefit is that sometimes students learn that Automotive or Diesel is not for them. The reason why this is such an important thing, is that if it wasn't for this program, students would end up spending a lot of money attending local technical colleges only to change majors resulting in an unnecessary expense. "We have had a few students decide that this area is not for them". Liethen said. "In most cases the experiences that the students obtain will help them in a related field or just as an automobile owner."

Transportation and Logistics Management

The Transportation and Logistics Management bachelors' degree program was designed with the aid of business educators and industry leaders. The program is the only one its kind in Wisconsin and has been continuously growing since its inception in 1998. Students majoring in this program enjoy the benefits of UW-Superior's personal attention to students and its quality business programs. Students go on tours of five modes of transportation that serve the Twin Ports of Duluth-Superior which is as a Midwest transportation hub. Students with faculty also travel frequently to the Twin Cities for tours of distribution centers, warehouses and transportation facilities.

At UW-Superior, you'll learn the business of efficiently moving people, information and money. You will also learn business techniques, management skills and leadership. Through a major in transportation and logistics at UW-Superior, you will: Gain a sound background in business while specializing in your desired form of transportation or logistics

- Earn real-world experience
- Learn to plan, organize, and control procurement, manufacturing, logistics and supply chain management
- Gain an understanding of conducting business in different cultures

- Enhance your decision-making skills

Students start with a critical foundation of the liberal arts. They also take core business courses such as accounting, finance, marketing and business law. The T&L program build on these keystones with courses in; International Logistics, Transportation Economics, Environmental Law, Supply Chain Management, Economic Geography and three electives from our pool of six electives in the field. All T&L majors must also complete a two credit internship giving them with hands-on experience making them more valuable to companies upon graduation. This is a comprehensive major that does not require a minor but many students double major or take the Geographic Information Systems (GIS) minor along with the T&L degree.

T&L Student John Bergstrom says: "I'm really impressed with the program. There are so many opportunities. The instructors are great too, and I'm glad I joined the Transportation and Logistics Management program." To get even more out of his second major and make new connections, John recently joined the Transportation and Logistics Club. "It's a great group of people. There's a different mentality here," he said. "Everyone wants to be successful, and no one is ashamed of going after their dreams. They're not shy at all, and

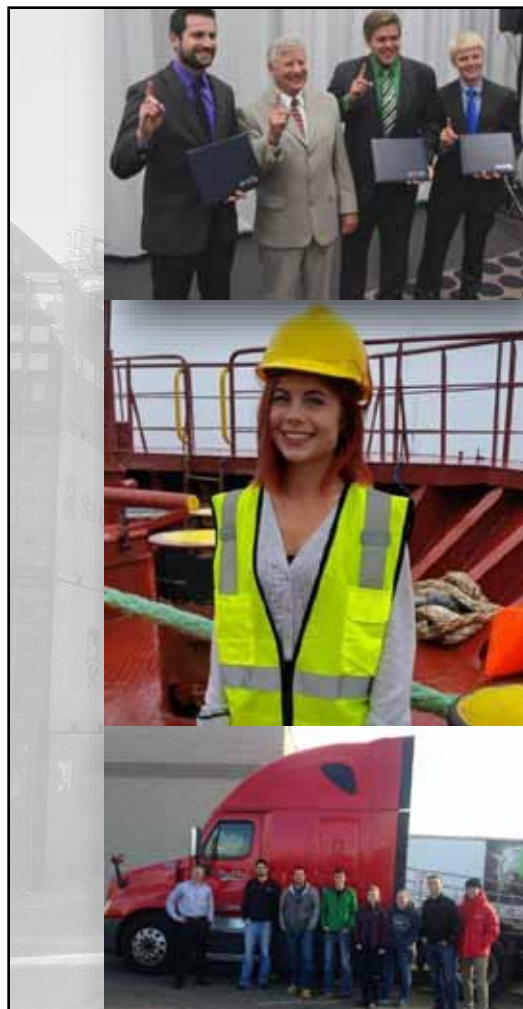


it's motivated me to do the same." The Transportation and Logistics (T&L) Student Club is very active and travels across the nation attending EXPOS, tour facilities and winning intercollegiate case study competitions.

UW-Superior offers a very high quality T&L Degree at an affordable price. In 2016-2017, nearly 30% of all Transportation & Logistics Students were awarded some type of scholarship.

