

Brett Lobben, Eden Prairie Schools, Selected NAESP National Outstanding Assistant Principal



Brett Lobben, the esteemed assistant principal of Prairie View Elementary School within the Eden Prairie School District, has been recognized as Minnesota's 2024 NAESP National Outstanding Assistant Principal. This prestigious accolade, presented jointly by the Minnesota Elementary School Principals' Association (MESPA) and the National Association of Elementary School Principals (NAESP), highlights Lobben's exceptional dedication and leadership in the field of education.

Expressing his gratitude, Lobben stated, "I am truly honored to be named the Minnesota NAESP National Outstanding Assistant Principal. While I thank MESPA & NAESP for the wonderful acknowledgment, this award is really a testament to the inspiring people I work with each and every day and our collective commitments to risk-taking, continuous learning, and always doing what's best for kids."

Dr. Robb Virgin, the Executive Director of

Learning and Innovation within the Eden Prairie Superintendent's Executive Cabinet Team, commended Lobben's outstanding capabilities as an assistant principal. "I was struck by his pedagogical knowledge, empathy, careful listening, drive and strategic approach. [. . .] He has the rare combination of skills needed to build leadership in others, create a data-driven culture, be a champion for students and promote innovation across the school and system."

Among Lobben's notable achievements is the establishment of MESPA's Assistant/Associate Principal (AP) Professional Learning Community (PLC), which has significantly impacted leadership development across various schools statewide. Reflecting on this initiative, Lobben humbly shared, "The AP PLC provided a safe space for members to be a resource for each other as we navigate and process situations specific to the AP role. I continue to receive detailed feedback from members on how the AP PLC has made a difference in their work."

Dr. Michelle Krell, Executive Director of MESPA, applauded Lobben's outstanding leadership, stating, "Brett Lobben embodies the essence of exemplary leadership. His vision of a Professional Learning Community for APs across our state has not only elevated the standard of APs but has also served as a space where APs can connect and build community. Brett's commitment to fostering collaborative environments and driving meaningful change resonates profoundly within our educational community."

One of Lobben's best practices is his method of conducting teacher observations. Beginning

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Superintendent Gothard Named Finalist for 2024 National Superintendent of the Year

Saint Paul Public Schools

Superintendent Joe Gothard has been named a finalist for the AASA National Superintendent of the Year. This distinction honors school system leaders throughout the country who are making a positive difference in the lives of the students they serve in addition to ensuring the safety and wellness of their school communities.

This announcement follows Dr. Gothard's recognition as Minnesota Superintendent of the Year by the Minnesota Association of School Administrators (MASA) earlier this fall. Dr. Gothard is one of four finalists for the national award. The finalists had an opportunity to meet the national education community during a press conference on January 11, 2024, at the National Press Club in Washington, D.C.

The 2024 National Superintendent of the Year will be announced during AASA's National Conference on Education, on February 15, 2024, in San Diego. A \$10,000 college scholarship will be presented to a student in the high school from which the winning superintendent graduated or the school now serving the same area.

Last fall, the Minnesota Association of School Administrators (MASA) named Dr. Joe Gothard, Superintendent of Saint Paul Public Schools (SPPS), the 2024 Minnesota Superintendent of the Year.

Dr. Gothard has served as Superintendent of SPPS since 2017. Prior to his time with SPPS, he was Superintendent of the Burnsville-Eagan-Savage School District for four years. Dr. Gothard was a dean of students, middle school principal, high school principal, and then assistant superintendent with the Madison Metropolitan School



District in Madison, WI. Dr. Gothard began his career in teaching as a biology teacher at La Follette High School in Madison.

In the last year, Dr. Gothard has produced transformative change for SPPS with American Rescue Plan (ARP) spending to create a new district-wide department called the Innovation Office. The district's ARP planning resulted in a needs assessment that received more than 11,000 responses from SPPS staff, students, and families. The project management system developed by the Innovation Office has supported ongoing and emerging initiatives across the district, including work with their American Indian Parent Advisory Committee, Latino Consent Decree, and the recent planning and successful launch of the nation's first East African Elementary Magnet School in September 2023. Dr. Gothard's plan has been cited by the U.S. Department of Educa-

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Construction Complete



Spring Lake Park High School

There was a buzz of excitement and pride as students, families and staff gathered early last summer for a BBQ in front of the brand new 2-bedroom, 2-bath house standing in the parking lot of Spring Lake Park High School. They were the first guests at the house the students just finished building. Students were sharing it with their families before it moved

into the community to become a home.

More than 40 students in the Construction Trades course spent most of the school year learning construction trades through the hands-on experience of building a single-family house.

"This was such a great project for our students as well as our district and community," says Scott Wicklund, Spring Lake Park High

School teacher and project lead. "I'm proud of my students for their dedication to this year-long project and grateful to everyone, especially our partners during the build, for their support."

The building journey

The Construction Trades course was a new course last year at Spring Lake Park High School. It was designed based on student interest and industry needs and is part of the Technology, Engineering and Design Pathway at Spring Lake Park High School. It is one of three Career and College Pathways that help students explore different career paths as they gain high school and even college credit.

Students started the year in the classroom learning about safety, vocabulary, tool knowledge and basic tool measurements. Then they moved outside where they put that learning to work and dove into framing, putting up walls and trusses and completing roofing.

Inside, they tackled carpentry, trim work, insulation, painting and more. They also got to learn from the experts in the field who came in to help with the plumbing, HVAC and electrical.

"I wouldn't say the students were experts when we left the shop to start building the house, but they learned through hands-on work and any roadblock or mistake was a learning moment for all of us," says Scott.

"There is always going to be a learning curve with a project like this and I believe you have to make mistakes in order to learn. Students really adapted to any situation that was thrown at them."

Preparation for the future

Senior student, Drew, enjoyed the hands-on and physical aspects of the course. What most surprised him was how much time and care goes into these types of projects.

"Every step of the project took careful planning and time," says Drew. "I have a new appreciation for those in the field who work on these kinds of projects and the effort it takes to do it right."

Drew plans to go to a two-year technical school for electrical after graduation. Taking this course helped him solidify his decision.

"Before taking this course, pursuing electrical was a small idea but now I know it's what I want to do," he says. "The skills and experience from this project will not only help me in school and in my career but will also help me when I become a homeowner one day."

Senior Ernie enjoyed building the house as a team with the class and also learning from Mr. Wicklund.

"He didn't teach us in a way where we just had to memorize," says Ernie. "He taught

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MOMENTUM Students Take Part in Service Learning with Habitat for Humanity



Minnnetonka Public Schools

On Wednesday, September 20, students in the MOMENTUM Physics in Home Renovation and Mathematics in Home Renovation courses took part in a service-learning opportunity with Twin Cities Habitat for Humanity. Students volunteered at various Habitat work sites to frame walls, place windows, build a patio, paint walls, secure scaffolding, measure and cut lumber and put some of their early construction learning into action.

Students' biggest takeaways from the

experience ranged from task-based confidence in installing stone patios to the importance of interpersonal skills, such as communication, teamwork and working safely to complete a job. In a post-event survey, 100% of participants shared that they would recommend the experience to their friends.

"These responses warm my heart because this is the essence of what we are trying to capture with the MOMENTUM experience," shared Brent Veninga, MOMENTUM program coordinator.

MOMENTUM is the Minnetonka High School program for design and skilled trades. It provides opportunities for students with a passion for real-world, hands-on learning to take courses that can lead to skilled trade careers.

Lessons and experiences are coordinated to provide maximum student engagement. For example, in "Mathematics in Home Renovation" and "Physics of Home Renovation," two courses in the Construction Pathways strand of MOMENTUM, students learn about math or physics topics and then engage in projects that bring those concepts to life. A lecture on electrical circuits might be connected to an opportunity for students to practice wiring their own electrical systems. Academic courses are then connected to guest speakers or site visits where professionals working in the industry share their experiences with students.

"This year, physics and math students worked together to build our first ever 'ice castle,'" shared Minnetonka High School MOMENTUM instructor Brent Veninga. "It's a full-sized ice fishing house where students have done everything from framing the walls and interior cabinetry to wiring the electrical systems, plumbing a toilet and shower for the bathroom, and even planning the interior aesthetic design. It's been a multifaceted project for students to lean into their strengths and interests in a real way."

MOMENTUM Physics/Mathematics of Home Renovation classes also participate in a "mini youth apprenticeship" program where students visit nine different companies monthly, exposing them to community businesses related to their areas of interest. These

mini apprenticeships can be great connections for future internships and career opportunities.

Veninga makes a point to gather student feedback after every event, guest lecture and site visit. Students regularly give experiences such as the mini youth apprenticeships high praise. "These direct quotes from our students, when they are sharing about their experiences with external partners in our program, are pure gold," said Veninga. Student feedback is an important metric in MOMENTUM's forward planning, and it helps demonstrate the value the program provides to students as they plan their steps after high school.

After the program's "Human Resources Day," where MOMENTUM students had the opportunity to work on job application and interview skills while hearing from local hiring professionals in the industry, one student shared: "This program has helped me figure out what path I want to take right now. It's such a good path for many kids who are hands on and might want to be in the trades, but don't know where to start."

Changing minds and opening opportunities is what MOMENTUM is all about. In a recent survey of students, MOMENTUM program leaders found that more than three quarters of the students surveyed agreed that their perspective around the trades has changed since being in MOMENTUM. "It has really sparked an interest in me," shared one student. "It has shown me the amount of opportunities available through this field."

minnetonkaschools.org



Construction Complete Continued from Page 4

us in a way where we actually had to do the things we were taught and apply our learning."

Ernie plans to go into carpentry after graduation. Like Drew, the small idea of going into this field was cemented because of this project.

"This project made me realize I am good at carpentry, and I do want to do it for a career," he said.

For Scott, the goal of the course wasn't to turn each student into a builder. He wanted to introduce them to the process, give them a better understanding of what it takes to get a finished product and give them the tools and experience to help them as they look ahead to what's next.

"Maybe they'll take what they've learned and pursue a career or maybe they are able to apply some of the learning when they own a house or business someday. Regardless, I think this project helped them discover their likes and dislikes and gave them more knowledge and experience for their futures." Scott Wicklund, SLPHS teacher, project lead.

Projects beyond the house

Students wrapped up the project earlier than anticipated, giving them the opportunity to build smaller projects. From a garden shed to chicken coops, students got to apply their learning and continue building their skills on real projects.

"Students are really driving these projects and it has been cool to watch them revisit what they've learned and continue honing their skills," says Scott.

Drew and Ernie are considering starting a business together building chicken coops.

"We now have the knowledge and skill, and we know there is a want in the community," says Drew. "With the sale of eggs going up, people are buying chickens and need chicken coops so this would be a good business to start."

Made possible with partners

"We had a terrific experience because of our community of partners who were involved," says Eric Van Brocklin, Career Pathways Lead.



"We felt the support and know it was a team effort from everyone involved. I hope students drive by the house someday and reflect on their experience and the important part they played in building a house that will live in our community for a long time to come."

springlakeparkschools.org





A BIG Sandbox!

Partnership at Wright Technical Center offers heavy equipment training to high school students

Students are receiving hands-on instruction in heavy equipment operation — while earning both high school and apprenticeship credit — through a new program at Wright Technical Center in Buffalo, Minnesota.

A grand opening, held Thursday, Sept. 14, showcased the Operating Engineer’s Pathway, celebrating the launch of the heavy equipment operations and maintenance program and the “sandbox” where students can safely hone their operating skills. Industry and educational partners donated more than \$350,000 in equipment, materials and labor for the sandbox and classroom.

For the program, Wright Technical Center received permission from the city of Buffalo to develop a sandbox up to one acre in size. The sandbox they created is slightly over a half-acre in size, so there is room for future expansion.

Wright Technical Center partners with Minnesota Virtual Academy to provide the curriculum, which is a hybrid model. Some of the curriculum is taught in the classroom with simulators that use the same controls that are in the heavy equipment vehicles, while other parts of the curriculum give students on-site experience.

There’s already a waitlist for the heavy equipment program. The courses offer four

semesters of high school elective credit and cover topics from equipment fundamentals to grade and construction math.

Program participants can build a strong future for themselves by participating in the Wright Tech program, completing an apprenticeship, and then becoming employed by one of the 700 employers of The International Union of Operating Engineers Local 49.

“We recognize virtual learning is not for everyone, so this is piloting an in-person opportunity for students,” said Jenny Winkelhaar, Local 49’s director of workforce and community development. “We couldn’t be more excited about our partnership with Wright Tech. The impact on students could be truly life changing.”

Monticello High School co-principal Lori Hanson said the heavy equipment operators program aligns with the high school’s career pathways program.

“This allows our students to learn and explore beyond our four walls, which is a goal we have,” Hanson said.

Wright Tech is an important partner of the high school because programs like the heavy equipment operator program allow students to see what their futures might be through opportunities the high school might not offer.

“It’s invaluable,” Hanson said.

Wright Tech “has been a stepping stone for many people in the area,” said Brian Lenneman, who attended Wright Tech and is now director of earthwork operations at one of the program’s industry partners. Lenneman hopes this program will help students discover an interest in the construction industry.

