



Hayes Robotics LEGO League Builds Robotic Town, Imagines Future of Transportation



Fridley Public Schools

Igniting curiosity, innovation, and teamwork skills, participants in Hayes Elementary's LEGO League developed and programmed fully-functioning cargo transport systems in a robotic town, presenting their creative work at their final showcase on April 14. The challenge at hand was to imagine the future of transportation, focusing on innovative, inclusive and environmentally friendly ways to transport cargo, specifically packages and mail, in the next generation.

LEGO League is an after-school program open to 3rd and 4th graders at Hayes Elementary. Each year, the group tackles a specific challenge from FIRST LEGO League: Explore. This year's CARGO CONNECT challenge allowed students to create a different robot each week, build-

ing upon their coding knowledge to work toward their final product. They began by creating LEGO robots according to instructions, then adapted the build and code to achieve certain goals.

Sarah Armstrong, 2nd grade teacher and advisor of the after-school program, remarked that students were surprised at how much more they could do with LEGOs outside of retail kit instructions.

"Many kids who love LEGOs are used to following step-by-step directions," she said. "When they realize that 90 percent of LEGO League has no direction, they begin to apply soft skills like innovation, creativity, and problem-solving."

Using a required "core element" of the CARGO CONNECT challenge, students chose to develop and motorize the distribution center as their key piece, coding a chute that was motion censored.

"When the packages dropped down the chute, it turned the sorting arm on, which dropped packages into one of two containers," said Armstrong.

Students also developed robots that were based on their own ideas, interpretations, and applications of their new learning. These elements included a package storage

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Minneapolis Youth Mentor Charles Walker Fosters Friendships, Community Pride Through Construction Internships

Amid the questioning of purpose and attempts to find community that are characteristic of adolescence, there comes a point in nearly everyone's adolescence when you need somebody to look you in the eye, and tell you that the work that you do, and the person who you will become—matters.

For many Twin Cities area high school students, Charles Walker is that person.

Walker is a Minnesota educator, Minneapolis Parks and Recreation organizer and youth mentor for the Minnesota Trades Academy, a paid summer construction internship experience for high school youth with the goal of preparing youth for adulthood through skill development, and access to good jobs with good benefits in the construction industry.

"My experience volunteering with the Minnesota Trades Academy has been overwhelmingly positive," said Walker. "A lot of these kids are looking for summer jobs, and some can't get one because of their age or because they don't have access to transportation. The Minnesota Trades Academy is an important program, because it eliminates these obstacles for students, allowing them the equal opportunity to get paid to learn a trade that they may want to go into one day, regardless of their background."

Walker's experience with MTA began seven years ago through a connection with Sam Ebute, Trades Navigator for the Construction Careers Foundation, a Twin Cities-based



nonprofit organization with the mission to, "increase the diversity of entrants into the construction trades and to enhance young people's access to construction-related employment opportunities."

The pair had previously coached track and field together at North High School in Minneapolis and had bonded over their shared passion for, "getting kids set on the right path," according to Walker.

So, when Ebute informed Walker of the Minnesota Trades Academy's need for mentors to oversee their summer programming, Walker knew it would be a perfect fit for his skill set. He began mentoring with the program and hasn't looked back since, returning every summer since he first began his role.

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PUBLISHER/EDITOR: Renee Feight
EDITOR: Andria Reinke
PAGE COMPOSITION: Andrew Clausen
WEBMASTER: Scott Bayerl
SPECIAL ASSISTANT: Allie Zacharias
Please direct articles, advertising, questions or comments to:

Teaching Today MN™
PO Box 1704
Eau Claire, WI 54702
Phone/Fax 715-839-7074
www.teachingtodaymn.com

Please direct all inquiries to:
renee@teachingtodaymn.com

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Thank you, to all our past, present and future contributors!

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Wishing you all a fantastic summer! It's a pleasure to be able to share your stories and successes in Teaching Today MN. We look forward to working with you in future issues to celebrate all of the fabulous things going on in Minnesota's schools!

Would you like to share your school's achievements in the newspaper?

Contact Andria at

andria@teachingtodaymn.com | 715-360-4875

or Renee at

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Congratulations to All of the Educators Awarded and Recognized During the 2021–2022 School Year!

Nancy Antoine, Northfield Public Schools, Named Minnesota's 2021 NAESP National Distinguished Principal

Nancy Antoine, principal of Bridgewater Elementary in the Northfield Public Schools District, and a member of the Minnesota Elementary School Principals' Association (MESPA) is Minnesota's 2021 NAESP National Distinguished Principal.

Among her greatest accomplishments as a principal, Antoine is proud of her role in altering the school culture at Bridgewater Elementary. When asked how she balances leadership and management duties to support student achievement, Antoine compared Bridgewater to a piece of music. Everyone in the symphony has a common purpose and goal. An effectively led and directed group has the potential to create beautiful music, which



are the learning opportunities for the students to be successful.

"I am very honored to have been nominated for the National Distinguished Principal Award, and to have been selected as a finalist!" Said Antoine, "Becoming the NDP is just incredible, and I would not be where I am today without the support and input of the amazing leaders that I have had the opportunity to work with over my career.

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Rochester Educator is 2021 Minnesota Teacher of the Year



Natalia Benjamin, a high school English learner and ethnic studies teacher at Century High School in the Rochester school district, is the 2021 Minnesota Teacher of the Year.

"Natalia sets her students up for success by fostering a safe, positive and wel-

coming learning environment for every child," wrote Molly Murphy, assistant principal at Century High School, in a letter supporting Benjamin's nomination. "She has an ability to vary instruction and adjust lessons to meet student needs."

"Learning languages has been a part of me for all of my life," said Benjamin, who was born and raised in Guatemala, in an essay submitted to the Minnesota Teacher of the Year selection panel. "My personal experiences with languages created a passion and appreciation for multiple languages and cultures. Many of my students are navigating new cultures and places. I hope that I can be a small part of their journey in succeeding as they follow their dreams."

Fall 2021, Volume 1, Page 25

Minnesota Principals of the Year (MASSP)

2021 High School Principal of the Year, Scott Gengler

Wayzata High School, Wayzata Public Schools



Scott considers school culture to be his greatest responsibility and that culture is shaped by the school's purpose. Wayzata High School's focus is that every student graduate is prepared for post-secondary success, regardless of race, class, gender or ability. This purpose has become known as the "Wayzata Promise" over Scott's tenure. The promise is a commitment shared by all staff to ensure that each student is afforded an opportunity to learn and grow in a safe, secure, nurturing and supportive environment. "We are here for you" is part of the school's motto.

2021 Middle Level Principal of the Year Shawn Andress

Park Rapids Century Middle School, Park Rapids Area Schools



Shawn shares that culture and climate have been a main focus point at Century for several years. The creation of The Panther Pride Matrix around Respect, Responsibility and Relationships (3Rs) has guided staff development in preparing our learners

New! Onamia Educator is 2022 Minnesota Teacher of the Year

Sarah Lancaster, a first-grade teacher at Onamia Elementary School in the Onamia district, is the 2022 Minnesota Teacher of the Year.

Lancaster is the 58th recipient of the prestigious award, the first from the



Onamia district and the first teacher of Asian Pacific Islander descent to be named Minnesota Teacher of the Year.

"No matter the age of the students she is

working with, Sarah displays an unrivaled amount of passion for student education and improvement," said Cynthia Martin, a fellow first-grade teacher at Onamia Elementary, in a letter of recommendation for Lancaster. "Sarah is forever willing and open to acquiring new knowledge to help students in need of intervention or enrichment. Her breadth of knowledge in teaching methods is vast, and she is able to connect with students in so many effective ways."

More to follow in the next issue!

for tomorrows' challenges. "Shawn is a very visible presence in our school", shares a staff member." Students receive fist bumps and high fives everyday along with knowing nods and verbal encouragement like, have a great day."

2020–2021 Assistant Principal of the Year Angela Charboneau-Folch

Big Lake High School, Big Lake Schools

Angela shares that positive student relationships have been a key focus in her work. An



example of which is the Reason I Come to Work video that was created by staff to build community and positively impact learners and the Being Your Own Champion initiative to open communication lines with families.

Students share that they feel safe and secure at Big Lake because of programs and leadership created by building leaders. "I feel strongly that I can speak for the entirety of the Student Board that every staff member knows us deeply whether in class or not," added a student leader.