Graduates have tremendous job opportu-

nities and upward mobility. Read more about the program, the students, the student club and scholarship opportunities by going to the UW-Superior Website www.uwsuper.edu and search the word transportation. You can hear from students, see a video about the program and get more details about a very special opportunity. What can you do that does not incorporate transportation?



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Values vs. Priorities

Like the bricks and mortar of a solid building, our values provide the solid foundation that guides and supports our behaviors. When we say Safety is our “cornerstone” value, it is reflected by our philosophy of Protective Driving. Priorities constantly shift and change. As the circumstances of the moment change, so do the priorities. Getting the groceries can usually wait until Saturday unless there’s a big storm coming this weekend. Then there’s the rush to the store for milk, bread and other essentials. Could you imagine if we treated safety that way—it can wait till the weekend until something comes up to cause it to be done now? That’s no way to treat safety. It has to be important all the time.

Values are deeply held beliefs beyond compromise. Values don’t change based on the circumstances of the moment. If honesty is one of your values, you don’t lie simply because it’s convenient. Values are enduring and guide our daily behaviors. We’re so very proud that Roehl drivers choose to treat safety as a value rather than a priority. By doing so, they recognize and behave in a way that shows that safety is important all the time and not simply a matter of convenience. Because they hold safety as a value, Roehl drivers don’t drive defensively, that is, trying to defend themselves from the motoring public. No,

Roehl drivers try to drive protectively—that is anticipating, recognizing and adjusting to mistakes that others may make.

We realize that most motorists don’t share our values, experience, or training, so we have a special responsibility to drive in a way that protects them— even from their own mistakes. Roehl drivers distinguish themselves because they drive to protect others—the sons, daughters, mothers, fathers, relatives and friends whom we love and cherish so deeply. We deliver “Confidence and Satisfaction” by living our values.

About Roehl & our CDL Trucking Jobs, Owner Operator Truck Driver Program and Paid CDL Truck Driver Training

Roehl Transport started in 1962 with one truck. Now, with over 2,000 driving and 500 supporting teammates, we’re one of the largest trucking companies in America.

Roehl’s long been known as a great place to get a truck driving job for all levels of experience. From innovative programs that pay drivers based on their performance to trucking jobs that get our teammates home based on schedules that work for them, Roehl’s been a leader in truck driver employment. Roehl has

also partnered with OOs and independent contractors to build an attractive Owner Operator Program for truck drivers who are also small business owners - we have one of the lowest owner operator turnover rates in the business because our compensation plans, business support and fuel surcharge are among the best in the transportation industry. In fact, Owner Operators that partner with Roehl are in the top third for net income.

Experienced drivers get great pay and find Roehl an attractive company because of the incredible amount of truck driving jobs - options that range from our many divisions hauling unique freight using different equipment (Van, Flatbed, Refrigerated, Curtainside and Dedicated) to our excellent home time options (weekly home time, daily home time and more).

Student drivers or new-to-trucking-CDL-holders who need paid on the job CDL training love our Safety and Job Skills Program.

For those seeking CDL training, Roehl offers one of the most unique programs that lets drivers get paid while they get their CDL.

If you’re seeking a driving career as an experienced trucker, a student driver who need paid on the job training, or you have no trucking experience and want to get your commercial drivers license and then into one of



our CDL trucking jobs, connect with us. You’ll find that our reputation and culture are built on values like Safety, Honesty, Driver Success and Integrity are well earned, and we encourage you to become a member of our team and drive The Roehl Way.

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- **Maintenance**— Tractor Trailer Mechanic, Maintenance Support Coordinator.



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Superior Training— Advance your skills with Roehl's diverse training opportunities.

Growth Opportunities— Our promotion from within policy and tuition reimbursement allows you to stay and grow your career with Roehl.

Stability— Family owned and operated with over 55 years of experience and growth.

A Powerful Positive Culture— Take part in team-building company events and be recognized for outstanding performance and safe work.



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Careers in the Freight Industry

Heavy and Tractor-Trailer Truck Drivers

Drive a tractor-trailer combination or a truck with a capacity of at least 26,000 pounds Gross Vehicle Weight (GVW). May be required to unload truck. Requires commercial drivers' license.

Tank Car, Truck, and Ship Loaders

Load and unload chemicals and bulk solids, such as coal, sand, and grain into or from tank cars, trucks, or ships using material moving equipment. May perform a variety of other tasks relating to shipment of products. May gauge or sample shipping tanks and test them for leaks.