The Wright Tech program is an extension of the Operating Engineers Pathway, launched in 2020 by Local 49 and Minnesota Virtual Academy. The Pathway is still available online to Minnesota public high school students at no charge and features multiple hands-on events each year. The Wright Tech program could serve as a model for future in-person programs with regional partners.

The Wright Technical Center is a cooperative public high school established in 1972 to provide instruction in career, technical and alternative education. The WTC services eight, member school districts in both



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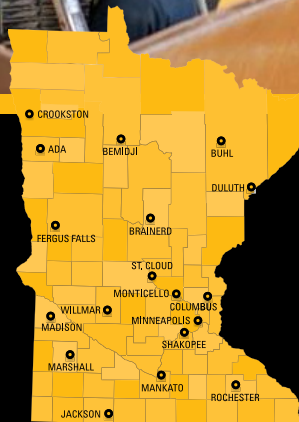
Wright and Sherburne counties. The eight local districts include: Annandale, Big Lake, Buffalo-Hanover-Montrose, Delano, Howard Lake-Waverly-Winsted, Maple Lake, Monticello, and St. Michael-Albertville. The WTC provides students with fourteen different career and technical program choices to meet their needs, skills and career interests.



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Brooklyn Center Students Begin Establishing a Career Path Through the Trades



Brooklyn Center Community Schools

Through the Finishing Trades Program, BC high school students gain hands-on experience with the trades and get a peek into a post-graduation path other than college.

Brooklyn Center Community Schools is proud to offer a growing number of Career and Technical Education (CTE) partnerships for high schoolers. One of these partnerships

is with the Finishing Trades Institute. Through the Finishing Trades Program, BC high school students gain hands-on experience with the trades and get a peek into a post-graduation path other than college.

The pilot program ran in the spring of 2023 after BC staff toured the Finishing Trades facility searching for opportunities to provide hands-on learning in the Trades in high school classes. “We recruited four stu-

dents and overcame the transportation barrier for our students to attend training from 8-10 a.m. daily to explore tasks in the finishing trades such as painting, glazing, dry walling, framing and some metal work,” said Julie Gloege, BCCS teacher. “The pilot class was so successful that Finishing Trades invited us to partner with them and can have 10-12 students participate each semester this year.”

Students have an option of attending from 8-10 a.m. or 12-2 p.m. at the Finishing Trades Institute of the Upper Midwest (FTIUM) in Little Canada. The program runs for one semester and students can earn 2 credits for successfully completing the program and network with companies hiring in the trades.

At the FTIUM facility, students work with apprentices and instructors who are leading professionals in their fields. Students work on many of the same projects and activities as the apprentices. They learn to operate trade tools and machinery such as scissor lifts, forklifts, aerial lifts, and swing stages; and learn sandblasting and professional painting techniques.

“FTIUM’s CTE program also has a robust personal finance and career readiness curriculum,” said Philip O’Neill, licensed CTE teacher at FTIUM. “We stress the importance of union labor and involvement and have many industry leaders and politicians visit us.

We also go on field trips to see plant operations and network at their facilities.”

Seniors Alphonso Kayee and Jaden Love both decided to join the program when they learned of the financial opportunities within the trades that don’t require the expense of college. “That interested me because college takes a lot of money,” said Kayee.

Senior Jezarius Sheldon added that it provides an opportunity to learn something new, and a different career path, while giving students credits toward high school graduation.

Current Finishing Trades students all had positive encouragement to offer their peers who might be interested in joining the Finishing Trades Program.

“If you’re thinking of taking this program, I highly encourage it,” said Meya Xiong, BCS senior. “Even if you don’t go into the trades, you can still use what you’ve learned. The instructor makes math fun, too, because it’s not the type of math where you do algebra or calculus, it’s more hands-on. You also won’t be in the classroom most of the time. You’ll be on the shop floor where you’ll be working on your projects.”

“The program is a great opportunity for a lot of young people who don’t know what they want to do yet. Once you graduate and if you

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Preparing Students For Healthy Construction Careers, Mentally and Physically

Construction workers can find themselves grappling with physical strain, long hours, and demanding environments that can profoundly impact their mental health. By integrating mental health education into their academic journey, construction students acquire coping skills and support networks. This transformative knowledge

empowers workers to not only take care of their own mental wellbeing, but also shifts construction culture in a positive direction.

“Our main goal has always been to help our members succeed. We’ve seen that professional success isn’t only about showing up to work, learning skills, and getting paid,” said Jeff Stark, Business Manager/Secretary-Treasurer of IUPAT District Council 82. “It’s about building a culture of support and wellness that helps members and their families in the long term.”

This year, we at the Finishing Trades Institute of the Upper Midwest (FTIUM) at IUPAT District Council 82 (DC 82) have pioneered a new program with TEAM Wellness



at Work aimed at providing direct access to free mental health counseling. The program is called the FTIUM Care Team.

The FTIUM Care Team provides students with access to life-saving mental health services, substance use counseling, health consultation and other critical resources. The Care Team consists of

four licensed, multilingual clinicians who are available for all students, staff and members of IUPAT DC 82 to schedule a private appointment on-site at the training center.

“What makes FTIUM and DC 82 different is that we create spaces for students to be their whole selves,” said FTIUM’s Director of Academic Education, John Burcaw. “Many workers are starting to wake up to our industry’s historical toxic masculinity and how it hurts them and their peers. They’re beginning to recognize the immense strength that comes with talking about your struggles. We’re proud to be part of this important shift in the construction industry.”

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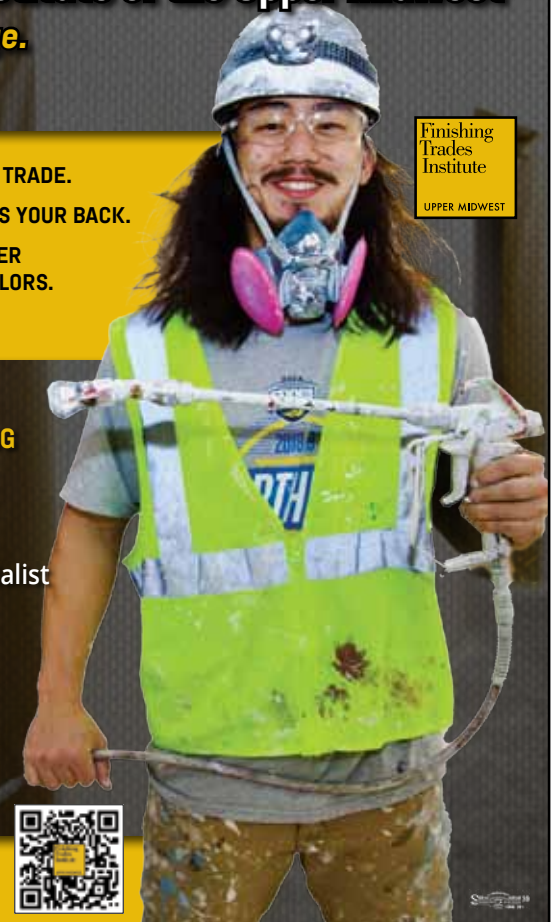
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- Share and learn about models of promoting Career and Technical Education to youth and their families at the secondary level
- Examine current practices in safety training with special emphasis on training youth to be safe in the trades classroom
- 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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742! Project-Based Learning Leads the Way



Tech Ed teacher Tom Dahl with some of his students and their shed

St. Cloud Area School District 742

Every year students in Project Lead the Way woodworking classes at North and South Junior High Schools have a chance to do a major build project. They work from start to finish on a shed or playhouse using lumber and tools. The project is possible due to the generous donation and partnership with Simonson Lumber.

“Students are introduced to safety and machine use in seventh grade,” explains

South career and tech ed teacher Tom Dahl. “While the focus is on safety and materials fabrication, students [also] learn techniques of measurement, assembly and finish work. Our assignments are geared toward learning by doing, and we’ve introduced projects that are culturally transferable.”

Transferable skills to the “real world” is the main

objective. Every student learns how to properly handle tools, take measurements and plan a project. Whether a student ultimately owns a home, attempts a do-it-yourself project or works in construction, they’ll take these skills and confidence with them throughout their lifetime.

South eighth grader Mailyann Vo took the class because she was interested in woodworking. Vo built one of the scaled (3/16

replicas of the shed.

Eighth grader Yaitza Arroyo-Ruiz at South grew up helping her dad build things, so the class brings back good memories for her.

“He used to build things for construction,” explains Arroyo-Ruiz, “so I would help him build certain stuff.”

“Students that find enjoyment in working with their hands often elect to join the year-long class. Their understanding and technique are further challenged by learning milling and a few joinery techniques,” says Dahl.

Masaud Mohamed, another eighth grader at South, was responsible for doing the measuring of the lumber.

“I took the class because it would help me learn some life skills,” says Mohamed. “Taking this class helps me see what it is and maybe take it in high school.”

Career demand for skilled workers is at an all-time high.

“My colleague, Mr. Stadther, and I often hear from industry professionals about their needs, which keeps us in tune for how to design and teach our courses,” shares Dahl.

There is something for each student. Students who are nervous about using machinery still learn the operations and soon learn that with proper training, a build project is very satisfying.

Michelle Sininger from a local lumber

company says, “We have had a fantastic partnership with the junior high instructors over the years in being able to provide them with the materials to build small sheds and playhouses with the students. We all know that the earlier we can expose kids to the trades, the more likely they are to have interest in the field. We are blessed to be able to give back to the students, our builders and our community through this partnership.”

“From my point of view,” says Dahl, “they have been very generous in their support of our students. Their donation allows us to improve the program through the purchase of tools and materials for future use.”

When the next shed is complete, it will be up for sale to the public.

Students who exit the program have experience with machine and tool usage, building and finishing projects, and completing plans from start to finish. Even if a student does not become a carpenter or cabinet builder, the skills they learn develop confidence and practical knowledge for life.

www.isd742.org



2024

CONSTRUCTION AND TRADES CAREER FAIR

SATURDAY, MAY 4, 2024 | 10 AM - 1 PM

ERX MOTOR PARK | ELK RIVER

8th-12th grade students and parents are invited to explore the construction trades.



MEET THE PROS

- CARPENTERS
- CONCRETE/MASONRY
- DIESEL MECHANICS
- ELECTRICIANS
- ESTIMATORS
- IRON WORKERS
- LABORERS
- LINEWORKERS
- OPERATORS
- PIPEFITTERS
- PROJECT MANAGERS
- SHEET METAL WORKERS
- TRUCK DRIVERS
- UNDERGROUND CONSTRUCTION
- UTILITY CONSTRUCTION
- WELDERS

VISIT WWW.MUCA.ORG FOR MORE INFORMATION



CAREERS IN CONSTRUCTION

Construction Laborers

Perform tasks involving physical labor at construction sites. May operate hand and power tools of all types: air hammers, earth tampers, cement mixers, small mechanical hoists, surveying and measuring equipment, and a variety of other equipment and instruments.

Construction Carpenters

Construct, erect, install, and repair structures and fixtures of wood, plywood, and wallboard, using carpenter's hand tools and power tools.

Construction Managers

Plan, direct, or coordinate, usually through subordinate supervisory personnel, activities concerned with the construction and maintenance of structures, facilities, and systems. Participate in the conceptual development of a construction project and oversee its organization, scheduling, budgeting, and implementation.

Construction and Building Inspectors

Inspect structures using engineering skills to determine structural soundness and compliance with specifications, building codes, and other regulations. Inspections may be general in nature or may be limited to a specific area, such as electrical systems or plumbing.

Civil Engineers

Perform engineering duties in planning, designing, and overseeing construction and maintenance of building structures, and facilities, such as roads, railroads, airports, bridges, harbors, channels, dams, irrigation projects, pipelines, power plants, and water and sewage systems.

Operating Engineers and Other Construction Equipment Operators

Operate one or several types of power construction equipment, such as motor graders, bulldozers, scrapers, compressors, pumps, derricks, shovels, tractors, or front-end loaders to excavate, move, and grade earth,

erect structures, or pour concrete or other hard surface pavement. May repair and maintain equipment in addition to other duties.

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 for tamping gravel, dirt, or other materials. Includes concrete and asphalt paving machine operators, form tampers, tamping machine operators, and stone spreader operators.

Structural Iron and Steel Workers

Raise, place, and unite iron or steel girders, columns, and other structural members to form completed structures or structural frameworks. May erect metal storage tanks and assemble prefabricated metal buildings.

Architectural and Civil Drafters

Prepare detailed drawings of architectural and structural features of buildings or drawings and topographical relief maps used in civil engineering projects, such as highways, bridges, and public works. Use knowledge of building materials, engineering practices, and mathematics to complete drawings.

Electrical Power-Line Installers and Repairers

Install or repair cables or wires used in electrical power or distribution systems. May erect poles and light or heavy duty transmission towers.

Highway Maintenance Workers

Maintain highways, municipal and rural roads, airport runways, and rights-of-way. Duties include patching broken or eroded pavement and repairing guard rails, highway markers, and snow fences. May also mow or clear brush from along road, or plow snow from roadway.

Painters, Construction and Maintenance

Paint walls, equipment, buildings, bridges, and other structural surfaces, using brushes, rollers, and spray guns. May remove old paint to prepare surface prior to painting. May mix colors or oils to obtain desired color or consistency.