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Educators Awarded and Recognized During the 2021–2022 School Year

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Minnesota Rural Educator Awards 2021 (Minnesota Rural Education Association)

Dr. Jackie Stevens, Mora High School



In addition to her role as an English teacher, Dr. Stevens leads the professional development efforts at Mora High School, always bringing her enthusiasm and energy for education to the district in different ways. Not only does Dr. Jackie Stevens bring enthusiasm and energy to her classroom, she brings a love of forever-learning to her district in ways that are both unique and impactful. With a focus on staff development, students at Mora High School see that learning doesn't end at graduation, it's a life-long process and their educators are still investing in learning to be better every day.

Howard Van Otterloo, Janesville-Waldorf-Pemberton High School



Howard Van Otterloo makes learning about social studies fun in Janesville-Waldorf-Pemberton High School. But more than learning, his students notice that he cares for them — genuinely cares. Second only to his personal approach for teaching, Van Otterloo is known in his district (and across the state) for his history trips throughout the United States. As a matter of fact, parents join the waiting list years ahead of time to chaperone the trips. “They come away with a much more wellrounded idea of America, and that's really all you can do as a teacher is try to get people to see things in other people's eyes,” Mr. Van Otterloo says.

Kristen Schwarz, Fisher High School

Kristen Schwarz was born and raised in Fisher, graduating from Fisher High School where she now teaches. But Kristen took a different path to her teaching career than most. Schwarz started as a part-time volunteer for the ag program in Fisher. Now, Kristen



leads the ag program, and provides skills and experiences for Fisher students that set the foundation for a lifelong career in the community, if that's what they choose. “Her students are learning so much more than just the letters and the numbers,” said Superintendent Evan Hanson. “They're learning about life.”

John VanKempen, West Central Area Secondary School

West Central Area's cross country coach and science teacher John VanKempen doesn't know all the answers, but he encourages his students to learn by trial, experiments, and research. His students say they never know what they're in for when they walk into “VK's room.”



One of VanKempen's most well-known classes is “Outdoor Adventures,” which leads students through the preparation process to take a group trip to the Boundary Waters. “He knows how to push students to help them want to go deeper and arrive at answers to questions. Kids know when they take his class that it's going to be a little bit of everything. He doesn't like to sit behind a desk all day either,” said Susan Knutson, West Central Area Secondary School Principal.

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Dr. Heidi Miller, Anoka-Hennepin Schools, Selected NAESP Outstanding Assistant Principal™ from Minnesota

Dr. Heidi Miller, assistant principal of Rum River Elementary School in the Anoka-Hennepin Schools District is Minnesota's 2022 NAESP National Outstanding Assistant Principal.



Dr. Miller considers collaboration to be one of her best practices as an educator. She explained that staff groups meet weekly to analyze student data and have open conversations about what is working, what needs to change, and create an action plan.

“Dr. Miller has a clear vision of excellence in teaching and learning and is able to convey this vision to staff members,

students, and parents in a positive and collaborative manner,” said Jeffrey Clusiau, principal at Rum River Elementary school. He praised her balanced leadership and holistic approach to the Assistant Principalship saying, “She provides consistent and fair leadership to staff members while supporting the mission of the school and school district by taking on a wide range of duties and responsibilities within the school.”

Winter 2022, Volume 1, Page 19

Minneapolis Associate Educator named 2021–22 Education Support Professional of the Year

Tequila Laramée, an associate educator at Bethune Community School in Minneapolis, is the 2021–22 Education Minnesota Education Support Professional (ESP) of the Year.



“I want to show and educate students in poverty that they have choices,” Laramée said in her application materials for the award. “I want to introduce them to careers they maybe haven't thought of and I want them to know they do not have to become stereotypes or a product of their environment.”

“From arrival to dismissal, she is engaged with students, supporting them, encouraging them and redirecting them as needed,” said Kari Ehlers, the kindergarten teacher at Bethune who works with Laramée, in her award recommendation letter. “She is able to connect with our students in such a caring and loving way that all the children feel safe and secure in her presence.”

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CPHS Principal Mike George Recognized for Outstanding Leadership in an IB School

Champlin Park High School — International Baccalaureate (IB) Programme (CPHS) principal Mike George was recognized by the Minnesota Association of IB World Schools (MNIB) for his outstanding leadership in a Minnesota IB school.



Ashley Brown (diploma

programme coordinator) and Chris Baker-Raivo (career-related programme coordinator) lead the IB program at CPHS and nominated George for this award because of his support for their work in providing students these opportunities. “As we created pathways for students interested in education, the medical field, culinary careers, design, and manufacturing, Mike was tireless in supporting our endeavors. At every turn, Mike proves himself to be a creative problem solver and a dynamic leader. However, his most impactful trait is his focus on people. Mike leads from the heart and is focused on making both students and staff feel taken care of. I feel very lucky to work with Mike and happy that he is being recognized for his contributions to the IB career-related program,” Baker-Raivo said.

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2022 Minnesota Principals of the Year

2022 High School Principal of the Year Nathaniel “Natty” Messick

Fertile-Beltrami High School, Fertile-Beltrami School District #599

Natty has instilled the value of the “Falcon Way” — focusing on a culture of



responsibility, respectfulness and determination. As one student states, “Our school has an amazing sense of unity that doesn't happen in other places. There is so much support for each and every student. Our

teachers and administration always greet everyone with a smile and make sure that each student knows that they are cared for.” Furthermore, according to an administrator in the district, Natty creates a strong culture, “Mr. Messick is very approachable, people person, student-oriented principal who works to establish one-on-one relationships with all participants in our school system. Students, staff and community members feel connected and supported by our principal — which, in turn, creates trust and a sense of belonging.”

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Abdul Wright '16 MA-Education, 2016 Minnesota Teacher of the Year

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Minnesota's Six Blue Ribbon Schools 2021



The National Blue Ribbon Schools Program recognizes public and private elementary, middle, and high schools based on their overall academic excellence or their progress in closing achievement gaps among student subgroups. The coveted National Blue Ribbon School award affirms the hard work of students, educators, families, and communities in creating safe and welcoming schools where students master challenging and engaging content. The National Blue Ribbon School flag gracing an entry or flying overhead is a widely

recognized symbol of exemplary teaching and learning.

Atkinson Elementary School Barnesville, MN



Barnesville Public Schools

Along with the strides made in the area of technology, the most important factor in our overall success as a school has always been our incredible staff. As new and unforeseen challenges arise, solutions are discovered. Through teamwork and perseverance, we have had a very successful year despite all of the obstacles in our way. Our staff has done an outstanding job accommodating our students

for two simple reasons — they are dedicated professionals and they care about their students.

McKinley Elementary School Ham Lake, MN



Anoka-Hennepin School District

Our underlying belief is that all students have the potential to succeed and that supporting the whole child in their social, emotional and academic growth is at the core of what we do. The relationships cultivated between students, families and the community were made stronger during the pandemic. In order for students to be successful during distance learning, they needed to be able to stay connected with their teachers and classmates from home. Our community came together to make sure all students had access to technology and reliable internet access.

Minnetonka West Middle School Excelsior, MN



Minnetonka School District

The Minnetonka Middle School West community believes high expectations combined with high levels of support ensure outstanding personal growth and unparalleled academic achievement. The school is committed to nurturing the strengths and potential of every student so that middle schoolers develop into confident, courageous and kind citizens of their local and global communities. MMW is a warm, inclusive and connected place rooted in strong relationships that honor the voices and experiences of students, staff and families.

Roosevelt Middle School Blaine, MN

Anoka-Hennepin School District

During the 2021–22 school year Roosevelt has added the district middle level online program called the Virtual Academy. As with other challenges such as the boundary changes or the shut down to distance learning during the pandemic, Roosevelt continued to provide



a strong education to its students. It will continue to do so for families that continue to choose to learn in a virtual format in the future.

St. Croix Preparatory Academy Middle School Stillwater, MN



We combine classical education with a culture of character. This small community allows us to create a supportive learning environment where students can build relationships with their teachers throughout their K–12 education. Our school community partners with families who are truly invested in their children's education. Teachers are furiously passionate about meeting students where they are, while still upholding high expectations and rigor.

Twin Lakes Elementary School Elk River, MN



Elk River School District

Through innovation and creative programs and curriculum, Twin Lakes has built a sense of "Otter Pride". This sense of connection has led to the success of the "whole child", looking beyond the classroom and into the family unit. That creativity starts each day with WTLN - the Twin Lakes "news" network - which teaches the four core values mentioned above and brings it into the home. Through rewards, highlight videos and more, the values are used to lift up students who are living the Otter Pride example each day.