Bus and Truck Mechanics and Diesel Engine Specialists

Diagnose, adjust, repair, or overhaul buses and trucks, or maintain and repair any type of diesel engines. Includes mechanics working primarily with automobile or marine diesel engines.

Light Truck or Delivery Services Drivers

Drive a light vehicle, such as a truck or van, with a capacity of less than 26,000 pounds

Gross Vehicle Weight (GVW), primarily to deliver or pick up merchandise or to deliver packages. May load and unload vehicle.

Industrial Truck and Tractor Operators

Operate industrial trucks or tractors equipped to move materials around a warehouse, storage yard, factory, construction site, or similar location.

Logistics Analysts

Analyze product delivery or supply chain processes to identify or recommend changes. May manage route activity including invoicing, electronic bills, and shipment tracing.

Cargo and Freight Agents

Expedite and route movement of incoming and outgoing cargo and freight shipments in airline, train, and trucking terminals, and shipping docks. Take orders from customers and arrange pickup of freight and cargo for delivery to loading platform. Prepare and examine bills of lading to determine shipping charges and tariffs.

Driver/Sales Workers

Drive truck or other vehicle over established routes or within an established territory



and sell or deliver goods, such as food products, including restaurant take-out items, or pick up or deliver items such as commercial laundry. May also take orders, collect payment, or stock merchandise at point of delivery. Includes newspaper delivery drivers.

Crane and Tower Operators

Operate mechanical boom and cable or tower and cable equipment to lift and move materials, machines, or products in many directions.

Weighers, Measurers, Checkers, and Samplers, Recordkeeping

Weigh, measure, and check materials, supplies, and equipment for the purpose of keeping relevant records. Duties are primarily clerical by nature. Includes workers who collect and keep record of samples of products or materials.

Dispatchers

Schedule and dispatch workers, work crews, equipment, or service vehicles for conveyance of materials, freight, or passengers, or for normal installation, service, or emergency repairs rendered outside the place of business. Duties may include using radio, telephone, or computer to transmit assignments and compil-

ing statistics and reports on work progress.

Shipping, Receiving, and Traffic Clerks

Verify and maintain records on incoming and outgoing shipments. Prepare items for shipment. Duties include assembling, addressing, stamping, and shipping merchandise or material; receiving, unpacking, verifying and recording incoming merchandise or material; and arranging for the transportation of products.

Paving, Surfacing, and Tamping Equipment Operators

Operate equipment used for applying concrete, asphalt, or other materials to road beds, parking lots, or airport runways and taxiways, or equipment used for tamping gravel, dirt, or other materials. Includes concrete and asphalt paving machine operators, form tampers, tamping machine operators, and stone spreader operators.

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Quality in Highway Construction is a Top Priority

*Kevin W. McMullen, P.E., President
Wisconsin Concrete Pavement Association*

I am frequently asked by the public if we are building better highways today. My answer is absolutely we are! Not only are the materials, processes, specifications and methods better, but we are measuring the quality of our construction more completely. In fact, the construction industry is consistently training and hiring quality control staff to assure that specifications and minimum quality levels are achieved. And, for many construction companies the fastest growing area in their company is their quality control department.

When I entered the highway construction industry in the early 1980s there was typically one set of quality control tests per day for each. Perhaps there were two sets taken if problems were encountered during the day. To put that into perspective, the concrete pavement industry that I work in has an unwritten goal that a mile of pavement per day is normal production. That equates to 4,000 to 5,000 cubic yards of concrete produced and placed per day. The Wisconsin Department of Transportation employed engineering staff would do one

set of quality control tests per day on that large volume of concrete.

Today's standards are much different. In concrete paving construction, we measure the air content for freeze-thaw durability, strength for its ability to carry the heavy highway trucks, thickness of the pavement for conformance to what is required for each highway and ride in terms of the nationally accepted ride index. The quality control testing is now being done by the contractors because they are the ones that can affect quality the most by reacting to quality issues the fastest and most efficiently. The Wisconsin Department of Transportation engineer comes in and checks the contractor by doing one quality control test for every five that the contractor does. If the engineer and the contractor testing agree, then construction moves forward. If they do not the contractor has to stop and investigate why and correct the issue. In addition, anytime the contractor is testing and it reveals that they are not meeting the State and Federal standards he has to stop and get back into specification requirements.