Traffic Technicians

Conduct field studies to determine traffic volume, speed, effectiveness of signals,

adequacy of lighting, and other factors influencing traffic conditions, under direction of traffic engineer.

Surveyors

Make exact measurements and determine property boundaries. Provide data relevant to the shape, contour, gravitation, location, elevation, or dimension of land or land features on or near the earth's surface for engineering, mapmaking, mining, land evaluation, construction, and other purposes.

Transportation Engineers

Develop plans for surface transportation projects, according to established engineering standards and state or federal construction policy. Prepare designs, specifications, or estimates for transportation facilities. Plan modifications of existing streets, highways, or freeways to improve traffic flow.

Electricians

Install, maintain, and repair electrical wiring, equipment, and fixtures. Ensure that work is in accordance with relevant codes. May install or service street lights, intercom systems, or electrical control systems.

Mobile Heavy Equipment Mechanics

Diagnose, adjust, repair, or overhaul mobile mechanical, hydraulic, and pneumatic equipment, such as cranes, bulldozers, graders, and conveyors, used in construction, logging, and mining.

Career/Technical Education Teachers, Postsecondary

Teach vocational courses intended to provide occupational training below the baccalaureate level in subjects such as construction, mechanics/repair, manufacturing, transportation, or cosmetology, primarily to students who have graduated from or left high school. Teaching takes place in public or private schools whose primary business is academic or vocational education.

This is just a sampling of the careers available in the construction industry. For more information go to www.onetonline.org



**Minnesota Asphalt
Pavement Association**

Minnesota Asphalt Pavement Association (MAPA)
1000 Westgate Drive, Suite 252 | St. Paul, MN 55114
info@mnapa.org | 651-636-4666

MAPA supports and facilitates workforce development by **providing scholarships** to students interested in asphalt careers, creating a marketing program to promote **available jobs** with MAPA members, and performing **outreach to school districts** to provide resources to promote careers in the asphalt industry.

Check out the resources available at:
www.asphaltisbest.com

St. Cloud State University TEC Network



The TEC Network (Technology, Engineering & Careers) is all about building partnerships with school and businesses around the state. Each school selected to be a part of the Technology Network will engage in:

- Equipment access
 - Over \$1,300,000 worth of equipment
 - Supplies and maintenance of the equipment
 - Opportunity to purchase equipment at demo rate
 - New equipment added to meet changing needs of industry
 - Equipment is scheduled for 2-3 weeks at a time throughout the year.
 - Concrete & Masonry tools, equipment and demonstrations
- Professional development:
 - Summer workshops
 - On-site support
 - CTE License
 - Graduate courses
 - WBL License
 - Program review
 - Advisory board support
 - Program enhancement plan (district will determine items needed) Examples include:
 - Youth apprenticeship plan
 - Career awareness /readiness
 - Recruitment ideas / plan
 - STEM activities / curriculum
 - Network meetings of all teachers, administrators, and business partners

Mike from Maple River noted:

“Our local Perkins consortium used funds for the next 5 years to help join the SCSU TEC program. This has been the best thing to ever happen to our program. I always tell local community members it is like joining a blockbuster for shop equipment. The TEC program has allowed our students to experience a CNC router, virtual welder, virtual painter, and later this year and CNC plasma cutter. My first 10 years of teaching no students were able to experience this technology.”

- Technology Management
- Manufacturing Engineering Technology
- Environmental Studies
- Environmental Science

Graduate Programs:

- Technology Education
- Career and Technical Education (CTE)
- Work Based Learning

For additional information, contact Chuck Hentges, Department Chair. E-mail: chentges@stcloudstate.edu

Technical Programs for Today and Tomorrows Careers

Undergraduate Programs:

- Construction Management
- Technology Education



Brooklyn Center Students Begin Establishing a Career Path Through the Trades

Continued from Page 8

don't go to college, there aren't a lot of jobs that help you make a lot of money with just a high school diploma," said Kayee.

Sheldon noted the welcoming nature of the instructors who guide students through all of their work. "Don't be scared. They're very adamant about us learning from others and communicating with others. There's someone to help you every step of the way. They're really accepting, and they all seem super genuine."

"Not all BCCS students want to go to college, have limited resources to pay for post-secondary education, or they learn best by hands-on training," said Gloege. "There are opportunities for this type of training that lead

to a high-paying career with benefits without acquiring debt."

Students who are interested in participating in Finishing Trades can fill out an application during the previous semester. They are then interviewed by Finishing Trades staff. For any questions, contact Julie Gloege at jgloege@bccs286.org.

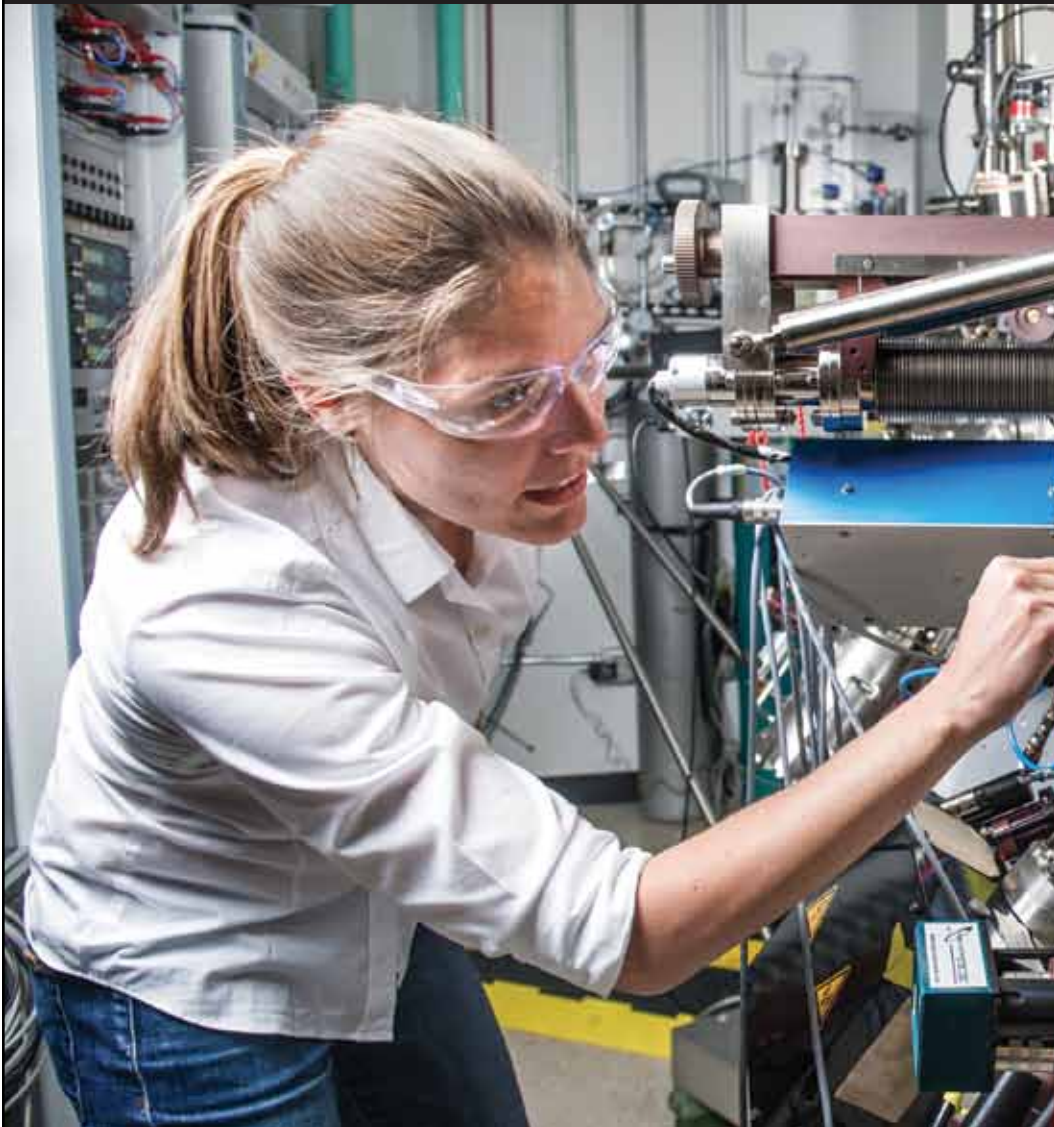
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- ▶ Manufacturing Engineering Technology
- ▶ Construction Management
 - ★ Program Available Online ★
- ▶ Environmental Studies
- ▶ Environmental Science

- ▶ Manufacturing Engineering Technology
 - The Manufacturing Engineering Technology program is a Bachelor of Science Degree in an applied engineering field that looks for better ways to manufacture products. This includes reducing cycle times, maintaining quality, and keeping costs reasonable.
 - The field emphasizes engineering problem solving using a hands-on approach rather than the complex analysis that an engineer would typically use. The curriculum focuses on hands-on experiences to prepare the graduate for an exciting career in the midst of production activity

- ▶ Technology Education

- Bachelor of Science Degree
- Master of Science Degree

- ▶ License Endorsements

- CTE — Career and Technical Education
 - Communications
 - Construction
 - Manufacturing
 - Transportation
- Work Based Learning

Outreach Activities:

Partnering with over 30 schools and businesses to serve over 10,000 K–12 students per year.

- ▶ **Huskies Invent** —
A non-stop weekend “invent-a-thon” for collaboration with businesses and students.
- ▶ **Husky Make It Space** —
Bring ideas to life, from design to the creation of visual models/functional prototypes.
- ▶ **Mobile Lab Program** —
A lending program that brings high-tech equipment to partnering K–12 schools.
- ▶ **Mobile Make It Space** —
State-of-the-art instructional equipment available for SCSU students and K–12 partners.

Contact: Chuck Hentges — Department Chair
E-mail: crhentges@stcloudstate.edu
Phone: (320) 308-2118

Learn more about Environmental and Technological Studies at St. Cloud State University at:

www.stcloudstate.edu/ets



MINNESOTA STATE

*St. Cloud State University,
A member of Minnesota State*

St. Cloud State University is committed to legal affirmative action, equal opportunity, access and diversity of its campus community. (<http://scsu.mn/scsuoia>)



Pathways Program Connects Students With Jobs



Spring Lake Park High School

Julian Christensen and Trevon Holeman started their senior year unsure how to get a job and gain experience within the career path they want to pursue after graduation — mechanics. After understanding and taking advantage of the resources available to them through the Spring Lake Park High School Career and College office, both students now have a part-time job at an auto repair shop (HT) across the street from the high school.

Through this part-time job, as well as classes they are taking in their high school, Julian and Trevon are gaining real-world, hands-on experience that is setting them up for success once they graduate next spring.

We (Spring Lake Park High School) asked a few questions to learn more about their experiences and plans for the future.



What type of work do you do at HT? How do you think it will help prepare you for your future?

Julian: I help with inspections, tire replacements and rotations and oil changes. I basically help with anything that the other employees ask me to do. Learning about all of the tools and equipment has been good. Also learning about what not to do or the mistakes to avoid has been helpful. I know the work I am doing now at HT will help me in trade school.

Trevon: I mostly do

oil changes as that's what I'm good at. But I help with any work that needs done. I've learned a lot within the actual physical side of job itself, but I've also learned that watching and asking for help is important. These guys have a lot of experience and can help me when I make a mistake or am not sure what I'm doing.

What do you enjoy most about this work? Are there any challenges?

Julian: I enjoy the inspection part of the work the most. I also like the flexibility that I get through this job. I have basketball and other things that pop up throughout the week and they work with me to find a schedule that works. I really didn't have a lot of experience with fixing cars before so learning something brand new on the job and figuring out where everything is at the shop has been a challenge sometimes but I'm a hands-on learner so this environment has been good for me.

Trevon: I also like the flexibility of my work schedule. The people I work with there are nice, too. It's a good working environment. They are always willing to listen, help and answer any questions I have. The biggest challenge is learning all the machines on the job, but I also think it's fun at the same time.



What Pathways courses have you taken or will you take this year? How did they prepare you for this job and your future? Are there certain classes or teachers/mentors in particular that guided you along the way?

Julian: I have taken Introduction to Engineering and AP Computer Science so far, and then I am going to take the How to Make Almost Anything and Introduction



to Construction courses next. Pathways courses have allowed me to explore multiple career areas and see if I like that area or not which has been helpful. Mr. Van Brocklin has definitely guided me. He gave me the run down on available jobs, internships and career and trade school opportunities. He made the process of talking with him and getting this job very easy. If I didn't go to him, I wouldn't be where I am in my career path. I encourage any student who isn't sure what they want to do or aren't sure how to get to where they want to go to talk to him.

Trevon: I took Tech Ed and Woodworking courses in middle school and then am also going to take the How to Make Almost Anything and Introduction to Construction courses this year. I know, for the most part, what I want to do after high school so these courses will help me prepare for that kind of work. Mr. Van Brocklin has helped me as well as my math teacher who always helps me figure things out when I can't figure them out on my own.

What are your plans after high school?

Julian: I plan to go to trade school and then hope to be a mechanic someday.

Trevon: I either plan to go to a trade school to be a mechanic or maybe go to a 4-year school and study sports management. I'm still deciding.