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Educators Awarded and Recognized During the 2021–2022 School Year

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2022 Middle Level Principal of the Year Michael O'Neil

Pequot Lakes Middle School, Pequot Lakes Public Schools



Mike understands the importance of individualized and high-quality education offerings for his students. He states, "As a campus community, we have worked to stay the course in providing each child with their version of "what they need" to be successful. This includes a strategic PLC devoted to Social Emotional Learning and the support of some of our most challenging students on campus." As stated from a teacher under Mike's leadership, "Mike has been courageously steadfast in his messaging and in his decisions related to equity. His advocacy for equity is rooted in his desire to hear from people whose perspectives have been shaped by experiences different than his own. He is a humble learner in this regard, modeling curiosity and respect in his personal and professional equity work."

2021–2022 Assistant Principal of the Year Nick Bakke

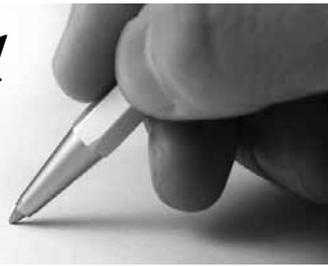
Mora High School, Mora Public Schools



Nick comes with high praise from staff and community members. A special education teacher shares that Nick comes with many strengths, including listening to the concerns of others as well as being able to soothe stressful situations. Both powerful tools when working with students and parents. Furthermore, Nick's principal notes his dedication to continually improve the culture of Mora High School. Although he faces many challenges and difficult conversations with students, he never shies away. His ultimate goal when working with students is not to discipline, but to change behavior. One community member expressed that Nick treats all students, regardless of age, gender, race or GPA with respect. He is always thinking of ways to include kids in different levels of activities and training to ensure he finds ways for them to fit in. Congratulations Nick! Thank you for your strong leadership and dedication to your students, staff and community.

Spring 2022, Volume 1, Page 26

Apply for a Grant



Secondary Level Manufacturing Education Grants

The Gene Haas Foundation awards Secondary Level Manufacturing Education scholarship and sponsorship program grants. Funding is provided to CNC training/engineering programs and competitions that highlight manufacturing at the following:

- Public and private high schools and occupational and tech centers available to high school students, and for articulated classes at other facilities.
- FIRST robotics teams at schools, or organizations with 501(c)(3) status if community based.

Deadline: Applications due Dec. 1, annually.

Website: ghaasfoundation.org/content/ghf/en/education-grants.html

Toshiba America Foundation Grants for Elementary Level Teachers (K–5)

The foundation offers grants to elementary-level teachers for projects that focus on innovative ideas for improving science, technology, engineering, and mathematics (STEM) learning in the classroom. Projects should have measurable outcomes and make learning fun for students.

Grants up to \$1,000 are awarded.

Deadline: Applications due Oct. 1, annually.

Website: www.toshiba.com/taf/k5.jsp

Corporate Giving Grants

General Motors' Corporate Giving Grants support projects in the areas of science, technology, engineering, and mathematics (STEM) education, as well as community development. Grants should demonstrate innovative approaches to address a defined social issue.

Deadline: Letters of Inquiry are accepted

January 1 through September 30, annually.

Website: www.gm.com/commitments/communities#apply-for-funding

Aviation and Flight Educators, Inc. Grants

The Society of Aviation and Flight Educators, Inc. (SAFE) is offering four grant awards designed to encourage kindergarten through grade 12 classroom teachers to incorporate aviation-themed lessons into their normal curriculum. Grants may be used to design an aviation-themed classroom unit or complete an aviation-themed project.

Grants of \$500 each are awarded.

Deadline: Applications are due August 31, annually.

Website: www.safepilots.org/programs/k-12-classroom-teacher-grant/

Air Force Junior ROTC Grants

The Air Force Association Junior ROTC (AFJROTC) grant program was established to promote aerospace education throughout classrooms and units. Applications are judged by the importance and the impact the selected aerospace activity will have on students. Funds may be used for any aerospace education related activity from purchasing textbooks or videotapes, to going on a field trip to an aerospace museum, Air Force base, or other aerospace facility.

Grants up to \$250 are awarded.

Deadline: Applications are due February 10 and October 10, annually.

Website: www.afa.org/education/air-force-junior-rotc-grants

Education and Technology Program School Station Grants

The Education and Technology Program (ETP) of The National Association for Amateur Radio (ARRL) provides funding and resources to elementary, middle, and high schools in the United States. ETP School Station Grants are awarded for the purpose of purchasing equipment to set up a school amateur (ham) radio station.

Equipment valued at up to \$1,500 is awarded.

Deadline: Applications are accepted October 1 through November 1, annually.

Website: www.arrl.org/etp-grants

Association of American Educators Foundation Classroom Grants

Classroom grants can be used for a variety of projects and materials including, but not limited to, books, software, calculators, math manipulatives, art supplies, audio-visual equipment, and lab materials. Funds must be used within one year of the application deadline.

Grants are available for up to \$500.

Deadline: Application Deadlines are Autumn, October 8th and Spring, March 1st

Website: www.aetteachers.org/index.php/classroom-grant-application

Innovative Reading Grant

The AASL Innovative Reading Grant supports the planning and implementation of

a unique and innovative program for K-9th learners which motivates and encourages reading, especially with struggling readers.

Grants of \$2,500 are awarded.

Deadline: Applications open Sept. 1, 2022

Website: www.ala.org/aasl/awards/innovative

SCA Grants

Sony Corporation of American and its operating companies offer funding to programs that support education and creative, artistic, technical, and scientific skills that are necessary for tomorrow's workforce.

Deadline: Requests are accepted year-round.

Website: www.sony.com/en_us/SCA/social-responsibility/giving-guidelines.html

Saxena Family Foundation Grants

The Saxena Family Foundation has a particular focus on initiatives that promote US science, technology, engineering, and mathematics (STEM) education and the empowerment of girls, female children, and young women so that they have equal rights later in life. The foundation focuses on empowerment programs to include economic, educational, and political empowerment of women through literacy programs, jobs, and life-skills training.

Average awards range from \$5,000 to \$50,000.

Deadline: Applications are accepted year-round.

Website: saxenafoundation.com/guidelines/

Education Grants, Verizon Foundation

The Verizon Foundation grants education initiatives that support projects promoting digital skills development for kindergarten through grade 12 students and teachers. Examples include summer or afterschool programs in science, technology, engineering, and mathematics (STEM); teacher professional development; and research on technology-infused pedagogy.

Deadline: Applications are accepted year-round.

Website: www.verizon.com/about/responsibility/grant-requirements

H2O for Life Project Minigrants

The mission of H2O for Life is to improve local and global communities by engaging students as change-makers for a better world. Minigrants are intended to kick-start service-learning projects focused on the global water crisis and to benefit partner schools. Grants may be used for service-learning project expenses.

Awards range from \$250 to \$500.

Deadline: Applications are accepted on a rolling basis.

Website: www.h2oforlifeschools.org/page/kickstart-your-project-with-a-grant

The Harry Chapin Foundation Education Grant

The Harry Chapin Foundation makes grants in the areas of education, arts, agriculture, and the environment. Priority is given to arts-in-education programs, agricultural and environmental programs, and community education programs.

Grants up to \$10,000 are awarded.

Deadline: Applications are accepted year-round.

Website: harrychapinfoundation.org/apply/

Energize the Environment Grants

Quadratex is sponsoring Energize the Environment Grants to promote environmental responsibility to energize those in the community who have a vision, a sense of responsibility, for making the environmental world a better place. To compete for a grant, the required submission is an essay of 1,000 to 1,600 words that describes the applicant, the environmental commitment, anticipated accomplishment, and how a grant would be applied.

Two grants of \$3,500 each are awarded.

Deadline: Application essays are due June 30 and October 30, annually.

Website: www.quadratex.com/page/quadratex-cares-grant-program

School Garden Grants

Safer Brand offers School Garden Grants to schools that want to create and start a school garden. Interested schools should explain their reasoning for a school garden and how they would use the grant.

Grants of \$500 are awarded.

Deadline: Applications are accepted September 1 through December 1, annually.