The frequency of testing today equates to about one set of tests on concrete for



every 250 cubic yards produced and placed. So, we are measuring quality at a frequency of 16 to 20 times more than what we were doing 30 years ago.

This is a great opportunity for the next generation of engineering students and the graduates of the technical colleges who want to work in the road building and construction industry. The jobs will be there

and the opportunity to take part in the next generation of technology in doing the measurement of the quality of the constructed product will be exciting. In addition, you will be able to take pride in working on the highways that move the people, products and services of Wisconsin.

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Pictured Here: Monroe Avenue (State Trunk Highway 29) in the City of Green Bay. It was constructed by Wisconsin Department of Transportation, the City of Green Bay and WCPA Contractor Member Vinton Construction Company. It was the recipient of the 2015 Gold Award for National Excellence in Concrete Pavement in the Category of Municipal Streets and Intersections, Greater than 30,000 SY.

City Stadium Automotive® at East High to Offer Students 24 College Credits with New Partnership



Green Bay Area Public School District
Northeast Wisconsin Technical College

The City Stadium Automotive® program at East High School is proud to announce that new this school year is the opportunity for stu-

dents to earn 24 college credits toward the one-year Automotive Maintenance Technician technical diploma program through a new partnership between the Green Bay Area Public School District and Northeast Wisconsin Technical College (NWTC).

Upon graduating from high school, students will be prepared to either enter the workforce directly or continue their education at NWTC to complete either the two-year Automotive Technician technical diploma or an Automotive Technology associate degree.

City Stadium Automotive® courses are taught at East High School by NWTC instructor Clint Braun and supported by Green Bay

Area Public School District instructor Brian Loll. Both are Automotive Service Excellence (ASE) certified instructors.

“This partnership is a great opportunity for automotive students at Green Bay East High School to not only earn college credit but also be within three credits of earning a technical diploma in Automotive Maintenance while still working toward high school graduation,” said NWTC Transportation and Construction Associate Dean Gene Francsico. “These students will come to NWTC with the first year of their Auto Technician credits completed and be able to start their automotive career much faster.”

The District expanded the automotive technician lab at East High School in 2015 to form City Stadium Automotive®, where students receive hands-on, real-world experience centering around technical research and automotive workplace skills and practices while receiving high school and college credit.

“We are excited to provide this collaborative learning opportunity that will allow our

students to be in a unique position to prepare for their future in the workforce while in high school,” said Green Bay Area Public School District Director of College, Career and Community Readiness Lori Peacock.

In addition, City Stadium Automotive® at East High is proud to be one of only 14 high schools in Wisconsin to be certified by the National Automotive Technician Education Foundation (NATEF) for Maintenance and Light Repair Program Standards. NATEF is an organization that examines the structure, resources, and quality of training programs and evaluates them against standards established by the industry. Students who receive NATEF certification are prepared to work in the automotive field, enroll in technical school, or both.

www.gbaps.org

SCHS Car Show Rolls In!



Sam Kobs, *The Hawks Post*
Shawano Community High School

SCHS put on a car show May 19 for both classic and new model cars. The event has a number of classes that different cars can compete for the win. Antique, muscle, late model import, and custom are the classes to compete.

The custom class was the biggest with

the widest variety of cars. Any car that has modifications would be able to qualify: anything from exhaust to bodywork and engine performance.

The event shows cars from all over the state, so they may be sweet daily drivers or seldom Sunday cruisers, the show was bound to catch the eye of people that knew nothing about cars.

Cars were not the only thing that made an appearance at the show. The grill was fired up, and the live music was kickin'. Speaking of music, there was not only a vast variety of beautiful cars there. There was also a man that wanted to show off his subwoofer system to the kids at Shawano High. His system was all professionally wired up, and had some top of the line equipment to drop the jaws of anyone that loved to listen to music with more than just a little kick.

A few students decided to enter their rides in the show. One being sophomore Tyler Wagner's beautiful all black Chevy Silverado.

“It's a very sharp looking truck. I would love to own it,” said senior Colt Olson.

Not to mention the show-stopping four cylinder demo cars that senior Kasey Kristof and junior Lucas Schoenike trailed in. They have yet to demo their masterpieces, seeing as they are not yet smashed up steel. But the



kids at Shawano High know that once demo day comes, the boys from Bell Plane are most definitely gonna send it, no questions asked.