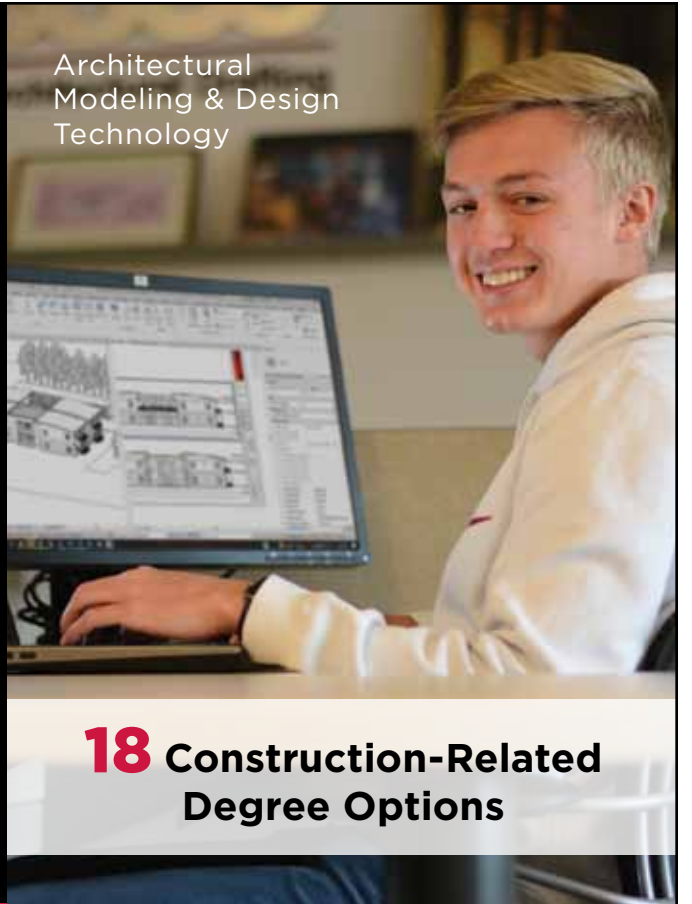
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Information based on 2023 NDSCS data.



Central CTE Teacher Receives National Award



Matt working with a student in the tire lab.

Congratulations Matt!

Ask any highly accomplished adult, in any profession, to name an individual who played a pivotal role in their success and they will likely name an educator. The National Society of High School Scholars (NSHSS) provides its high school members with the opportunity to acknowledge high school teachers, counselors or administrators who have made the most significant contribution to their academic career by nominating them as an Educator of Distinction.

Matthew Lijewski, the automotive instructor at Central High School, was nominated by his students for a Claes Nobel Educator of Distinction award. Matt, a 1988 graduate of Harding High School, is in his 14th year of teaching with SPPS.

Matt said about his award:

I appreciate this award because a student took time out of his day to nominate me. It is nice to know that what I teach has a big impact on students' lives and the choices that they make after they leave Central. I am proud to teach a subject that provides a student with very valuable information/skills and may lead them into post-secondary education to become a professional automotive technician, which is a high demand/high-paying career.

The student that nominated me for the award got a job this summer working at a local automotive repair shop and loves it! He saved enough money over the summer to buy his first truck.

Educators of Distinction are outstanding role models and exemplary practitioners who have made a lasting difference in a student's life by encouraging them to strive for excellence, not just in their academic pursuits, but in all their endeavors. Educators of Distinction are invited to attend the Society's free member events around the country and are recognized with a personalized certificate presented in honor of NSHSS Founder Claes Nobel. Educators of Distinction are also eligible to compete

for the NSHSS Educator of the Year award.

For more about the award visit <https://www.nshss.org>.

A Hidden Gem

Matt Lijewski has been teaching automotive technology at St. Paul Central High School for the past 14 years. His path was not the traditional one taken by most teachers.

After graduating from high school, Matt pursued an Associate Degree in Automotive Technology and went on to work in the automotive industry for 20 years as a transmission and driveline specialist.

Feeling his career had become stagnant and looking for a change that was both challenging and personally fulfilling, Matt explored a job opening at Central High School as an automotive instructor. He thought it might be a new and interesting career where he could utilize his personal experience and extensive automotive knowledge to educate the youth of St Paul.

Matt talks about the program

The Automotive Program at Central High School consists of two levels: Auto 1 and Auto 2. Auto 1 is offered to grades 9-12.

"In my introductory Auto 1 class, I educate my students about the basics of automotive knowledge and repair. How to work in a shop safely, hand tools/power tools, maintaining your vehicle, tires, batteries, starters, and alternators. The goal of the class is to prepare my students for purchasing and maintaining their own automobile and avoiding common problems associated with vehicle ownership. In addition, we explore career options in the industrial trade industry, which is a well-paying, essential, high demand career. This class is taught in a traditional classroom setting.

"In my advanced Auto 2 class, I prepare my students to become a "do-it-yourselfer" or to enter post-secondary automotive training. I accomplish this goal by providing a mixture of traditional classroom education with real world/hands on training. In addition, I have

partnered with local businesses to give my students valuable apprenticeship opportunities for career exploration and employment. I feel that what I teach is a lifelong skill, that is transferable to other career options and will save my students thousands of dollars in their adult life."

This class is taught outside of the traditional classroom.

Auto 2 is taught at a shop located two blocks away from the main campus. It was originally a Skellys gas station back in the 1940's. In 1971, Skelly donated the shop to the St Paul School District, and it was converted into an automotive shop/classroom. It's a small, two-bay garage. Quite often we do repairs outside due to the limited work area. In the last few years, the district gifted the program with two new hoists, new tire machines, an updated security system, new LED lighting, a new heating system and a new, beautiful, epoxy floor.

Auto 2 is available to students in grades 10-12 that have successfully completed Auto 1. Students learn everything from brake jobs to engine removal. This class specializes in general vehicle maintenance repairs, not auto body repairs. The unique part of Matt's Auto 2 program is that they work it like a real shop. Students learn on teacher/student/community member vehicles. Students must diagnose the problem, write up the vehicle, order parts and complete the repair. The main benefit of this type of working/learning set up is that students are working on real world problems, the vehicle must be repaired correctly, and the

tires can't fall off when the vehicle drives out of the shop. The customer gets the value of an inexpensive repair (we charge \$10-20 for repairs or sometimes just a box of doughnuts) and the students get the experience of fixing real problems. An A in this class can earn college credit as well!

"I feel that what I teach is a lifelong skill, that is transferable to other career options and will save my students thousands of dollars in their adult life. I want to prepare all of my students for success, no matter their race, color of skin, gender or economic status. Without my program, many urban youths would not have exposure to the subject matter and struggle with the inevitability of vehicle ownership," says Matt.

"I identify myself as a hardworking, passionate educator. As in my career in automotive, I want to be the best at my teaching profession. I feel that my students deserve nothing less. I truly love my job at Central and enjoy teaching a diverse student population. I feel that the best part of my job is connecting with students and getting to know them on a personal level. I have found that the key to student success is taking the time to build that all important teacher/student relationship and treating students with equity and respect. Each student brings in a unique set of skills and life experiences that provide excellent opportunities for us to learn from each other."

www.spps.org/central



SPPS Automotive Program

Saint Paul Public Schools

The Saint Paul High School Automotive Center, as part of the Districtwide Career Pathways program for all high school students in 10th grade and up, just underwent their 5th ASE Education Foundation 5 year Program Accreditation review. This process ensures that the automotive program's curriculum, tools and equipment, and instructor training meet the high industry standards set forth by the governing board of ASE. With this latest accreditation the Saint Paul High School Automotive Center will continue the tradition of delivering training excellence since 1979 to students of SPPS.

Students attending the program can earn ASE Student Certifications, apply for summer internships, as well as earn articulated college credits. The Districtwide Automotive Program shares a location with Global Arts Upper School and is led by instructors Ron Rybicka and Henry Velasquez and supported by the Office of College and Career Readiness.

Automotive Course Descriptions

Automotive Maintenance and Light Repair 1 Course Description:

Allows students to explore career opportunities and requirements of a professional service technician.

- Content emphasizes beginning transportation service skills and workplace success skills.
- Students study safety, tools, equipment, shop operations, and the fundamentals of operation, maintenance, and basic repair procedures for automotive engine mechanical systems, heater and air conditioning systems, and drive train systems.
- Classroom and shop activities simulate automotive service industry operations through the use of training aids, shop vehicles, and customer work as available.

Continued on Page 17



Peter's Journey into the Automotive Industry

How a preference for hands-on learning led Peter Mendez to a promising career path

Burnsville-Eagan-Savage School District 191

Peter Mendez has always had an interest in how things work. As a middle school student at Eagle Ridge, he began to consider a future in engineering and found a new world of possibilities at Burnsville High School (BHS) when he saw the opportunities for automotive and engineering classes.

"The course catalog really sparked my interest," said Peter. "I have always been interested in cars, racing and the mechanical workings of things, so learning how engines work was a perfect fit."

In tenth grade, he took the Introduction to Consumer Automotive class that provided lessons on all aspects of vehicles including insurance and purchasing cars, and gave the chance to take a vehicle apart and learn more about the inner workings of cars. The following year, he started the Automotive Maintenance and Light Repair (MLR) courses where students learn about engine repair in the classroom and get to participate in hands-on learning by taking an engine out of a vehicle and disassembling it down to its components.

"Sitting in a classroom and listening all day is harder for me," said Peter. "I can be much more engaged and really just learn better with hands-on learning."

With the auto shop spaces at BHS, Peter gets real-world experience with vehicles while working towards Automotive Service Excellence (ASE) certifications, which he hopes to achieve before he graduates in 2025. The class toured a nearby technical college which offers a two-year program in a variety of automotive pathways.

"The technical college opened my eyes about potentially being a mechanic," said Peter. "I have always thought about the four-year college option, but am leaning more towards a path like technical college to become a mechanic because it is a fulfilling career with many different options and seems like a great fit."

Peter also keeps busy outside of the automotive shop. He plays the bass clarinet in the BHS band, is on the mountain biking team, has served two terms on the Dakota County Library Advisory Board and is a youth member of the Burnsville Parks and Natural Resources Commission. He is looking forward to the upcoming band trip to Costa Rica and the opportunity to learn as much as he can in high school before his next steps.

"The biggest advice I can give is if you don't know what you want to do, don't worry



about it too much, but use your time to try to narrow it down and figure out what you want to do while it's free," said Peter. "One of the things that I have enjoyed about BHS is that they put a lot of emphasis on the fact that going to a four-year school isn't for everyone and that it's perfectly acceptable to go into

the trades or to a technical school, especially since those career fields really need people right now."

www.isd191.org



CAV Career Pathways Camp

Are you a high schooler interested in vehicles and the latest technology? Intrigued by self-driving cars and automated shuttles? Then the CAV Career Pathways Camp may be right for you!

Dates: August 5–9, 2024

Location: University of Minnesota Twin Cities campus, Minneapolis, MN

For more information or to apply, contact ctscamps@umn.edu or visit mncav.umn.edu/outreach/cavcamp



SPPS Automotive Program

Continued from Page 16

Automotive Maintenance and Light Repair 2 Course Description:

Allows students to explore career opportunities and requirements of a professional service technician.

- Content emphasizes beginning transportation service skills and workplace success skills.
- Students study safety, tools, equipment, shop operations, and the fundamentals of operation, maintenance, and basic repair procedures for automotive electrical systems and engine performance systems, as well as the fundamentals of hybrid vehicle information.
- Classroom and shop activities simulate automotive service industry operations through the use of training aids, shop vehicles, and customer work as available.

Automotive Maintenance and Light Repair 3 Course Description:

Allows students to explore career opportunities and requirements of a professional service technician.

- Content emphasizes beginning transportation service skills and workplace success skills.

• Students study safety, tools, equipment, shop operations, and the fundamentals of operation, maintenance, and basic repair procedures for automotive suspension systems, steering systems, and brake systems.

• Classroom and shop activities simulate automotive service industry operations through the use of training aids, shop vehicles, and customer work as available.

Completion of any or all of the Maintenance and Light Repair courses will give the student a good foundation in the operation, maintenance, and repair of an automobile and prepare students for employment, further advanced training in a post-secondary automotive program, and NATEF certification.

www.spps.org





Foley's Impressive Industrial Technology Program Adds Automotive Classes



Foley Public Schools

The Foley Public School Industrial Technology program has served students for several years, showcasing the importance of skilled trades careers. With community and admin-

istrative support, Foley has been able to expose and offer Industrial Technology classes beginning in 5th grade.

Recently, in 2020, Foley was fortunate and received an automotive shop addition to its Industrial Technology facilities. This has given them the ability to widen their skilled trades electives to include various potential career paths given to their students. Prior to the addition, Foley offered coursework at the high school level involving welding, machining, woodworking, drafting, and robotics. Since the addition, they've been able to expand their offerings to include automotive classes as well.

Foley currently has three Industrial Technology instructors who cover various grades and areas relevant to their expertise. Mr. Timothy Smith works at the intermediate level and engages students as early as 5th grade. At that level, he introduces students

to STEM activities where they work with a Mission to Mars kit including hands-on activities. Students are also able to work with Spike Essential robotics kits throughout Smith's course. He also has them touch base on 3D printing.