Website: www.saferbrand.com/articles/how-to-start-a-school-garden

Therapeutic Garden Grants

The National Garden Bureau and partners award three Therapeutic Garden Grants in a competition that promotes the health and healing powers of human interaction with plants. Gardens may be used for occupational, physical, vocational, or rehabilitation therapy in a garden setting or to promote positive social relationships within a community. Gardens may also be used for environmental education, job training, skill building, food growing, improved quality of life, stress reduction, and other positive impacts. Gardens should also feature a significant number of students, clients, visitors, patients, or others involved in substantial people-plant interaction on a regular basis.

Grants of \$3,000 (first place), \$1,000 (second place), and \$1,000 (third place) are awarded, plus each winner receives a set of garden tools.

Deadline: Applications are due July 1, 2022.

Website: ngb.org/therapeutic-grant-program/garden-grant-application



New Trades-Focused Facilities Expand Opportunities at Minnetonka High School



Mary Cornelius
Communications Specialist
Minnetonka Public Schools

In January 2022, Minnetonka High School completed a new addition to its high school campus to provide space for its expanding technical education program, MOMENTUM Design and Skilled Trades. The MOMENTUM program offers students the chance to do hands-on work in the concentration areas of engineering, design, construction, manufacturing and transportation.

The school added a four-car automotive garage to host classes within the transportation track of MOMENTUM, which includes courses such as Automotive Career Investigations, Automotive Braking Systems and Automotive Engine Performance. The expansion also provides flexible ‘makerspace’ classrooms, which are used in MOMENTUM’s other career pathways.

Having dedicated and specialized classroom space for the program has raised student excitement and engagement, according to Minnetonka automotive instructor Lee Berger. “Seeing the impact the new facility has had on students has been my favorite part of the semester,” Berger said. “It’s been a different atmosphere from past classes. I think the new space has really exceeded students’ expectations, and they are surprised by and appreciative of all that it has to offer.”

Minnetonka senior Mason Jakubik is currently a student in Automotive Career Investigations. “I like working on my own car, and I thought taking this course would be a great way to heighten my own skills,” Jakubik shared. “Last week, we learned how to put tires on rims and take them off. That was really cool—and something I couldn’t do outside of this type of class.”

Jakubik encourages other Minnetonka students to consider MOMENTUM regardless of their current level of automotive knowledge. “There is always something here to learn!” he said.

Business partnerships with industry professionals have brought authenticity and real-world connections to MOMENTUM classrooms. “We work with external organizations to make our curriculum as real and relevant as possible,” said Berger. “For example, early in the semester, multiple representatives from a local automotive service center shared insights about career pathways and the day-to-day work of automotive technicians.”

In part due to this presentation, several MOMENTUM students are now employed with the service center and are continuing to explore the opportunities the automotive industry holds for them beyond the classroom.

Visits from local technical colleges have also engaged students in planning for their future. Before the year ends, students will take a trip to a Mercedes-Benz dealership, to experience more aspects of the industry.

Berger is excited to spend the summer learning from the successes of this semester and refining processes and enhancing lessons for his fall classes, as the program continues to grow.

Growth Continues with New VANTAGE/MOMENTUM Building

The Minnetonka Public Schools community celebrated the historic groundbreaking of another new facility—the new VANTAGE/MOMENTUM Building—on May 5, 2022. When completed, this will be the first new school building Minnetonka Public Schools has constructed in more than 55 years. The building will open for classes in Fall 2023.

The groundbreaking featured addresses from District and community leaders, a display of renderings of the new building and the ceremonial ‘dirt toss’ with members of the Minnetonka School Board, Superintendent Dr. Dennis Peterson and Minnetonka Mayor Brad Wiersum.

This new 36,300-square-foot VANTAGE/MOMENTUM Building will house the

school district’s signature and recently expanded VANTAGE and MOMENTUM programs, focused on professional studies and on design and skilled trades, respectively.

“This is a monumental day for Minnetonka Schools,” said Chris Vitale, Minnetonka School Board Chair. “As we break ground, we are ushering in the next chapter for the VANTAGE and MOMENTUM pro-

grams and opening up new opportunities for students. With VANTAGE alone, in less than a decade, the program has grown so large it’s bursting at the seams—with more than 500 students planning to take a VANTAGE course next fall. This new building is the result of that growth and interest.”

VANTAGE is Minnetonka Schools’ advanced professional studies program with nine strands of study—including Business Analytics, Health Sciences, Design + Mar-

keting, Global Business, Digital Journalism, Global Sustainability, Public Policy, User Experience (UX) Design, and Education.

MOMENTUM is also growing rapidly, and the new building will serve as one of the primary locations where Minnetonka students in the MOMENTUM program will hone their skills and expand their education in the design and skilled trades fields.

“Minnetonka High School is a school of opportunities where we work to help each student find their passion and place,” said MHS Principal Jeff Erickson. “MOMENTUM and VANTAGE, in particular, provide pathways for our students to broaden their horizons and apply their learning to real-life scenarios in fields that are in dire need of the next generation of workers, such as the trades.”

- Learn more about VANTAGE: www.minnetonkaschools.org/academics/mhs/vantage
- Learn more about MOMENTUM: www.minnetonkaschools.org/MOMENTUM

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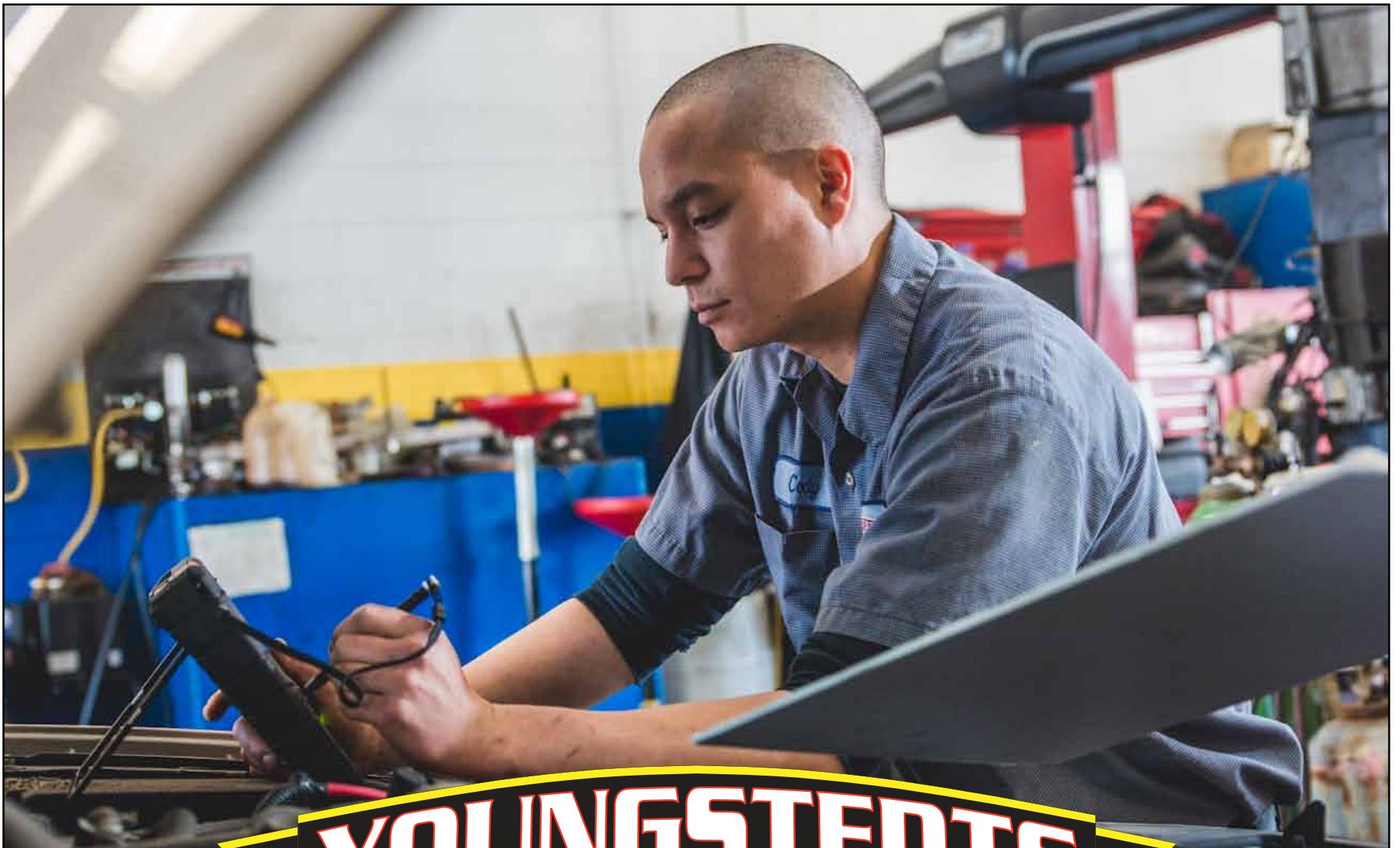