“She's not as tough as I would like her to be, but it will do the job,” Kristof said.

Car enthusiasts look at everything when purchasing a new Sunday cruiser. They make sure the car is kept in very well mint condition, with almost all of the original parts.

“Most of the time when an old classic car is kept nice and all original, it could be worth a lot more than you bought it for,” shop teacher Mr. Jeremy Hodkiewicz stated.

When buying a classic you must know what to look for.

“When buying a car with all original parts, [they] are very hard to find. You must check over everything,” a car collector named Mike stated. “Especially when buying it for the big bucks.”

www.shawanoschools.com

See Inside the **NEW** **TRANSPORTATION** **CENTER**

New on campus is the NWTC Transportation Center. The 63,000-square foot facility is located adjacent to the Green Bay campus on Packerland Drive.

The Transportation Center is home to the College's Automotive, Auto Collision and new Diesel Medium and Heavy Truck programs.

The *NEW* building includes:

- ★ a diesel truck repair lab
- ★ an auto collision refinishing lab
- ★ two auto repair labs complete with a shared parts department
- ★ a transportation welding shop
- ★ a modern high bay demonstration lab for instructional and corporate partner use

The facility serves up to 96 auto tech students, 96 diesel truck repair students, and 32 collision and refinishing students annually.

DID YOU KNOW?

The Transportation Center is designed to give students the familiarity of working in a dealership.



Northeast
Wisconsin Technical College

nwtc.edu



Badger High School Automotive



Marie Collins
Badger Community Education Director,
Career/Tech Ed Representative
Badger High School

The mechanical skills of the Badger High School automotive program were put to good use recently in the repair of a vehicle to be donated to The Time Is Now to Help, a local charity helping the less fortunate.

The vehicle, a 2000 Ford Taurus, donated by Badger Visual Arts teacher Michael Kern, needed significant repairs to its fuel system.

The students in Tom Sheeley's Auto III class took on the project of readying the car for its new owner. After inspecting the vehicle top to bottom, the students installed a good used battery and a new battery hold down. Sheeley said the students were begin-

ning their fuel unit and installed a fuel pump unit on a different vehicle for practice. They then replaced the leaking fuel pump on the donated car. But with the vehicle being old and rusty, other parts continued to deteriorate as they worked on the car and they ended up with more work than they first anticipated.

Additional repair included fabrication and installation of fuel lines. Then a new fuel filter and fuel tank filler neck also were needed to get the fuel system in shape. After the fuel filler a new fuel tank and mounting straps were purchased and installed, and the fuel injectors were cleaned.

Students then diagnosed an inoperable fuel gauge and replaced the fuel gauge module. An inspection and cleaning of the front bakes estimating there to be 20,000 miles remaining. On the rear of the car, new brake shoes, hardware and self-adjusters completed the brake job.

A power balance test was performed, and the students tuned up the vehicle, check-

ing the fuel injection system making sure the spark plugs were clean and properly gapped, confirmed that the ignition wires and coil were functioning properly, and repaired leaks in the PCV, EGR and exhaust systems.

When looking to replace one bad tire, a call to Mike's Auto Repair in Lake Geneva yielded a donation of four brand new tires, mounted and balanced by the students.

Finally, the students cleaned the interior and exterior of the vehicle and installed new windshield wipers before declaring the vehicle ready for donation.

Sal Dimicelli, founder of The Time Is Now To Help, received the vehicle and its title on November 10th and already has a family in mind to receive it.

Real-world examples of auto work offer teaching moments that do not happen in lab exercises, Sheeley explained. For example, at times the fuel work was frustrating, as one problem fixed would reveal another.


“The students involved found the project to be worthwhile. ‘It is good to give back,’ said Mark Lisny. And classmates echoed the sentiment. Badger Auto students receive free college credit from Gateway Technical College that is transferable into any Wisconsin Technical College.”