Mr. Brian Kemmy works at the high school and teaches welding, machining, and automotive classes. These classes allow students to practice and explore metal fabrication through various classroom and lab activities. Students always enjoy the final project in welding class in creating a custom stool where they learn how to run and set up the school's CNC plasma cutter.

In the automotive classes, students learn the basics of automotive maintenance which all car owners should know. These include checking fluids, plugging leaking tires, changing oil, and detailing cars to protect their finish and remove scratches from the paint. If a student chooses to pursue the advanced automotive class, they will follow curriculum aligned with SCTCC and get hands on experience with tire machines and wheel balancers in addition to other more advanced lessons on the systems of an automobile.

Also at the high school, over in the woods lab, Mr. Dan Carlson offers woodworking, drafting, and robotics courses. These classes expose students to various levels of furniture and cabinetmaking, along with an emphasis

on design utilizing CADD technologies. Students pursuing this path can take three levels of woodworking. The capstone class allows students to design and build a project of their choosing. Carlson runs an Engineering Drawing course which is aligned with SCTCC which introduces students to mechanical drafting and elaborates on 3D printing. Students successfully passing this course can earn college credits while learning how to operate CAD programs. He also runs a Home Maintenance and Repair course where students often find their favorite activity learning how to sheetrock and lay tile. This course touches base on the various aspects of owning a home as far as the regular upkeep and small DIY repair jobs.

Our Motto

"Helping Students Succeed Every Step of the Way" is the motto of Foley Public Schools. This philosophy is actively engaged each day across our three combined campus buildings. Foley's academic excellence provides students with challenges and positive reinforcements at each step of their education."

www.foley.k12.mn.us



CIM Student Point-Of-View: CIM More STEM Than CM



CIM students tour various businesses their facilities and a wide variety of career options. Pictured: Article author and SDSU CIM junior, Josue Mendez alongside fellow junior, Emma Roth and CIM senior, Brittany DeGroot.

Contributor: Josue Mendez, junior, SDSU CIM

I wanted hands-on learning, related to construction but not swinging a hammer and managing the project while trying to manage everything else. Something that included business management and real-world experience, so I knew how things were done and WHY they were done.

Fortunately, I had a contact in the concrete industry who cared enough to connect me within the industry and recommend SDSU's Concrete Industry Management (CIM) program.

CIM is more STEM related than CM as it involves a deeper level of science, technology, engineering, and math. As CIM majors, we learn construction management principles

along with the concrete science and technology necessary to ensure a safe, quality project completion. Through our concrete labs, trips into the field, and conversations with industry professionals, we understand if a concrete issue is not caught, it can create huge risks and cost millions.

I feel like CIM majors truly have unlimited career paths because you can minor in your area of interest and because CIM works hand-in-hand with concrete professionals in a variety of industry careers, you have insight on which courses to take to land in the career you want — Geology, environmental, sustainability, marketing, computer science, etc.

Yes, we have fun traveling to conferences, participating in golf outings and trap shoots, scholarship fundraising events, and attending pro and/or collegiate football, hockey, basketball games and more. But I've honestly learned as much outside the classroom as inside.

My favorite trip so far was World of Concrete 2023 (WOC) in Las Vegas, where I was able to see all the different aspects of the industry come together. For example, I learned about masonry, precast, and other areas that are related by now in ready-mix.

I feel like other more general majors are missing out on critical learning and an easier path into a job after graduation by not having access to this level of travel and networking.



Josue's experience in ready mix plan management at Lyman-Richey, Inc. in NE.

The envy is thick when they ask me, "So, where are you going this week?"

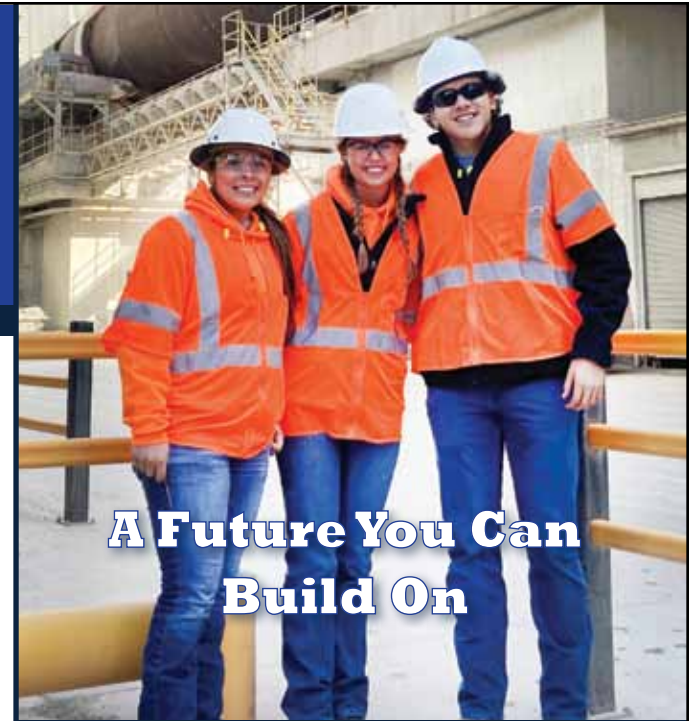
I recommend CIM students take industry experiential learning summer jobs. These opened my eyes to the ins and outs of the industry that can't be taught in a classroom and helped me determine which formal internship experience I needed between my junior and senior year to land where I'd be happiest after graduation - In ready mix management as an operations or plant manager.

There will always be a need for concrete industry experts, so my CIM degree and expertise will always be employable. Last year as a sophomore, I already had job offers in ready mix management, and because the aspects of the CIM program have prepared me well, I can step into my career after graduation without any hesitation and bring value.



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*Statistic from Middle Tennessee State University

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Under Graduate



Moorhead Students Use Their Skills to Impact Others



Moorhead Area Public Schools

In the fall of 2022, Moorhead High School teacher Chantz Rud, partnered with Fix it Forward, a community non-profit to give his students an opportunity to use their skills to impact others. Fix it Forward provides donated cars to the program for learning and repairing.

The result is a win for students, a win for Fix it Forward, a win for an individual or family in need and a win for the community as a whole.

Chantz leads the Automotive Program at Moorhead High School.

In 2021, the Moorhead School District opened the Moorhead High School Career Academy. The Academy is changing the way students approach high school. Based on industry and professional standards, the program offers unparalleled experiential learning about careers and self.

With 9 bays, state-of-the-art technology, and an incredible learning environment, the Autos Lab can be found within, humming with activity.

Each of the 9 work bays has a complete toolbox with the standard set of hand tools you would need to complete the majority of tasks. They have a large assortment of specialty tools to complete more complex work, including state-of-the-art scan-tools.

Classes offered include:

- Automotive Technology (9–12 Intro Class)
- Brakes Steering and Suspension (10–12 Advanced Class)
- Maintenance and Light Repair (11–12 Advanced Class)
- Electrical and Engine Performance (12 Advanced Class)

Students in these classes are assessed as soon as they enter the room. They are graded on attendance, just like they would be on the job.

Students are extremely proficient with our tire changing machine, road force tire balancer, and on-car and off-car brake lathes. Once the service is complete each vehicle typically needs an alignment, which is completed by the students as well.

In addition to learning the technical skills to complete the tasks, they are learning the skills required to be independent workers that still know how to work together in groups. They can find their own resources and information. They know how to rely on each other and cooperate for a common goal.

Students are learning the process of interviewing customers, checking in a vehicle, initial inspections, diagnostics, part ordering, repair, and thorough record keeping.

After the students have worked on the school's learning vehicles, then their own vehicles, they wrap up each class by working on the donation vehicles to help out the community. They take pride in their work and understand that what they're doing is going to greatly improve someone's life.

This spring, Chantz's students performed work on what was to be Fix it Forward's 400th vehicle donation.

A young mother from Youthworks in Fargo was awarded the car. Youthworks is a nonprofit that provides support to vulnerable teens and young adults.

With a referral from anti-trafficking specialist Karlee Liddle from Youthworks, the young lady from Fargo no longer has to worry about taking public transportation with her child.

"The case worker for the individual who will receive the 400th car donated by Fix it Forward

shared the woman's story. In just the few seconds it took to share the background of her life, there were quite a few "tough guys" that were visibly holding back a couple of tears. You could see that they fully understood what their little class project was going to mean to someone."

— Chantz Rud, MHS Teacher

An big milestone today! We were blessed to donate our 400th vehicle to a very deserving member of our community!

We celebrated this morning with our friends at the Moorhead High School Career Academy, honoring their incredible faculty and students who performed the needed repairs on car #400.

On hand was the vehicle recipient, her Youthworks caseworker, members of the local media along with Ministry leadership. A very special day, an opportunity for these talented, young students to witness first hand the power of giving back through the use of their minds, hearts and hands.

—Post from Fix It Forward Ministry.

www.isd152.org

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Anoka-Hennepin STEP Automotive Program Named Exemplary Secondary Program of the Year



Theron Busse

Anoka-Hennepin Schools

Last summer, the automotive program at Anoka-Hennepin Secondary Technical Education Program (STEP) was recognized as the 2023 Exemplary Secondary Program of the Year by the Minnesota State Transportation Center of Excellence (TCOE).

The Exemplary Secondary Program of the Year award showcases secondary level transportation programs that serve as exemplary models of institutional support, instructional leadership and program-wide excellence.

“The automotive program at STEP stands out because of its industry based curriculum, dedicated teacher, state-of-the-art facilities, community partners, and support from our colleagues at Anoka Technical College,” said Jess Lipa, the STEP Career & Technical Education Director.

The automotive program is led by instructor Theron Busse. He is an experienced automotive teacher with a passion for empowering students with the knowledge and skills needed to excel in the automotive industry. With time spent at the post-secondary level teaching and now completing his sixth year of teaching at STEP, Busse has developed a comprehensive understanding of automotive technology and a talent for effectively communicating complex concepts to students of all levels.

“It’s a big honor,” Busse said. “I’m never one for vanity and recognition, but we try hard out here. I found that working on customer and student vehicles is by far the best way for these students to learn and apply the content they get in the classroom. High school students will rarely see what they get here in a lab setting. I’m honored and thankful for the award.”

Busse’s expertise spans various

areas, including engine diagnostics, electrical systems and vehicle maintenance. His dynamic teaching style incorporates hands-on learning, theory, and uses his own industry experience to ensure students gain practical experience and problem-solving abilities. He is committed to fostering a collaborative and inclusive learning environment where students feel motivated to explore their potential and pursue rewarding careers in the automotive field.

“Theron brings his background, high expectations for students, and connection to our business partners into his classroom in every way possible,” Lipa said. “This award is because he works tirelessly to support, mentor, and guide our students into all of the opportunities that a career in transportation can bring.”

Busse’s commitment to the industry is evident as he runs the Nitro-X Camp for middle school students each summer to get youth exposed to the transportation industry. Theron’s colleagues recognize his work and dedication to student success and utilize him regularly as a mentor and professional colleague, often asking him to lead staff in professional development and courageous conversation. Theron’s strong work ethic,

commitment to equity, and passion for the industry help to equip students with the necessary tools to be successful in the evolving automotive industry.

The STEP automotive program is Automotive Service Excellence (ASE) approved and brings academic theory and combines it with practical, hands-on experience to prepare students for the dynamic and evolving automotive industry. The courses incorporate industry standards, real-world experience, and internship opportunities to allow students to gain invaluable industry exposure and develop their problem-solving skills.

Visit the Minnesota State TCOE website for more information about the awards. <https://www.minntran.org/tcoe-awards>

www.ahschools.us/step



White Bear Lake High School Automotive Career Pathway



White Bear Lake High School was awarded \$95,000 in the fourth round of YST grants to support the expansion of their Automotive Career Pathway program. Derek Doescher, transportation instructor for White Bear Lake High School, said the YST grant has helped the growth and success of the school’s program, including:

More than 1,000 students received exposure to the automotive industry.

More than 500 students enrolled in a Transportation Pathway course (the highest enrollment to date).

Thirty-one students were placed in paid summer work experiences with many receiving offers for full-time opportunities.

Doescher plans to expand paid summer work experiences during the 2024 summer and offer interviews at school with local industry partners to remove barriers for all students

Professional credentials

Students earned industry-related automotive credentials including more than 300 Ford ACE training modules each semester – the most in the Twin Cities area. These modules allow students to gain dealership-level training while still in high school. Additionally, 13 students passed the ALLDATA certification test.

Doescher added to his automotive credentials completing six Automotive Service Excellence tests. “One of the best ways I can be an example for my students is by continuing my own training and education. This not only helps me lead by example, but also keeps me up to date with the content I am teaching my students,” he said.

An expanding audience

It is important to celebrate Doescher’s impact on the number female-identifying students enrolled in the Automotive Career Pathway courses. Since beginning teaching in White Bear Lake, Doescher said the number has grown from six to over 40 during the 2023-24 school year. Doescher credits the growth to intentional culture-setting, innovative staff and student outreach, industry support, peer support and open houses.