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Bemidji Career Academies



*Brian Stefanich, Solway Elementary Principal
Bemidji Career Academies Director
Bemidji Area Schools*

Developing our Future Talent Through Community Partnerships

The Bemidji Career Academies were created in 2016 with the mission to build learning opportunities for our local businesses and industry partners. This prepares our partners to collaborate and prepare the next generation of employees and community leaders. In doing this, our vision was to create a pathway for every student at Bemidji High School to succeed and thrive in the greater Bemidji community. The program started with 6 academies and has grown to 15 academies and 22 career pathways for our students in grades 9–12 to choose from. For students earning a medallion to wear at graduation, they must complete a set of required existing high school courses pertaining to each academy and a quality real world experience. These experiences are through Exploring Posts and Youth Skills Training (YST) paid internships. Exploring Posts meet monthly onsite at our business partners and our students gain valuable experiences through community mentorship. These exploration activities may lead to paid internships through the YST/DOL grant program.

The Aerospace Technology Career Academy

The Aerospace Technology Career Academy is a skills-based program designed to prepare graduating students with basic knowledge, skills, and hands-on experience to help prepare them to work in the fast paced and rapidly changing world of aerospace sciences. Credit earned in this program will help the graduate enroll in a two- or four-year program at an institution of higher learning offering aerospace technology. There are 39 students in grades 9–12 currently registered for the Aerospace Engineering Academy.



Required High School Courses

- Aerospace Engineering
- Robotics
- Principles of Engineering
- Work Seminar
- Real World Experience (Exploring, paid internship and/or field trips).



Our students in the Aerospace Academy meet on site at Bemidji Aviation once a month to explore and learn about the careers available in aviation from the professional staff at Bemidji Aviation. During the April session, our students in the Bemidji Aviation Exploring posts got to go on a 30 minute airplane ride around our community as a capstone activity. The aerospace academy students also toured Air Corp Aviation in Bemidji this past week.

The Automotive Technology Career Academy

The Automotive Technology Career Academy is a skills/aptitude based program designed to prepare graduating students with knowledge, skills, and hands-on experience to help prepare them to work in the fast-paced and rapidly changing field of automotive technology. Credits earned in this program will help the graduate enroll in a two-year Associate of Arts program or in an industry recognized course of study such as NATEF, AYES, or ASE certification to prepare them for a career in automotive technology or diesel mechanics. There are 58 students in grades 9–12 registered for the Automotive Technol-

ogy Academy.

Required High School Courses:

- Automotive Technology I
- Brake Systems
- Steering and Suspension
- Automotive Electrical
- Engine Performance
- Work Seminar
- Real World Experience

Our students are fortunate to be able to choose from three different Bemidji Automotive Service stations for flexible hours paid internships through the Youth Skills Training (YST) grant to learn from their automotive technicians through mentorship. In March, over 50 Bemidji High School Automotive Academy students toured of the three automotive services centers along with a tour of the automotive department at a nearby technical college. We currently have 4 students in automotive technology paid internships through YST.

www.bemidji.k12.mn.us





The Win-Win of Partnership in North Branch, Minnesota



*Patrick Tepoorten
Community Relations Coordinator
North Branch Area Public Schools*

Last May, North Branch Area Public Schools (NBAPS) was featured in Teaching Today MN for its embrace of Career and Technical Education, automotive and manufacturing career pathways, and future plans to “track industry trends to design programs that align to careers that provide liveable wages.”

For the 2021–22 school year, students in the automotive career pathway performed their

classroom hours at North Branch Area High School (NBAHS), and their “hands-on” laboratory work at a local technical and community college located in Pine City. In addition, nine students received job shadowing and hands-on experience at both the Ford and Chevrolet dealerships in North Branch. One of the challenges of this year’s arrangement has proven to be the time it takes for students to commute back and forth from North Branch to Pine City, which did effect enrollment in the program.

For the 2022–23 school year, NBAPS

plans to continue providing classroom hours at NBAHS. However, an emerging partnership is being formed by the school district and transportation provider 4.0 School Services to provide the lab hours at the 4.0 bus garage, directly across the street from NBAHS. Staff at the district and at 4.0 are working together to provide a dedicated mechanic bay, as well as two mechanics to provide oversight and instruction to students under a Tier I license.

Those efforts, along with several additional Career and Technical education initiatives were celebrated and accelerated at a luncheon on May 18. North Branch Area High School hosted an informational luncheon attended by roughly 40 area industry leaders in a wide variety of fields, including welding, manufacturing, information technology, health care, automotive, marketing and business, as well as representatives from local government, the state, and institutions of higher learning.

All came together to hear how students have been affected by the school district’s emphasis on Career and Technical Education and how they may play a role in expanding the scope of the program to even more learners.

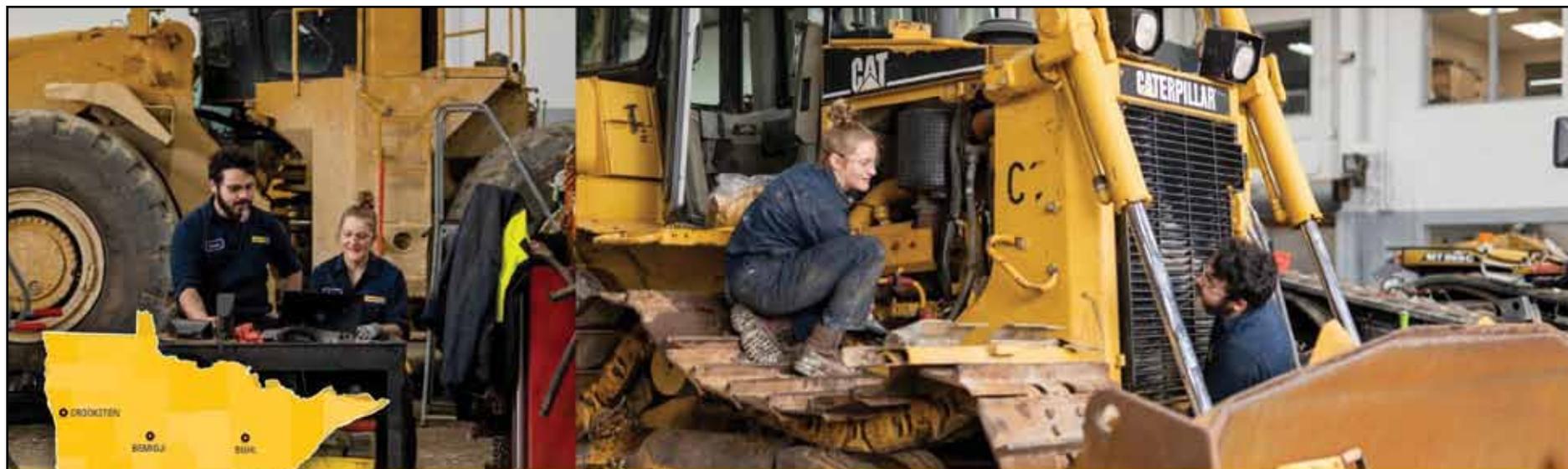
Students spoke to those in attendance about their experiences with job site tours, college visits, hands-on exploration, job shadows, and internships. Through efforts to expand CTE experiences, more students than ever are getting first-hand experience with

potential careers before they leave high school. Dozens of students attended college visits, nine students participated in job shadowing at the local Ford and Chevy service areas, and two received paid internships with local companies.