Continued on Page 18

Safe Winter Driving Tips


- **Clear snow and ice from all windows and lights** — even the hood and roof — before driving.
- **Pay attention.** Don't try to out-drive the conditions. Remember the posted speed limits are for dry pavement.
- **Leave plenty of room for stopping.**
- **Leave room for maintenance vehicles and plows.** The law requires you to slow down or move over when approaching emergency or maintenance vehicles, including snowplows, parked on the side of the road when they have their flashing lights turned on. If approaching a snowplow, stay back at least 200 feet (it's the law!), and don't pass on the right.
- **Know the current road conditions.** Call 511 or log onto the winter road conditions report Webpage.
- **Use brakes carefully.** Brake early. Brake correctly. It takes more time and distance to stop in adverse conditions.
- **Watch for slippery bridge decks,** even when the rest of the pavement is in good condition. Bridge decks will ice up sooner than the adjacent pavement.
- **Don't use your cruise control in wintry conditions.** Even roads that appear clear can have sudden slippery spots and the short touch of your brakes to deactivate the cruise control feature can cause you to lose control of your vehicle.
- **Don't get overconfident in your 4x4 vehicle.** Remember that your four-wheel drive vehicle may help you get going quicker than other vehicles but it won't help you stop any faster.
- **Do not pump anti-lock brakes.** If your car is equipped with anti-lock brakes, do not pump brakes in attempting to stop. The right way is to “stomp and steer!”
- **Look farther ahead in traffic than you normally do.** Actions by cars and trucks will alert you quicker to problems and give you a split-second extra time to react safely.
- **Remember that trucks are heavier than cars.** Trucks take longer to safely respond and come to a complete stop, so avoid cutting quickly in front of them.
- **Go slow!**
wisconsin.gov/Pages/safety/education/winter-drv/driving-tips.aspx

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Plymouth High School Formula Car Takes First Place!

Plymouth Joint School District

Plymouth High School took first in the Modified Class of the Formula High School challenge May 15-16 at Road America.

Three different drivers behind the wheel of PHS car S-66 averaged 45.83, the second-fastest time in any class.

The car was designed, built and raced by members of the PHS Tech Club, created a

few years ago as an umbrella extracurricular for various tech ed-related projects. The club provides hands-on experience with real-world problems for those interested in engineering and motorsports, but also draws on math, welding, CNC, manufacturing, physics, language arts.

The Formula team is comprised of 20 students from all four grades, some of whom have not taken any tech ed classes. PHS first participated in Formula High School last year, where it took third in Stock Racing Class. This year's goals were to improve upon that performance and to add a second car so more students can participate.

“The project develops more than engineering, welding and driving skills. Students created a presentation to share with potential sponsors to generate enough funding to cover their budget of \$5,450.”

Students designed the new car using the CAD program Autodesk Inventor, using parameters given by Formula High School such as a 16hp engine. The car embodies several innovations, including the use of round metal tubing instead of square to be lighter, and a different front-end design intended to be more stable.

Students started on the car in November, and worked on it from 6 to 10 p.m. twice a week, more as the event neared. Team members noted that teachers Greg Gritt, Jake Sherman, Beau Biller and Ken Odekirk were right there alongside them. “It’s cool to see the passion with our teachers, too,” junior Logan Kulow told the Board of Education.

Logan said that the experience helped advance his welding skills. “You can’t just read a book and know how to weld,” he said.

The project develops more than engineering, welding and driving skills. Students created a presentation to share with potential sponsors to generate enough funding to cover their budget of \$5,450. Senior Tyler Luedtke plans to study business in college and said he



appreciated the opportunity to talk with the business sponsors.

Some sponsors gave more than money. Team members visited Kohler Engines for a professional performance test by a PHS grad who now works there – and was as enthusiastic about the project as the students are.

In addition to Formula High School, the PHS Tech Club also has participated in Project GRILL, High Mileage and Beat the

Heat, plus lots of community volunteer projects; each year’s projects reflect the interests of current members. Club members also lead tours for eighth-graders and second-graders in the LTC-Plymouth Science & Technology Center at PHS.

www.plymouth.k12.wi.us

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2018 Technicians of Tomorrow Competition — February 6th



The annual ADAMM Technicians of Tomorrow competition pits the top high school automotive technology students against one another in a written and hands on skills competition. The best of the best high school students compete for prizes including Snap-on tools and technical college scholarships. The top two schools qualify for the national finals held at the New York city auto show each spring. ADAMM high school teams are three time winners of the National Automotive Technology Competition.

This year’s competition is set for February 6th at the Auto Labs on the Oak Creek Campus of Milwaukee Area Technical College.

The 2018 competition qualifying schools are:

- Arrowhead High School (Hartland)
- Grafton High School
- Mukwonago High School
- Racine High School
- West Bend High School

Students will compete in teams of two



using no tools or equipment other than those supplied or requested by the competition organizers.