At the end of the grant cycle, Doescher created a video to showcase the White Bear Automotive Career Pathway program to stu-



dents and industry partners. He intends to use this video as a recruitment tool for local employers who are not currently involved, and with young people who traditionally may not choose automotive classes.

“It was truly a great opportunity to participate in this grant . . . I think this (video) is a great example of how everyone (secondary school, post-secondary and local industry) working together benefits the students and the

whole transportation industry,” he said.

Congratulations to White Bear Lake on your successful program.

Courtesy of the Minnesota Department of Labor and Industry

www.isd624.org





Minnetonka High School MOMENTUM Expands Programming and Classroom Space: New Aviation Classes and a New Building on the Horizon for 2023–24

Minnetonka Public Schools

MOMENTUM is the Minnetonka High School program for design and skilled trades. It provides opportunities for students with a passion for real-world, hands-on learning to take courses that can lead to skilled trade careers. The program began as a reimagining of Minnetonka High School's technical education program, with its first courses launching in 2020-21. Four years later, there are more than 500 students involved in classes within MOMENTUM's four different areas of study—Construction Systems, Manufacturing, Design, and Transportation—the last of which expanded in a big way in the 2023-24 school year to offer a track in aviation.

Aviation first surfaced as an opportunity in the winter of the 2021-22 school year. Throughout 2022-23, Minnetonka leaders completed initial program research, gathered data about high school aviation programs and gained school board approval for the new courses to launch in 2023-24. MOMENTUM staff hoped to have 12 students register for the new opportunity. But when the registration window for 2023-24 opened, 179 signed up for Aviation I and 99 chose to continue the program with Aviation II. A full-time aviation instructor was hired for 2023-24.

In 2024–25, Minnetonka High School will offer a cross-disciplinary course in Aviation called *"Flight Instruction Through Time: Navigating Aviation and World History."* This two-hour, team-taught course will combine students' social studies World History requirement with an aviation elective, giving them the opportunity to experience global history through



a unique lens.

The MOMENTUM aviation classes will provide students with the potential opportunity to earn a ground pilot/drone license by the time they graduate, and it will also enable them to work toward a private pilot's license. Watch a feature on MOMENTUM's new aviation track here: <https://bit.ly/3HtazP>

In addition to the new aviation courses, the 2023–24 school year will bring a new building for MOMENTUM classes, opening for student learning in the second semester of the year. This is the second building that Minnetonka Schools has designated for the program.

During the 2021–22 school year, Minnetonka High School opened a dedicated space for the MOMENTUM program, which includes a four-car automotive garage and flexible "maker bay" for different hands-on classes. 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."

Now, the new VANTAGE/MOMENTUM building is under construction. Once completed it will house aviation classes and other MOMENTUM offerings, as well as strands from the High School's VANTAGE program, which offers advanced professional studies programs for a wide range of concentrations—including International Relations, Global Business, Business Analytics, Public Policy, Health Sciences

I and II, Global Sustainability, Multicommunications, Design+Marketing, Computer Science and Education.

"We are ushering in the next chapter for the VANTAGE and MOMENTUM programs and opening up new opportunities for students," said School Board Member Chris Vitale during the building's groundbreaking. "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."

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: minnetonkaschools.org/VANTAGE

Learn more about MOMENTUM: minnetonkaschools.org/MOMENTUM

minnetonkaschools.org



Johnson Aerospace and Engineering High School



The Johnson High School Aerospace and Engineering Department is very excited to offer the rigorous challenges of Aerospace and Engineering to its students as the SPPS Aerospace and Engineering Magnet high school in Saint Paul, Minnesota. This unique opportunity helps prepare students in the areas of mathematics, science, engineering and technology and encourages each and every single student to reach beyond the stars.

The aerospace program at JHS was established in 2013. The program was created to offer students a new class that was unlike any other in the state, or many in the country (still

to this day). Through SPPS allocated funds as well as generous support from area businesses and organizations, the Flight Simulator Lab opened for students in the 2014-15 school year. Originally comprised of seven simulators, we have added six virtual reality (VR) stations and have new computers to run the latest flight simulator software.

Students take the initial class in their 9th grade year, typically. The class is an "ab-initio" course, meaning we take them from zero hours and introduce them to the world of flying very quickly. Typically, on the second or third day of class, we are exploring the islands of the

Caribbean Sea, followed by a trip home to St. Paul to check out our school and local sights. We have five dual-seat simulators allowing for a pilot/copilot experience, and two single seat (military style) simulators that are half-sphere in shape and gives a very immersive experience. The third student in the group is the "air traffic controller" and sits on the opposite side of the classroom controlling the simulator, moving them to different locations, etc. All students are connected via real aviation headsets and allows them to talk to each other.

Our Aerospace courses are closely aligned with the Engineering and Manufacturing pathway programs at JHS. Upon entrance to JHS, students choose a pathway, either Engineering, Aviation, or Manufacturing, and take courses based on those selections throughout their high school career.

If students decide to continue in the Aviation program, they will enroll in Aviation II and III. These courses are accelerated, advanced, and allow students to experience flying in all types of weather, emergencies, and learn rules

and regulations of flying. Recently, we have begun teaching drone pilot curriculum in the Advanced classes, using student iPad apps as supplements. Upon completion of Aviation II, students should have gained enough knowledge to pass the FAA Drone Pilot certification exam and the FAA Private Pilot Written exam after Aviation III.

Our vision for the future includes the acquisition of a training aircraft, hangar space at STP airport, and the creation of a training program to allow students to complete their courses at school for the first half of the day and come to the airport to fly for the second. Students are eligible for their Private Pilot certificate at age 17.

Check out this short SPPS spotlight on our flight program <https://www.youtube.com/watch?v=789yzDO6e9I&ab>

spps.org/johnsonsr



Take Flight with EAA Youth Aviation Education

Paul Maloy, EAA Director of Education

Each July the world's largest aviation expo and airshow turns an otherwise quiet spot of Wisconsin into the busiest airport on the planet. Acres of fields turn into joyous communities as hundreds of thousands of eager people fly or drive to AirVenture hosted by the Experimental Aircraft Association (EAA) in Oshkosh, Wisconsin. Always designed for families amidst all that hustle and bustle you will find a long-held, passionate commitment to youth STEM education.

Founded in 1953, the EAA just celebrated the 40th anniversary of our Air Academy youth summer camps and concluded the 30th anniversary of our Young Eagles program, having flown 2.3 million youth ages 8 through 17 since 1992. EAA also celebrated the 25th anniversary of KidVenture and the 20th anniversary of GirlVenture last year, both with prominent visibility during EAA's annual AirVenture Expo.

While the EAA Aviation Museum has offered hands-on activities for students since it opened in Oshkosh in 1983, the newly added, state-of-the-art Youth Education Center now hosts hundreds of schools and other youth groups from September through June. However, with our newest, online, youth aviation education initiative called AeroEducate the EAA has now expanded to the global stage.

Officially launched at AirVenture 2022, AeroEducate is a robust, internet resource hub with nearly 200 activities for youth as young as 5 years old through high school graduation. Additionally, teachers and youth leaders can access 24 real-world, aviation-based, STEM enrichment activities for class or group use. Grade-banded for comprehension and aligned with national STEM standards each activity was developed by professionally certified teachers for teachers. Access to all student and teacher activities is completely free and without advertising or worry of spam mail.

Unlike many other youth aviation initiatives, AeroEducate does not just focus on piloting. Rather, five main career areas can be explored including: Aeronautical Engineering, Air Traffic Control, Aviation Maintenance, Aviation Business Management, and of course, the many Professional Pilot options too. As K-12 students explore and complete the activities, either on their own or in the classroom, they earn digital achievement badges (with beautiful printable certificates) in four different focus areas: Flight, Technology, Community, and Career, and then ultimately, their grade-level badge.

Although AeroEducate definitely encourages youth as young as five years old to explore aviation through age appropriate activities, high school juniors and seniors



will see multiple benefits also unique to AeroEducate, culminating in seven take-aways or deliverables: industry knowledge and skills, a printable AeroEducate "transcript" of completed activities, an aviation/aerospace focused resume, a written & professionally vetted plan of action, a qualified industry mentor, access to scholarships & schools, and a clear path to their dream job in aerospace!

Where do YOU start? How can you get your students involved? Start by visiting www.AeroEducator.org/teachers, create a free teacher account, then go to your teacher

dashboard to explore the enrichment activities, each with detailed printable teacher instructions, videos, student guides, and printable posters for your classroom. Then watch how your students light up as they enjoy the experimentation process of learning about aviation. If you want more, contact us at AeroEducate@eaa.org, come visit, or attend Teacher Day during AirVenture.

Let us help you elevate your aviation learning!



A FREE Teacher's Toolbox for Aviation and STEM Activities

Opening Doors to Careers in Aviation

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- ✈️ Help your students discover how they can take their love for STEM and turn that into a future career by exploring aviation career pathways
- ✈️ Innovative AeroEducate badging system with additional projects, experiments, and aviation experiences students can work towards outside of the classroom



AeroEducate.org/Teachers



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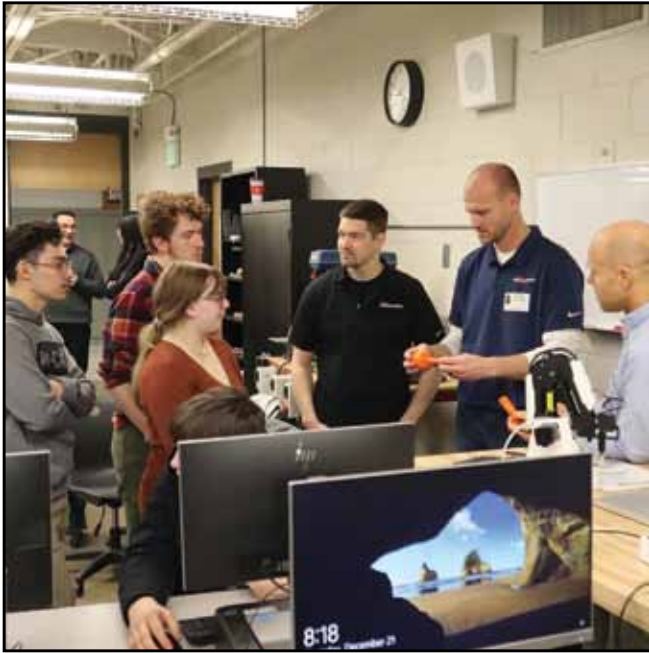


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Coon Rapids High School Engineering Students Help Create Solutions for Local Business



Anoka-Hennepin Schools

Earlier this school year, seniors enrolled in the engineering program at Coon Rapids High School — Center for Biomedical Sciences and Engineering (CRHS) toured a hydraulics manufacturing company in East

Bethel to learn about their engineering and manufacturing process.

While on tour, students were assigned a mini capstone project to design a device/tool that the manufacturer could use in the welding process of building custom hydraulics, an actual problem within their current manufacturing process.

On Dec. 22, students presented their creations and their process from design conception to completion. Representatives from the company were in attendance to learn more about the concepts, looking for ideas

to take back to the drawing board for potential solutions.

“It was a great interaction and we appreciate the students’ enthusiasm, interest, and desire to complete the project successfully,” said Tony Casassa, engineering manager at the company. “I think it’s great that students are

learning at a young age some of the fundamentals of engineering and the decision-making processes, and I hope it is useful for all of them in considering careers in the field.”

Each of the five groups created a unique device for the company to consider and presented their prototypes.

Marcus Grignon, a senior at CRHS, appreciated the opportunity to get a real-life look into what it means to work in the engineering field and get hands-on experience in creating something from scratch.

“We were mostly trying to meet the demands they (the company) set for us,” Grignon said about the project. “It needed to be relatively easy to make and at a reasonable cost. It had to do the job, be practical and meet industry tolerance which is five thousandths of an inch.”

Grignon and his peers used that standard in their decision-making process to create a simplistic tool that meets that criteria.

“I think that is why a lot of our ideas ended up being similar with little tweaks and changes between each group,” Grignon said.

The manufacturer welds ports on cylinders and needs a fixture to hold the part onto cylinders which are made in high quantities within the company. Students were tasked with developing a device to make this process

more efficient.

“We have had some solutions and they worked, but they didn’t work great and we were looking for something durable and reliable,” Casassa said. “We had our mindset on what needed to be done to secure the fixture, and the students thought outside of the box a bit and created some things that we hadn’t tried.”

The manufacturer will now take the drawings of the student projects as they consider new options for the development of a new tool or device to improve efficiencies in their engineering process.

Students in the engineering program at CRHS experience Project Lead the Way curriculum which empowers students to step into the varied roles engineers play in our society, discover new career paths and possibilities, and develop engineering knowledge and skills.

The CRHS specialty program offers pathways for students in engineering, biomedical engineering and biomedical sciences. Learn more about the Center for Biomedical Sciences and Engineering at CRHS

www.ahschools.us



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Bungee’s Journey into Engineering



Burnsville-Eagan-Savage School District 191
How trying new things and combining interests led to potential career paths.

Having completed her junior year, Bungee has big plans for the future. As someone who has always had an interest in designing things and exploring different fields, the options presented by Pathways at Burnsville High School were a perfect fit.