Other relevant progress this school year includes:

- 233 students participated in presenters/field trips
- 164 students participated in manufacturing/automotive classes
- 11 industries came to NBAHS to present to students
- 14 field trips students participated in related to manufacturing careers
- 39 female students participated in different manufacturing classes throughout the year
- 31 students took the MSSC CPT Safety Assessment
- 55 students took the OSHA 10 certification assessment
- \$90,000 YST grant was used to expand manufacturing and automotive programs over last two years
- \$2,500 Gene Haas grant to be used for students going to school in manufacturing/engineering fields next year

Continued on Page 16



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EOE DISABILITY/VETS



Automotive Technology at SouthWest Metro

Jennifer Bock

Director of Communications

SouthWest Metro Intermediate District 288

SouthWest Metro's Automotive Technology courses give students hands-on experience in engine performance and repair, transmissions, drive train, suspension and steering, electrical systems, and heating and air conditioning. Riley, a Shakopee High School graduate, likes that "it's more advanced than most high school programs. It helps you get a step forward in mechanics and there's always something new to learn and always something to do."

The automotive facilities consist of a lab along with classroom and storage space including a separate tool room and storage room where equipment is secured. The lab has four garage doors that can accommodate approximately six full-sized vehicles. There are three car hoists, one of which is an alignment rack.

SouthWest Metro follows Automotive Service Excellence (ASE), the industry standard, and updates the program every five years to maintain that certification. In addition, all CTE programs, syllabi, and curriculum need to get approval from the Minnesota Department of Education when a new course is added, a new teacher is hired, or every 5 years.

Beyond the standard coursework, the program prepares students for ASE Entry Level Certifications and they receive up to 11 articulated credits to various Minnesota college automotive programs. Communication is key within these partnerships to ensure that the high school content is aligned with current and relevant content needed by the industry. The program has an industry advisory board for this purpose and they are required to meet two times per year.

Soft skills, employability skills, and leadership skills are embedded into both programs. Our industry partners say that these are often time more important than the technical skills. Both programs are members of SkillsUSA, which is a career and technical student organization where these skills are reinforced and taught throughout the year.

SouthWest Metro Intermediate District is always looking to expand CTE offerings depending on the fluctuation of interest in different career fields and pilot fledgling programs with the changing professional landscape. Just in the 2021-2022 school year were Drone Operation, Small Engine Repair, and Video Production launched as potential choices at Dean Lakes Education Center, SouthWest Metro's newest campus in Shakopee. Additionally, next year the district is promoting Residential Electrician courses in



the high-wage construction industry. Even if a student ultimately declines to pursue the career path that their chosen course is directed toward, the experience gained is invaluable. To be able to produce tangible results on a project and spend time away from a desk and screen is a disruption in routine that never fails to ignite a spark in the youth that attend CTE classes.

For more information, visit swmetro.k12.mn.us or contact Mike Opp, Career and Technical Education Coordinator (mopp@swmetro.k12.mn.us) (952) 567-8017

swmetro.k12.mn.us



Hayes Robotics LEGO League

Continued from Page 1



facility, loading truck with a hinging bed, and a duck boat that could travel by land, air and sea.

Students presented their robotic town at Hayes Elementary School to a panel of staff judges. Students were awarded the "Genius Award" for their hard work and collaboration in developing and coding innovative solutions for future mail transportation.

Students participating in LEGO

League: Explore in elementary school can continue with the program at Fridley Middle School. Fridley High School also offers a robust Robotics team program that annually competes in statewide competitions.

www.fridleyschools.org



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Heavy Duty Truck Technology at ISD 917

Tom Ledoux
Intermediate District 917

The Heavy Duty Truck Technology program, taught by Tom Ledoux at Intermediate District 917, has much to offer throughout the year. Students learn entry level employment skills, get a good overview of the physical demands for this job, learn the importance of troubleshooting a failure to perform the correct repair, demonstrate proper repair documentation and use their analytical thinking skills as needed. These are all things that they will need to be successful in diesel engine and heavy duty truck technology careers.

Specific tasks that students perform are diesel engine and heavy duty truck component identification and terminology, systems overhaul of various parts of a semi-truck diesel engine and drivetrain components, vehicle safety inspections, heavy truck engine troubleshooting diagnostics and preventative maintenance procedures. The different welding procedures that are practiced cover Oxygen - Acetylene welding and torching, Wire Feed (Mig) on steel and aluminum including 120 volt and 480 volt welders, Arc welding and plasma cutting. Basic forklift inspections and operation as well as after passing on the simulator students with a driver's permit or license may have an opportunity to drive a diesel-powered semi and drive with a trailer if they do well with the truck. Curriculum covering

smaller heavy equipment repair and operation and other small gas and diesel engine powered equipment is also offered.

Career opportunities in The HeavyDuty Truck/Diesel Fields right now are surging. The stigma attached to people in these careers as grease monkeys are long gone. With technologies like automatic manual transmissions, autonomous vehicles, collision avoidance, electrical multiplexing and intelligent vehicle systems today's mechanic is called a technician who has to be well versed in the mechanical, electrical and numerous computerized systems to keep those trucks running safely down the road.

Total Auto at ISD 917

More into cars? Our Total Auto Care program, taught by Tony Vilelli and supported by Danny Hoffman combines both automotive repair, auto body and welding that is related to these areas. Students perform all types of services and repair in the automotive industry, focusing on safety, maintenance, tires, brakes, steering systems, suspension systems and alignments with modern equipment. Testing of computer control emission systems along with heating and a/c systems with state-of-the-art equipment is presented. Students repair automotive bodies, fenders and frames. Metal straightening, shaping, rust repair and spot painting. Skills in welding with oxy/acetylene gas, mig welding and plastic



welding, along with cutting with oxy /acetylene gas and plasma cutting will be performed. Applying and finishing plastic fillers and fiberglass repairs. Primers, paints and vehicle detailing will also be performed.

"We feed the 3 big programs at the technical college: Auto Body, Auto Repair, and Welding each year. We try to run as close to a real-world auto shop as possible," said Tony. "Working with kids and seeing them in college or on the job within the transportation industry is my biggest thrill."

Intermediate District 917 also offers Computer Networking, Computer Repair, Computer Gaming, Fundamental Chef, Constructions Trades, Medical Careers, Mechatronics, Career Exploration and Graphics Programs.

For more information contact Tom Ledoux — Thomas.ledoux@isd917.org (651) 423-8334

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New Automotive Electronic Diagnostic Specialist Diploma Program at Anoka Technical College



Anoka Technical College is adding a new advanced Automotive Electronic Diagnostic Specialist diploma program to its offerings in the fall 2022 semester.

The 32-credit program aims to give new, successful automotive program graduates and technicians new to the field a leg up in the industry through intensive diagnostic training.

“Diagnostics are not always part of your job day-to-day as a new technician,” explains Dave McFarland, Automotive program faculty

member at Anoka Tech. “It can be intimidating and it’s a perishable skill. This program will take what could take 8-10 years in on-the-job training and brings it to a hands-on, condensed lab experience.”

The program has been in development at the college for three years, in response to a growing need in the workforce and trends in automotive manufacturing shifting to electric and hybrid vehicles.

As part of their second year at Anoka Tech, students in the Automotive Technician degree and diploma programs are exposed to working hands-on with electric and hybrid vehicles.

Alex Vang, a second-year student at Anoka Tech recently learned about the new program offering and is eager to learn more.

“The program really excites me because you’d have the opportunity to learn how to diagnose an issue in exactly the way it’s happening in the workforce,” said Vang. “The advantage

the program gives is that you would not be afraid to diagnose, you’d build on your skills and ultimately build trust with your service manager to do good work, on time.”

Through the Anoka Tech program, Vang has built his confidence in his work in the shop and knows how it will contribute to his future as a technician.

“Electric vehicles are the future. More manufacturers are pumping out more hybrids and electric vehicles,” said Vang, “for us new guys coming into the industry, we have to be the people that employers will look upon to diagnose these electrical issues and to work on these hybrid vehicles.”

Anoka Tech’s Automotive program is nationally accredited by the National Institute for Automotive Service Excellence (ASE) Education Foundation. After successful completion



of the advanced Automotive Electronic Diagnostic Specialist program, students will qualify for ASE certification testing in: A6: Electrical/Electronic Systems, A8: Engine Performance, A9: Light Vehicle Diesel Engines, L1: Advanced Engine Performance Specialist, L2: Electronic Diesel Engine Diagnosis Specialist and L3: Light Duty Hybrid/Electric Vehicle Specialist.

Learn more about Anoka Tech’s Automotive Technology program offerings: www.anokatech.edu/ProgramsCourses/Automotive-Technician

The Win-Win of Partnership

Continued from Page 13



Attendees at the May 18 luncheon were treated to a meal prepared by high school Pro-Start students and it was announced that district Pro-Start student Lucas Nelson will have his hamburger recipe featured on the menu at local restaurant.