Competition will begin at 8:00 am and continue until 11:30 am. Guests are welcome and invited to experience the competition with the students in special areas set aside for viewing the competition.

For more information on this competition, or about ADAMM, contact:

Deb Kruse
Education Director
414-359-9000 Ext. 2
deb@adamm.com

www.adamm.com

Eleva-Strum's Transportation Program Evolving Into a Student-Run Business



Eleva-Strum's Tech Ed teacher Craig Cegielski continues his mission to turn his transportation program into one similar to the highly successful Cardinal Manufacturing program currently in place at the high school.

In addition to having an automotive lift installed on the shop floor they have they have improved the transportation program setting for a more professional look by taking down some walls, installing new windows and giving the whole area a new coat of paint. A new furnace, new lighting, new air conditioning, and a stereo system have been added. Parents, Retired Professionals and Students all volunteered to remodel the entire transportation area.

Tech Ed teacher Craig Cegielski said that acquiring a lift had been in the works for several months leading up to the purchase.

When the opportunity arose, Cegielski took advantage of business connections to bring in a quality piece of equipment at a very low price. The lift is a great demonstration piece. Instead of trying to cram fifteen students under a single car to examine an exhaust system, the lift allows Cegielski to teach without such restraints.

A full time maintenance person who has many years of experience in auto repair has been hired and he is there to assist students. They can rely on him to help with evaluating or finding a solution to fix a tricky situation.

Along with the professional setting students have been working on their soft skills. Employability, professionalism, hand shaking, eye contact, attitude, and attire are key. Being a problem solver is very important in the transportation industry and is a big focus in Craig's program. There are 10 commandments about

work ethics that the students are encouraged to follow.

Work is being done with an architect to create a virtual "Dream Shop" that will become a reality. The students are already receiving true business experience. Like Cardinal Manufacturing, they have a student area to run all arenas of the business: marketing, engineering, a project manager, and more!

In the Cardinal Manufacturing program students learn to bid on projects, work within deadlines, work with paying customers, and design parts. They are actually working for a paycheck. The program is also self-sustaining and requires no funds from the school district.

While students in the Transportation Program are doing small repairs for now and are learning many aspects of running a business the goal is to have another successful endeavor operating in the Eleva-Strum Technical Education classrooms.

Another facet of Craig's program is auto ownership, and everything that goes along with it. From purchasing, to maintenance, insuring, licensing, trading in, leasing, and everything else an informed consumer should know. A vehicle is one of the larger investments his students will ever make and he wants to make sure they are informed and make good decisions. Some of the topics covered are:

- How to locate a vehicle

- Private sales and working with a dealership (what to ask, what to look for, trade ins, warranties, and more)
- How to finance a vehicle (the terminology and the responsibilities involved)
- Insurance (the terminology, how to ask the right questions to understand their coverage, what to do if they have a claim)
- Understanding the legal laws and the results of breaking them.
- How to maintain your vehicle and to be ready for all of the seasons

Craig Cegielski grew up in Marshfield WI, and went on to earn a degree in Technology Education from a Wisconsin University. After Graduation, he taught welding and machining at Antigo High School and stated a very successful student-run manufacturing company called Red Robin Machining. Moving closer to family in western WI, Cegielski went back into manufacturing as a welder/machinist. After a year, he was able to re-enter the world of teaching as the technology education teacher at the Eleva-Strum High School, where he teaches various levels of CAD, welding, machine tool, automotive, construction, and woodworking.

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Badger High School Automotive

Continued from Page 16

However, it taught the students what they may encounter in their future careers.

The students involved found the project to be worthwhile. "It is good to give back," said Mark Lisnyy. And classmates echoed the sentiment.

Badger Auto students receive free college credit from Gateway Technical College that is transferable into any Wisconsin Technical College.

Badger High School's Automotive Program is aligned to Gateway Technical College's Associate Degree program. Students receive 2 transcripted credits in Auto Fundamentals, 3 credits in Brakes, 3 credits in Steering and Suspension and 2 credits in Electrical, saving students time and tuition costs.

Students compete in The Technicians of Tomorrow Competition sponsored by the

Automobile Dealers Association of Mega Milwaukee (ADAMM) and SkillsUSA sponsored by the Wisconsin Auto and Truck Dealers Association.

Badger also has a school racecar, a 1992 Ford Mustang that runs at Great Lakes Drag-away for the "Beat the Heat" program.

For further information, contact:

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