With a love for art and creating new things through interior design, and what

she describes as a huge passion for aquariums, Bungee found that science subjects got her excited about school and allowed for her to use her creativity. She even had an aquarium project go to the state science fair in tenth grade and got great encouragement from her science teachers.

“Biology kicked off my love for science even though I wasn’t a huge fan of the outdoors as a kid,” said Bungee. “I hate bugs, even butterflies, but I really appreciate the environment and the need to preserve it to fight climate change. Pathways really helped me since I wasn’t totally sure what interested me yet.”

Her exploration really kicked off during junior year when she discovered engineering. After taking classes like accounting which she said felt important but not quite for her,

her mother encouraged her to explore engineering and architecture, taking her to events to learn more. Having always enjoyed creating, science, and supporting the environment, the field of green architecture and environmental engineering combined a variety of interests. She was excited about the field, so she took classes like Civil Engineering and Architecture, alongside an AP Environmental Science course that was recommended by biology teacher Mr. Huemoeller.

“It was cool to have peers around me who were excited about the same things that I was,” said Bungee. “It was really interesting watching others work through their design process and I looked forward to that class every day. Science and engineering skills are really amazing because they show up in so many different fields.”

Through class trips, hands-on learning and joining the Women in STEM club, she learned more about options. Club advisor and science teacher Ms. Davidson encouraged students to explore different fields, organizing trips to businesses like an aerospace company in Burnsville.

“They employ every type of engineer there and it was so cool to see how many different jobs there are,” said Bungee. “I got to talk to someone who does additive manu-

facturing and 3D prints objects using nickel as well as see where they test flight parts to make sure they don’t freeze while they are in the air.”

Her hard work and curiosity has paid off. Bungee was among the winners for the 2023 Junior Book Awards with the U of M Norman Borlaug Science Achievement Award. Looking forward to next year, she plans to take engineering courses, honors and AP options, and other college level courses to get a head start on her likely next steps, pursuing a degree in Engineering. She wants to explore college options and learn CAD systems and basics of the field before eventually refining her focus to environmental engineering and green architecture.

“My advice to students is to try something that you’re not sure about to see how you like it,” said Bungee. “I personally think it’s important to not limit yourself to one pathway and to try different things while finding what interests you and makes you excited. I also think students should try engineering!”

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Inspiring Future Engineers: The Engineering Machine Design Contest (EMDC)



The world of engineering is vast and dynamic, offering countless opportunities for those with a passion for innovation and problem-solving. To ignite this passion and inspire the engineers of tomorrow, the Engineering Machine Design Contest (EMDC) has emerged as a transformative platform. EMDC Ambassador Luqman Muhamed, from New Century School, succinctly captures the essence of this remarkable initiative: “The EMDC has inspired me to be

interested in architecture, civil engineering, mechanical engineering, and computer science.”

A Journey of Discovery

For students like Luqman, the EMDC serves as a steppingstone on their journey of discovery within the field of engineering. This event provides teams of 5th-12th graders with a unique opportunity to design and build complex machines using everyday

objects. The result? A hands-on experience that not only promotes teamwork but also fosters creativity and problem-solving skills.

Luqman’s journey began in the 5th grade, the inaugural year of EMDC, and his involvement has only deepened his interest in engineering. As he puts it, “Engineering is a very broad field, and as I explore my options and increase my experiences, I will be better able to choose a specific career.” This sentiment echoes the central goal of the EMDC: to empower students to explore STEM principles while having fun in a collaborative environment.

A Pathway to Careers in Engineering

EMDC is not just about building machines; it’s about building futures. The program is cross-curricular and aligns with the academic standards. This ensures that participants are not just engaged in an exciting competition but are also gaining valuable skills and knowledge that will serve them well in their future careers.

Inclusivity and affordability are cornerstones of the program. Approximately 60% of teams build their machine as part of a STEM, physics, or CTE class, with most teams spending between \$51-100 per year. And with over 50% of participants being girls, it is also instrumental in promoting

gender diversity in a field that has historically been male dominated.

The Role of EMDC Ambassadors

Luqman’s journey has taken a new turn as he was chosen as an EMDC Ambassador. His enthusiasm is palpable as he shares the reasons he is drawn to the EMDC: “To be a part of the EMDC community and meet other cool and smart people, to develop my leadership skills, and to increase my engineering capabilities and explore other career options.”

Students like Luqman play a crucial role in spreading the word about this transformative experience, inspiring more students to embrace engineering as a potential career path. The EMDC stands as a beacon of hope for the next generation of engineers. It not only introduces students to the wonders of engineering but also equips them with the skills and knowledge needed to shape the future. Luqman’s story is a testament to the power of EMDC in nurturing young minds and setting them on a path to meaningful careers in the field of engineering. As we celebrate engineering in this issue, let us celebrate initiatives like EMDC that are molding the engineers of tomorrow.

Youth Skills Training (YST) Program and Grants



The Youth Skills Training (YST) program encourages, promotes and supports the development of local partnerships between schools, employers and community organizations. These local partnerships provide students with related classroom instruction, safety training, industry-recognized credentials and paid work experience in the high-growth, in-demand occupations of advanced manufacturing, agriculture, automotive, health care, and information technology. The Minnesota Department of Labor and Industry (DLI) awards grants to local partnerships to create, implement and expand YST programs throughout Minnesota. Successful applicants will demonstrate the ability to achieve program objectives through various means including outreach, education, training, and supportive services for students.

The goal of the YST program is to create pathways for students to high-growth in-demand occupations and support industry with future talent.

Eligibility

To be considered eligible, all applicants must include a partnership between a school and employer at minimum. Community organizations, non-profits, post-secondary institutions, chambers of commerce etc. may also be included in a partnership.

- Applicants must include a partnership between at least one school and one employer.
- Application must be in one or more of the following eligible industries (advanced

manufacturing, agriculture, automotive, health care and/or information technology).

- Programs must demonstrate the ability to provide industry exposure, industry-related classes for high school credit, industry-recognized certifications and paid work experiences within the eligible industries.
- Programs currently receiving a YST grant are ineligible to apply to avoid overlapping grant contracts.

The total available funding for the upcoming grant cycle is anticipated to total up to \$1.5 million per year. Applicants may apply for up to \$100,000.

Round Seven Grant Timeline

- Jan. 8 to Feb. 9, 2024: Grants applications open
- Feb. 23 to March 15, 2024: Grant review period
- April 16, 2024: Grant recipients announced
- July 1, 2024, to June 30, 2026: Grant performance period

2023 Grant Recipients:

Alexandria Area High School
Breckenridge High School
Edina Public Schools
Faribault Public Schools
Hibbing School District
Independent School District #728 (Elk River, Otsego, Rogers, Zimmerman)
Monticello Public Schools
Owatonna Public Schools
Sourcewell (Staples)
Stillwater Area High School
Venture Academy High School (Minneapolis)
Workforce Development, Inc. (southeast Minnesota)
Career Solutions – Stearns and Benton Counties
Minnewaska Area High School
North Branch Area High School
Princeton Public Schools
Windom Area High School

For more information about Youth Skills Training contact Rich Wessels, program manager, at 651-284-5184 or rich.wessels@state.mn.us and visit dli.mn.gov/YST.

To apply <https://www.dli.mn.gov/business/workforce/yst-grant>



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Three Named Recipients of Outstanding Educator Awards

The Outstanding Educator Awards Program was created in 1998 by the WEM Foundation in support of teachers and their important role in helping all students achieve academically and seeks to bring recognition to the often “unsung heroes” who meet the challenges of teaching in a variety of settings.

The 2023 honorees were announced at the Minnesota Service Cooperatives Conference in October. Synergy & Leadership Exchange presented these three deserving educators with Outstanding Educator Awards. The awards are given in three categories: Teacher Achievement, Coach and Educational Leadership.

Foley Educator Named Recipient of Award for Excellence (Coach)



Daniel Carlson, a teacher and coach at Foley High School in Foley, MN was recognized October 5 with a 2023 Outstanding Educator Award.

Carlson is one of three educators being honored by Synergy & Leadership Exchange for outstanding accomplishments and contributions to student learning. His award comes in the Coach category, which recognizes teachers who are exemplary coaches of either academic or athletic teams.

Daniel Carlson is an Industrial Technology Instructor at Foley High School and has been teaching for six years. Dan also coaches the Foley Fishing Team. The fishing team was a new idea Dan started first as a discussion. It grew into a presentation in front of the school board, then secured multiple team sponsors, and finally students qualified and competed at the Minnesota High School Fishing State Tournament. The program has grown to include more than 30 students to which Dan is paid nothing to coach.

Carlson teaches to expose students to what they can do with their own two hands. The skilled trades often get overlooked when it comes to school, and he likes to emphasize the importance of the various careers and jobs within those fields. His goal is to expose students to these paths and professions as not everyone is destined to earn a 4-year degree or even attend a postsecondary institution. Carlson finds that he is constantly striving to be the teacher and person he did not have in high school, and he tries to push all students to try new things and achieve at higher levels.

Principal Shayne Kusler shared, “Mr. Carlson is skilled in building relationships with students and uses this skill, combined with genuine interest, to build strong rapport with students across the student body. He is easily one of our most well-liked staff members and combines this with high expectations to support students to great success.”

www.foley.k12.mn.us



Dilworth-Glyndon-Felton Educator Named Recipient of Award for Excellence (Teacher Achievement)

Kerri Westgard, a teacher at Dilworth-Glyndon-Felton middle school in Glyndon, MN, was recognized October 5 with a 2023 Outstanding Educator Award.

Westgard is one of three educators being honored by Synergy & Leadership Exchange for outstanding accomplishments and contributions to student learning. Her award comes in the Teacher Achievement category, which recognizes exemplary teachers who support, inspire, and assist students to attain greater learning as evidenced by student achievement.

Kerri Westgard is a middle school geography teacher. She currently teaches at Dilworth-Glyndon-Felton Middle School and has been teaching for 29 years. One large community-based project her students recently completed involved discussions with parents, city council members, teachers, students, school board and community members about ways to reduce or eliminate single use plastic. This project is an example of Westgard driving her students to dig deeper, come up with solutions to an everyday problem and take action to create change.

Helping students realize how much they have to offer this world drives Westgard’s mission for teaching. She became a teacher because she wanted her life’s work to be meaningful and to be part of shaping minds that are dedicated to making the world a better place. Westgard strives to be a person that leads by example, holds high expectations for herself and others, and works tirelessly to provide opportunities that empower students, which comes through with everything she does.

Principal Katie Oman shared, “Ms. Westgard is an exemplary teacher who supports, inspires and assists students in attaining greater learning, as evidenced by their outstanding student achievement.”



Chaska Educator Named Recipient of Award for Excellence (Teacher Achievement)

Peter Welle, a teacher at Southwest Christian High School was recognized October 5 with a 2023 Outstanding Educator Award.

Welle is one of three educators being honored by Synergy & Leadership Exchange for outstanding accomplishments and contributions to student learning. His award comes in the Teacher Achievement category, which recognizes exemplary teachers who support, inspire and assist students to attain greater learning as evidenced by student achievement.

Peter Welle is a high school history teacher at Southwest Christian High School in Chaska and has been teaching for 18 years. A favorite project in Welle’s class is when students choose a person that they have a relationship with and conduct a research interview with them to collect stories about their life. Students then write a paper, including a portion of their interview, and contextualize it within a broader theme or moment in American life that they have researched. Welle notes that while there are still significant academic skills practiced, the energy is directed toward the relational aim of honoring and blessing someone that the students care about.

Welle loves helping his students make sense of the world and walking alongside them as they explore the questions and challenges of the past. He wants to equip his students with all the background knowledge they need for their journey, but also liberate social studies class from the “tyranny of worksheets.” Welle has built a reputation as being an engaging teacher who brings social studies classes to life.

Principal Dan Becker shared, “We are blessed to have a teacher like Mr. Welle educating and inspiring not only our students but other faculty as well. He is a gift to our community and to the teaching profession.”



www.dgf.k12.mn.us/schools/dgf-middle-school



www.swchs.org



Educators are first nominated for the Outstanding Educator Awards program by students, parents, colleagues or community members. Those who accept the nomination provide additional information for consideration by Synergy & Leadership Exchange and a selection panel, which reviews and ranks the nominees.

Synergy & Leadership Exchange is a nonprofit organiza-

tion and program of the South Central Service Cooperative. Synergy’s mission is to foster collaboration to advance the development of ethical citizens, provide educational resources, and celebrate achievement and best practices in Minnesota schools, businesses and communities. For more information on the Outstanding Educator Awards Program and Synergy & Leadership Exchange, visit: www.synergyexchange.org.

Osseo Area Schools Celebrates Minnesota Paraprofessional Recognition Week

Osseo Area Schools

Minnesota has declared Jan. 21–27, 2024 as Paraprofessional Recognition Week. In Osseo Area Schools, Education Support Professionals (ESPs) serve in multiple settings, including support for instruction, student activities, and individual students, as well as numerous other tasks that contribute to educational success.

Jackie Palmer, an ESP at North View Middle School (NVMS), sums it up best: “Schools couldn’t do it without us.”

Osseo Area Schools relies on ESPs to perform a variety of critical tasks to ensure schools run smoothly and students get the support they need.