“We are creating win-win partnerships between business/industry leaders and participating students. We are so grateful for the unique opportunities students have to advance

their education, earn industry certificates and college credits, all while discovering their purpose and passion for their future,” said Supt. Sara Paul. “And industry partners are gaining responsible engaged employees. That’s the win-win of partnership!”

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K Building Homes = Real-life Experiences at Kasson-Mantorville High School



*Aaron Davis, Technology Instructor
Kasson-Mantorville High School*

What comes to mind when you think about a high school classroom? Four walls, desks, and a whiteboard? For students in the Construction Technology class at Kasson-Mantorville High School, it could mean 80 degrees and sun or 5 degrees and 20 mile per hour winds; and that's just the weather. The classroom they learn in is something they construct together and alongside community supports. Their classroom is a residential construction site.

Each year students in the Construc-

tion Technology class at Kasson-Mantorville High School build a house on a lot purchased by the district. Students begin their learning journey by framing the entire house on a foundation built by a subcontractor. Students then continue with the installation of windows and doors, insulation, drywall, and siding. Throughout the process, students learn skills which include tool and worksite safety, measuring, blueprint reading, issues facing contractors, and information about utilities. In addition to construction-based skills, students are learning to simply be good human beings in the workplace. Using effective com-

munication skills is essential in making sure everyone is working together throughout the home building process. Students are having to communicate to ensure that the work is done in a high-quality manner because the house needs to be ready to sell once the final touches have been made. Organizational skills are at the top of the development list as well so that everyone is working together, and so that subcontractors have the time and space to complete their specific work to ensure the utilities are ready.

While students are engaging in real-life experience and developing skills working at the house site, they also get career exposure by having an opportunity each quarter to participate in a job shadow day. The program has partnered with an area builders' association to give students the opportunity to experience what a "day-in-the-life" is like in a career they are interested in.

With over five hundred members, the builders' association has a great pool of employers to pick from so that students are able to learn about a variety of careers, make connections and possibly create a path to a career after graduation. Students are not required to solely shadow careers in the construction industry. In addition to shadowing contractors, electricians and excavators, students have also had the opportunity to shadow bankers, financial advisors and even a catering service.

Numerous students have capitalized on their experiences from class and the connections they have made through the job shadows and have received job interviews or offers or have taken that interest to college or further training.

This year's house construction project is scheduled to be completed by the summer and another project will be getting underway in time for the 2022–23 school year.

The Construction Technology Program was started in 1993 by industrial technology instructor, Phil Johnson. The first house sites were on lots across the street from the school so that students could carry all the tools that would be needed from the school to the worksite each day. Since then, a trailer has been purchased to carry tools and equipment, with building sites always staying in Kasson near the school. After Johnson retired, the program was continued by current home builder, Tony Paulson and then taken over by the current instructor, Aaron Davis. Each of these instructional leaders have brought something unique and special to the learning environment, and have built a program that is something our entire district and community is thankful for and takes great pride in.

www.komets.k12.mn.us



The 916 Project—A Great Sign



In March, Jay Lewis, Lewis Electrical Contracting & Consulting Services Inc., mentored multiple youth in the Independent School District 916's Construction program.

Every year students in this program build a home from foundation to roof. This program is very much a community effort and the result is a home that is sold on the open market.

The City of North St. Paul provides the

lot that the home sits on every year. This year's home sits on a lot of a former blighted property that bothered neighbors to the extent that legislators were called about it and a squad car often monitored it. The problem property was torn down and a new 2500-square-foot home is being built in its place. This is the smallest home 916 has constructed, but the home needed to be scaled to fit the lot.

The students that cycle through the home throughout the day hail from 14 different school districts. Seventy percent of them have specialized IEPs. Of the 54 students, 15 have identified electrical as their trade of choice. Many have secured spots in electrical technical school programs.

The 916 Construction program could easily double to meet the needs of interested students; however, staff and one house site limit it to its current levels. The home will be sold this summer, and 916 will start a new property next fall.

If your community has a similar construction program, please let me know. The Electrical Association understands the workforce shortages within the electrical industry and the Association looks to provide additional support to these programs to help deliver members a skilled workforce.

The students are well on their way to successfully building a home!

This is a great sign of what's coming up the job pipeline!

Article courtesy of Project Build MN

www.916schools.org



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- Understand the current data trends in high school graduation rates, college attendance/graduation rates and how to promote careers in the trades to young people and their families
- Share and learn about models of promoting Career and Technical Education to youth and their families at the secondary level
- Examine current practices in safety training with special emphasis on training youth to be safe in the trades classroom
- Develop basic grantseeking and grantwriting skills necessary for procuring additional resources and materials for their classroom/program
- Learn about the latest trends in construction through touring an active commercial job site.
- Participate in structured networking with other educators, administrators, and industry professionals.

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White Bear Lake Career Pathways Coordinator Jenny Moore Pushes for More Equity in Construction



Jenny Moore is on a mission. Her goal? Filling a critical gap in construction career exposure and guidance for Minnesota high school students.

As the Career Pathways Coordinator at White Bear Lake High School, Moore runs the high school's Career Pathways program, an initiative that helps students explore a variety of careers while attending high school. In addition to the construction pathway, the school offers pathway programs in education, business, information technology, and more.

"I want every student to feel like they have the means to live a productive life outside of high school and early career exposure is an important part of that," said Moore. "My job as the Career Pathways Coordinator is to strategically work with students on exploring their post-graduation options, help them make an informed decision about a career choice, and construct a career pathway based on that choice."

Students who feel called to pursue a particular career pathway can officially register for a specific pathway as early as 10th grade. Students registered in the construction career pathway gain access to courses such as:

- Blueprint Reading, Carpentry, & Hand Tools
- Architectural Design
- Woodworking
- Introduction to the Construction Industry
- Civil Engineering

In addition to specialized coursework, registered students gain access to a multitude of off-campus and experiential learning opportunities. Benefits available to registered students include alumni support, career coaching, field trips, driver's education, apprenticeship application sessions, and more.

"One important component to this work is ensuring that students have agency when they create their educational experience," said

Moore. "This programming is not required, and every student has a different level of participation in the program. Some students choose to take career pathway courses, some can weave in and out and try things as they see fit."

As of March 2022, 106 students were registered construction career pathway students at White Bear Lake High School. The school has even more students who participate in construction career pathway courses, and who attend Construct Tomorrow and Learn-2Build events, hands-on construction career exploration events for K-12 students.

"Students find purpose in work — a lot of students need to work. This program connects their lives in the classroom to their lives outside of it," said Moore. "For that reason and many more, I am so thankful that we can offer this program to our students, and I feel very privileged to be able to hold this position as Career Pathways Coordinator."

Moore's passion for career readiness through education began during her six years as an elementary school teacher in rural Montana. In that role, Moore was the only fourth-grade teacher for the entire town.

"In that district, I worked with families that lived in extreme poverty, and started to see that when families are generally supported, their students do better," said Moore.

This sparked Moore's transition into a role with a Montana university where she created workforce training programs for undereducated or underemployed people.

"I found that when you empower and support young families and single moms, the whole community grows stronger, not just those families," said Moore.

When the educator moved back to the Twin Cities area and saw a job posting for a Career Pathways Coordinator, she was enamored by the job's marriage between education, workforce training, and what she describes as helping people find their "why."

"I believe in education so wholeheartedly," said Moore. "Finding that purpose and connecting that to what you are learning in the classroom, challenging and having that paradigm shift, thinking about how we can do better and work together to shape the future, have been my babies since the beginning of my career."

In her work at White Bear Lake Area High School, Moore recognizes that each student will have their own unique trajectory into adulthood and the beginning of their career. By acknowledging that each student comes from a different background, and therefore will require different modes of support, the educator is better able to guide and empower students to choose the path that is right for them.

"When you say, 'college and career ready'— that has to mean 'college and career

ready' for all students," said Moore. "It's about closing the opportunity gap, and not assuming that students automatically have access to every opportunity. Recognizing that, we intentionally create opportunities by engaging students of varying gender identities, students of color, and students who receive special education services, and connect them with opportunities that will be best suited for them to thrive."

Moore works in tandem with equity educational specialists and other groups at the school to be proactive about representation in these spaces, though she understands that simply reaching out to students is not all it takes to build an inclusive community.