Osseo Area Schools has more than 800 ESPs in its buildings, and the district is grateful for the contributions of each. In honor of Paraprofessional Recognition Week, we are shining a spotlight on just a few ESPs who contribute to the betterment of the schools they work in.

Jessica Kalisch-Kidstop



Jessica Kalisch is a dedicated ESP in the Osseo Area Schools Kidstop school-age care program.

Kalisch splits her workday between Kidstop before and after school care at Elm Creek Elementary and Fernbrook Elementary Schools. As a greeter, Kalisch is the first friendly face everyone sees at the beginning and end of each school day. “I greet everyone by name,” she said. Her warm demeanor and eagerness to greet students, families, and staff speak to her passion for uplifting students, letting them know they are capable and encouraging them to strive for anything they want to be.

In a typical workday, Kalisch works to help students problem solve and feel safe in a nurturing school environment. She also supports the Kidstop program by running reports and replenishing supplies. “There is so much variety in my role,” she said.

“If you enjoy working with kids, it’s a job to apply for,” she encouraged. “Each day is a new adventure.”

As a long-time Kidstop staff member

(Kalisch’s career with the district spans three decades), a highlight for Kalisch has always been working during the district’s summer programs in her role to support students during field trips. Kalisch said the field trips are a great way for staff to get to know students through shared experiences in the community.

Stephanie Halverson-Oak View Elementary School



Stephanie Halverson, an ESP at Oak View Elementary School, works each day to help students succeed. She has served on the academic intervention team since 2018, working with students in all grades on academic intervention groups for reading.

Before joining the academic intervention team at Oak View, Halverson worked in public administration and as a corporate trainer. She started volunteering at Rush Creek Elementary School when her children attended there, feeling a call to help out.

“As I was building my own family I could see that the needs of our kids were growing, so I started volunteering to support reading interventions. There really is nothing better than watching a child connect the dots on learning skills,” Halverson said.

From greeting students at the beginning of the day to being available for social-emotional learning during five minute passing times, Halverson works to support students one-on-one. A highlight for her is sharing students’ progress with them each week during intervention sessions to celebrate and affirm their hard work.

“That’s what most of our ESPs feel passionate about, is closing the gaps for our students. Our licensed staff is tied to their classroom team, where we are able to move throughout all of our grades in the building,” Halverson said. “It is fabulous to be able to have five minutes to sit with a child in the hallway and try to help them regulate when they are upset.”

Halverson enjoys working at Oak View because the staff act as family and support each other. She has found they are all very passionate about advancing student voices,

teaching and allowing them to advocate for themselves.

“There are places and spaces for people that are feeling little voices of calling and wondering if there is a place for them in our school system to support our students. There are so many opportunities, and I would just encourage people to reach out to their local schools if you feel like you want a new career,” Halverson said.

Mary Anne Maurer and Jackie Palmer-North View Middle School (NVMS)



If you visit NVMS, you’re likely to be greeted by two friendly faces: Mary Ann Maurer and Jackie Palmer, the two administrative ESPs who run the school’s front office.

Maurer has spent the past nine years at NVMS and 15 years at Cedar Island Elementary before that.

“I enjoy it so much,” Maurer said of her job. “I should be retired right now, but I’m still here because I love all the people here.”

Jackie Palmer spent two years at NVMS about a decade ago, then returned to the school after working at another district building for a few years.

“I love it here, we’re like a family,” she said. “We like to create a calm, welcoming atmosphere here in the office.”

In the front office, Maurer and Palmer complete a variety of tasks that are critical in ensuring the smooth operation of a school, including interacting with students and families, managing attendance counts, ensuring school safety with visitor check-ins, securing substitute teachers to cover staff absences, helping schools com-

municate effectively with families through e-newsletters and other methods, and more. The pair noted that fellow ESPs Kim Sturdy and Brenda Roberts are also integral to the success of the NVMS office.

Maurer and Palmer credit NVMS’s collaborative environment and compassionate leadership for the school’s success, along with the support from all the school’s ESPs.

“ESPs are amazing people,” Palmer said. “We do so much and don’t complain, we just get things done. It all takes teamwork.”

Rob Stout-Fair Oaks Elementary

Rob Stout began his career as an educator before moving into the corporate world for most of his working years. He retired around the time of the COVID-19 pandemic and heard stories of decreasing math and reading scores among many young people in the wake of the pandemic, so he decided to dust off his teacher’s cap and try to make a difference by jumping back into the education world as an ESP at Fair Oaks Elementary.

“I loved teaching, it’s probably what I should have done my whole life,” Stout said.

Stout now spends 30 hours a week helping students who are working to get up to grade level in reading and math skills, and he also jumps into classrooms during work time to help support students with questions.

“The kids are just so enjoyable to be around and eager to learn,” he said. “They’re making great strides, and at the end of the day I feel like I’ve made a difference in kids’ lives. It’s just so rewarding, there’s no other way to describe it.”

Stout said Fair Oaks Elementary is a fantastic school with an extremely talented, dedicated staff, and it felt like the right fit for him right away. Where he used to work 70-80 hours per week in the corporate world, he now says his six-hour days fly by.

“Everybody in this school just pulls together, it’s absolutely amazing and I’ve never experienced anything like it. It’s just a great place to be.”

“He is a champion for our students and such a positive influence at Fair Oaks,” said Cheryl Piotraschke, a teacher at the school.

www.district279.org



2023 MASP (MN Association of Secretaries to the Principals) Administrator of the Year Brian Nutter, North Junior High School Principal



St. Cloud Area School District 742

Brian Nutter, North Junior High School principal and 2023 MASP (MN Association of Secretaries to the Principals) Administrator of the Year, knew he wanted to do something exciting for a career. At 18, he narrowed his choices down to two: a United States Marshal or a kindergarten teacher.

He started his path with criminal justice classes but quickly found them too boring.

“[Instead], I focused on that sociology track and getting generals done during the first year,”

explains Nutter. “I was in love with my wife. We were high school sweethearts, and she said she wanted to attend SCSU. She thought it would be the best place for us. And I said, ‘OK!’”

The couple moved to St. Cloud and Nutter took stock in the programming to see what was appealing. Technology education stood out to him. He loved his tech ed courses (woodworking, welding and computer-aided drafting) in high school. He decided to pursue an education path instead of law enforcement.

Upon graduation from SCSU, Nutter was offered a job at Minnetonka Middle School East. He taught technology education to seventh graders for a year before accepting a position at Roosevelt High School in Minneapolis, his alma mater.

“It was my dream job at the time – teaching in the shop that I spent a lot of time in in high school,” shares Nutter. “That first year in Minnetonka, I wrote school curriculum for a high school construction program that I started teaching the next year at Roosevelt.”

Nutter taught the classes he loved, including driver’s education, for 13 years. What inspired him to advance his career into administration was his experience being on the board of the Roosevelt High School Foundation. The founda-

tion helps raise funds for student scholarships, teacher grants and more. He still sits on the board to this day.

“As long as I’ve been in education, so since 2002, I’ve told people high school was such an important experience in my life,” says Nutter. “Education is much more than just the education. It’s about the experience and all that happens during that time in our lives. I try to remind people . . . [education] is not just in the class . . . but how we interact with people. Relationships that we build in the school can continue on for the rest of your life.”

Nutter completed his graduate degrees at St. Mary’s University and became an assistant principal and program facilitator in Minneapolis Public Schools prior to accepting the position of principal at North Junior High in St. Cloud.

He still loves tech ed classes. He pops in on the year-long construction class every now and then at North.

“If Ms. Laudenbach is out and we can’t get

a sub, I’m the first person to volunteer to cover that class,” laughs Nutter. “I covered a build for her last year when she was at a robotics competition just to keep the kids going on the project.”

Wanda Sis, the lead clerical at North Junior High nominated Nutter for his recent award.

She says, “One of the key components [to Nutter] is effective communication . . . and his ability to lead by example. He is humble, kind and hardworking. He’s handy to have around, to be our ‘Mr. Fix-It.’ He advocates for students, families and staff . . . and seeks input and listens before making decisions.”

Whether Nutter is leading his school staff, teaching in the classroom or connecting with students, he experiences excitement every day—even if it isn’t in a kindergarten classroom!

www.isd742.org



Brett Lobben, Eden Prairie Schools, Selected NAESP National Outstanding Assistant Principal *Continued from Page 1*

with fostering strong relationships built on trust, Lobben adopts a strengths-based approach. He initiates coaching conversations by emphasizing strengths, engages in reflective questioning, fosters a culture of continuous improvement, and invests in nurturing relationships. “. . . I build trust in small interactions that occur over time: the small notes of acknowledgement and appreciation that are left in a classroom, the quick conversations in the hall, and by seeking out that one voice that has not been heard. These small details can be easily overlooked in our fast-paced school environments, but they also go a long way to building trust.”

With over 26 years of experience in education, including roles as a music teacher, q-comp instructional coach, and a research, evaluation, and assessment coordinator, Lobben’s journey led him to assume the role of assistant principal at Forest Hills Elementary in 2013 before joining Prairie View Elementary in 2020.

Established in 2011, the National Out-

standing Assistant Principal TM program aims to recognize and honor exemplary assistant principals and prepare them for future leadership roles. This program promotes educational excellence for pre-kindergarten through eighth grade (PreK-8) schooling and calls attention to the fundamental importance of the assistant principal. NAESP will share their successes and best practices in a practical document for other principals to utilize.

MESPA is the professional association of Minnesota’s elementary and middle level principals and has represented Minnesota’s principals since 1950. MESPA is affiliated with the National Association of Elementary School Principals.

Courtesy of the Minnesota Elementary School Principals’ Association.

www.edenpr.org/prairie-view-elementary



Superintendent Gothard Named Finalist for 2024 National Superintendent of the Year

Continued from Page 1

tion (DOE) as an example for districts around the country, and he has presented for the U.S. DOE as a part of their Raise The Bar series.

The district’s strategic plan, SPPS Achieves, focuses on reducing disparities in student success, especially among Black and American Indian students. Over the past three years, Dr. Gothard’s leadership team has proactively identified credit-deficient students early, offering virtual learning periods and after-school credit recovery options to help them catch up and stay engaged. Credit recovery initiatives were achieved by the reorganization of the alternative learning centers (ALC) oversight departments to bring them closer to the district’s Division of Schools and Learning to align the ALCs with all schools in SPPS. Dr. Gothard encouraged these departments to rethink credit recovery by making it more meaningful, as traditional credit recovery approaches often provided the same content with less time and support, resulting in negative student experiences and outcomes. SPPS also launched the Experiential Summer Learning program, which pairs core subjects with real-world experiences beyond the walls of the traditional classroom. This innovative summer learning program led to not only successful credit recovery but also increased student engagement and a re-energized enthusiasm for learning. The results of the credit recovery and the intentional experiential learning efforts created positive growth in four-year graduation rates from 2021-2022 for students who are American Indian (58.6% to 61.1%), Black (70.4% to 73.5%), and students who identify as two or more races (76.3% to 79.3%).

Dr. Gothard is an active member of MASA

and the American Association of School Administrators (AASA). He has served on the MASA Board of Directors for four years and is currently the MASA President. Dr. Gothard also serves as a member of the Professional Assistance Team, providing MASA members with professional and confidential support during times of need.

Dr. Gothard is involved in a number of other community and education organizations, including the Center for Model Schools National Advisory Board, Council of the Great City Schools Executive Committee, Edgewood College Board of Trustees, 3M Racial Justice for the Future of Work Community Coalition, Genesys Works Twin Cities Board of Directors, Generation Next Board Co-Chair, Ramsey County Juvenile Detention Alternatives Initiative Governance Committee, and the Saint Paul All Ready for Kindergarten (SPARK) Executive Committee.

Throughout his career, Dr. Gothard has received a number of awards, including the 2023 Laureate from the Junior Achievement North Hall of Fame, 2022 Green Garner Award Finalist from the Council of the Great City Schools, 2021 Edgewood College Distinguished Alumni Award, and the 2021 MASA Administrator of Excellence (Region 9).

Information courtesy of Saint Paul Public Schools and the Minnesota Association of School Administrators.

www.spps.org

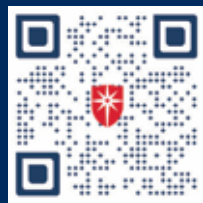


Congratulations, Brian Nutter!

Saint Mary's University of Minnesota extends heartfelt congratulations to alum Brian Nutter, principal of North Junior High at St. Cloud Area School District 742, for being awarded the 2023 MASP Administrator of the Year. He earned his K-12 principal licensure from Saint Mary's in 2013.

Brian's commitment to education serves as a true inspiration, leaving a positive impact on his school community. Join us in celebrating his well-deserved achievement and exploring endless possibilities in higher learning.

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Spring 2025	EDUC 746 Diagnosis & Evaluation of Reading Ability	3
Summer 2025	EDUC 747 Supported Literacy	3
	EDUC 748 Supported Literacy Practicum	3
Fall 2025	EDUC 749 Strengthening Professional Practice	3
Spring 2026	EDUC 751 Reading Research	3
Summer 2026	EDUC 750 Guiding & Directing Literacy Programs	3
	Your Choice of Elective	3



Application deadline to start summer 2024 is April 1

uwsp.edu/teachingtoday