"We try to be incredibly intentional about engagement, without making students of color feel like we are reaching out to them simply because they are students of color," said Moore. "It can be really scary when you are the only person who looks like you on a construc-



tion site, and we want to acknowledge that. Engagement is about providing students with role models who look like they do and creating a safe space for all students to learn and to be vulnerable, so they can feel supported and confident pursuing their career goals."

Due to social stigmas, and a general lack of awareness surrounding alternative career pathways to college, Moore notes that many students need extra support in communicating the value of a union construction apprenticeship to their family members.

Continued on Page 21

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Minneapolis Youth Mentor Charles Walker Fosters Friendships, Community Pride Through Construction Internships

Continued from Page 1



place,” said Walker. “In my first year with the program, I had one group of students who were all gangbangers — But I teach every student that we are all one when we enter this program. I make it known that it’s not about where they come from, it’s where they are going, and we are all headed down the same path when we are with MTA. Once that respect is there, everything else falls into place.”

Finding Meaning Alongside Peers

For Walker, the value of the Minnesota Trades Academy extends beyond career preparation. The educator has found incredible success using his influence as a mentor to foster strong, life-long friendships between the program’s interns— who, Walker notes, often come from very different backgrounds— and instill in his students, strong values of community engagement and service, respect for one’s peers and one’s community, and pride in oneself.

“I teach every kid that I encounter that we are not going to disrespect one another. If you have a problem with that you are in the wrong

place,” said Walker. “Besides gaining experience using tools, it is the friendship and bonds that students make along the way that really makes the program a success,” said Walker. “Those students from my first year with the program forged a strong bond together that summer, and many of them are still friends to this day.”

With students’ sense of purpose and community bonds growing increasingly unsteady under the weight of two years of a global pandemic, to say Walker’s continued success in this sector is anything short of a miracle would be an understatement.

Service-Oriented Program Builds Students’ Sense of Purpose

Walker draws upon his well-earned foundation of respect to inform the work that interns perform in service of their community during their time in the program. Walker recalled one recent project where students built a handicap ramp for a woman living in south Minneapolis.

“The handicap ramp project was probably my favorite project that the kids completed,” said Walker. “That project marked a big step for a lot of the students because they just loved working on that project. When it was completed, they were very happy with what they did for her, and so proud.”

During a different project, in which students rebuilt a deck for an elderly woman living in Minneapolis, Walker realized that one of the student interns lived only two blocks away from the project site.

“I was recently in touch with that student, and he told me that he walks by that house every day. He spoke about how proud it makes him to see that the work he did on that house had such a profound impact on his neighbor,” added Walker. “It is in this way that the program has had such a positive impact on how these students view and respect the world around them.”

Mentorship Matters

Walker values the respect that his students have for him and does not take that responsi-

bility lightly. The educator is committed to showing up for any student who needs guidance, no matter how long it has been since their time with the Minnesota Trades Academy.

“If any of these kids get in trouble, I am often the first person that they call, even if it’s years after they have taken part in the program,” said Walker. “I do a lot of work in this community with youth, so they trust me to help them navigate difficult situations and help them resolve whatever issues they have.”

Two MTA alumni whom Walker mentors to this day are DeShawn Davis, whom Walker first met when Davis ran on the 7th grade track team that Walker coached, and who took part in MTA three years ago; and Josiah Sutton, who completed the MTA program four years ago.

Davis and Sutton both entered a career in construction after their time with the program. Davis recently began an apprenticeship with a construction company that is renovating Hennepin Avenue in Minneapolis, while Sutton is reaching the end of his bricklaying apprenticeship and will soon graduate to become a journeyworker.

Educators seeking guidance in informing their students about a career in construction or hoping to pass along the opportunity to join the Minnesota Trades Academy, can visit the Resources for Teachers page on the [ConstructionCareers.org](https://www.constructioncareers.org) website.

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10 Top Construction Careers

According to the Bureau of Labor and Statistics

Construction Manager – Median salary: \$95,260

Plumber – Median salary: Median salary: \$55,160

Electrician – Median salary: \$56,180

Solar Photovoltaic Installer — Median salary: \$44,890

Glazier – Median salary: \$44,630

Equipment Operator – Median salary: \$48,980

Painter – Median salary: \$40,280

Sheet Metal Worker – Median salary: \$50,400

Structural Iron and Steelworker – Median salary: \$55,040

Construction Worker – Median salary: \$36,860

White Bear Lake Career Pathways

Continued from Page 20

“Many students have parents who view a four-year college degree as a kind of gold star. In that situation, it’s about reinforcing the concept that the apprenticeship pathway is a secondary education pathway, not unlike college,” said Moore. “My job is to help students and parents see each other where they are both at and introduce both parties to every option available so they can make an informed decision about the student’s career choice.”

White Bear Lake Area High School’s District, Independent School District 624, offers and hosts annual Parent Registration Nights. At these events, all staff members are available to talk with parents through career programming at a systemic level.

“I have yet to experience a negative response to the conversation,” said Moore. “Once we discuss what the job outlook looks like for students, and I explain that students will still be going to school, that it just looks different, parents have that sigh of relief. They get to have that connection with their child and be able to say, ‘I get it now, now I can support you how I want to support you, and now I see that this is an extremely valuable career path.’”

Though not many educators have access to the kind of career programming at their school, there are plenty of vehicles to foster equitable career readiness work at any institution. For educators who wish to implement this kind of work into their own classrooms, but don’t have access to already-existing programming and connections, Moore offers this advice:

“If an educator wants to get involved in work like this, the community can and will back you up and find a way to get you involved. You aren’t alone,” said Moore. “Communities and employers – they see the point. They understand that this work is for the betterment of the entire community, so they are going to support you. I encourage educators to get out there and to network because everyone can help make a difference.”

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Groundbreaking Ceremony Held for Home Built by SabreCON



Sartell-St. Stephen Independent School District 748

Central MN Habitat for Humanity hosted a groundbreaking ceremony on Wednesday, April 20 at 3:15p for the home constructed by Sartell High School students in the advanced construction class (SabreCON).

Central Minnesota Habitat for Humanity received a donation of a residential land parcel in Sartell so that the first-ever home build collaboration with Sartell High School will stay within the Sartell-St. Stephen ISD 748 community. Ryan and Bethany Cross, co-owners of local BCI Construction, donated an empty lot they owned in their Sartell neighborhood so the 6-bedroom 3-bath 2,112 square foot bi-level house being constructed by SabreCON students may be moved to its permanent location sometime in May. The home is expected to have an owner by the end of the year.

Building a House: Outdoor education Space + Community Support



Sartell-St. Stephen ISD 748, located north of St. Cloud in central Minnesota, serves over 4,100 students. Sartell High School has seen an increase in student participation in Construction and Automotive classes over the past few years. The new high school building opened in the Fall 2019 and key parts of the design process included making sure students in Technology Education not only had the necessary tools and

“It is exciting to see how this hands-on experience has impacted students’ learning already this semester: their work ethic has been amazing and their craftsmanship is improving each and every day.”

machinery, but that their classroom experiences were conducive to hands-on learning. The District prioritized the placement of these learning spaces so that they were central and visible to all students with a goal of promoting career and technical education. It has paid off with student enrollment soaring.

Due to the success and growing popularity of the construction program, Sartell High School created a new level 3 Technology Education class, SabreCON, to provide an advanced, real-world experience for students.

Students in the SabreCON class have been building their first home for Central

Minnesota Habitat for Humanity.

The home build is taking place on a 40' x 80' concrete pad on the South end of the school building to optimize protection from the elements. The building area provides a temporary foundation/level surrounding with air and electrical outlets as well as proximity to the school building for tool and material storage.

Teacher Joe Schulte shared, “It’s been really nice to partner with Central MN Habitat for Humanity. It is exciting to see how this hands-on experience has impacted students’ learning already this semester: their work ethic has been amazing and their craftsmanship is improving each and every

day.”

“Skilled tradespeople are a vital asset in our community and workforce,” said Bethany Cross. “SabreCON does a fantastic job engaging students in our local community to see the benefits of a career in the skilled trades. We are grateful for the opportunity to support the program as well as Central MN Habitat for Humanity.”

“Those wonderful kids — I’ve had an opportunity to watch some of the work being done. I’ve never seen something like this up close and personal before, and I am incredibly impressed.”

— Superintendent Jeff Ridlehoover

Sartell High School is currently running 10 construction classes and has waiting lists for three sections this year. The majority of the SabreCON crew have already committed to trades apprenticeships or Technical College programs for next year.

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