



## Otter Tale County & High School Collaborate on Welding Project



The Otter Tail County Highway Department's Ditch and Drainage Inspector, Colby Palmersheim, joined forces with the Fergus Falls Kennedy High School (KHS) welding class. Together, they launched Otter Tail County's Culvert Grapple Hook innovation, a winch-powered tool to clean out culverts. With a grant from the University of Minnesota Local Operational Research Assistance (OPERA) Program, the County was able to purchase a winch to power the hook. This collaborative effort has resulted in an innovative solution that saves time, enhances worker safety and highlights the talent of local youth.

Palmersheim's idea addressed the challenge of clearing clogged culverts, particularly those located beyond the reach of conventional equipment. The challenge of welding inspired a partnership with Mr. Dennis Wutzke, the welding teacher at KHS,

who enlisted the talents of Micaiah Abramson, a sophomore student, to bring the concept to life. Abramson enthusiastically accepted the challenge and began working on the mockup.

Abramson reviewed Palmersheim's handwritten mock-up and used scrap pieces of metal from the KHS welding shop to weld the prototype. Once he was satisfied with the mockup, he began to create. Using advanced welding techniques, Abramson dedicated over forty-five hours

to meticulously crafting the Culvert Grapple Hook. The final product features a heavy-duty post with retractable fins that can be connected to a winch-powered mechanism used to clear culverts of various sizes.

Reflecting on his experience, Abramson shared, "I had finished my project, and Mr. Wutzke asked if I would like to make a culvert cleaner tool for the County. I had to make a few adjustments, add to the post, and weld two hooks at the top of the design that weren't included in the original design. It was a fun project."

Palmersheim and Abramson recently tested the hook in a mock demonstration. Branches were stuffed into two different-sized culverts, and the hook was connected to the winch on a pickup truck. The hook pulled all

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## Bees, Produce, and Décor Program Honored for Innovation



*Wadena Area Learning Center  
Freshwater Education District*

Freshwater Education District — Wadena Area Learning Center (WALC) Mid-Level Program is an experiential program that has since its inception been a classroom that provided hands-on learning for students who needed a nontraditional way to learn. Students are at risk of not graduating from 11 different school districts in rural, central Minnesota and the student population is nearly 100% qualified for free and reduced meals. Many of their students have lived through and experienced more than they should have to at their age.

The staff is small, but their passion for their students is big. When you visit the Wadena Area Learning Center, you quickly catch that respect goes both ways — from the staff to the students and from the students to the staff. In this unique learning environment, the traditional classroom experience wasn't going to do, so the staff got creative.

Bees, Produce, and Decor was created over time with support of their district, local community, and grant dollars. The program started with a hive of bees which quickly turned into growing flowers for the bees and building products in the woodshop. The students run the program as a revenue-generating-business, where all revenue is invested back into the program to grow



pay for expenses and grow the experiences. The variety of activities that are part of the Bees, Produce, and Decor program results in almost every student finding their fit and engaging somehow in the program.

"The classroom finally feels like a safe place to learn and to even fail. Students learn that a failed idea is just another opportunity to learn. It is a way to teach students to advocate for themselves and their ideas, to connect with the curriculum, and enjoy success in school. Our students have strong personalities, and we want them to use them to be successful as adults in our community," says Heidi Heino at Freshwater Education District.

Students learn business and technology skills, see firsthand how climate affects plant and bee growth and gain experience creating their own business where they can be their own boss. They embed the understanding of the importance of being a part of their

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A man with short hair and a goatee, wearing safety glasses and a grey long-sleeved shirt with "METAL CRAFT RIVERSIDE" on the chest, stands with his arms crossed. The background is a blurred industrial setting.

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## Saints Manufacturing Student Success



By Ian Wreisner, ABC Newspapers

Walking into Saints Manufacturing, it would be easy to mistake the space as a bona fide factory floor. Each machine is stationed by a knowledgeable student, product is getting prepared for real-world use and the communication making sure everything is running smoothly and safely is constant. The only difference is that this is taking place in a St. Francis High School classroom.

The Saints Manufacturing program, headed by instructor Erik Trost, is a series of elective classes that teaches students aspects of manufacturing like welding, machining, machine programming, print reading and more — ranging from quoting a job to running a shop floor.

“In this class, the learning objectives change daily because it’s a live, living thing,” Trost said. “Different tasks come in, different orders come in, so then we have to shift gears. They’re still working on the skill building things they’ve learned in the prerequisite courses, but now we’re talking about sequencing jobs, logistics, making sure we’re processing the right materials.”

The Saints Manufacturing class is the highest step in the manufacturing program, which has three prerequisite courses that teach students how to safely operate each piece of equipment in the lab, including a machine tools class, that qualifies students for the manufacturing class.

Saints Manufacturing takes on orders from the community, with its largest collaborator being the Minnesota Department of Transportation. As Trost talked about the program, students were currently working on manufacturing carts that would store plows during the off-season and suspension pieces that would support them on their trucks during next season. Students are involved during the whole process, from quoting MNDOT for time and supplies up to shipping the parts out.

“Our students are having to take a look at

a project from start to finish,” Trost said. “It’s a real job, for a real customer, for real money.”

All of the funds received by Saints Manufacturing goes right back into the program. This year sees the class hitting new heights with the \$200,000 mark getting crossed, a testament to the overall growth seen by Saints Manufacturing in recent times. A pre-pandemic expansion to the lab saw the space double in size, and slots for the elective classes continue to fill up. Saints Manufacturing is operating at a capacity that Trost previously hadn’t expected.

“I never thought in a million years we’d have three CNC (computer numerical control) mills sitting on our floor at a high school, where there’s times we could use a fourth,” Trost said. “I never thought we’d be running weld positioners. With some of the MNDOT stuff we’ve had to upgrade our welding fleet. These are jobs that students have quoted and worked through.”

Trost emphasized that the class does not take out contracts, but work agreements. That means that there’s less of a focus on deadlines and a greater emphasis on learning, with the understanding that the job will happen at a pace the students can handle. Customers are receptive to the agreement, and happy to provide the work as Brian McDonald with MNDOT explained.

“We understand it’s a class,” McDonald said. “I’m heavily involved, I’m training my guys here to have that understanding that we look down the road to the stuff we need so we can give those guys plenty of time to get the things completed. Some of the simpler parts, they’re turning them around as fast or faster than we’d get from private industry.”

The agreement works well for Trost, too, who intentionally tries to select jobs that will be most beneficial for his students. Reasonably sized orders lead to more learning for students who will have to switch parts more often, keeping students engaged and on their toes. Large orders aren’t out of the question, but “lose their educational value” when students

are making one kind of component across multiple class periods.

McDonald was receptive to the partnership ever since Trost reached out about it. MNDOT was looking for such an opportunity, and were happy to provide opportunities to train the next workforce.

“It’s been awesome,” McDonald said. “It’s a great program, it’s a win-win for both of us. Obviously the kids are getting an education out of it and we’re getting a quality product in a timely fashion. He’s building the next workforce, that’s what he’s doing. Those kids, the benefits they’re getting out of it are going way beyond welding and machining. They’re building real-world skills.”

Ask any of the students in Saints Manufacturing what they’re learning in class, and they’ll prove McDonald right. When asked about the most valuable things they’re learning in class, their answers will go beyond how to operate a piece of equipment.

“Honestly, patience,” student Lydia Nelson said. “I’ve learned a lot about just slowing down and thinking about things more fully and from different angles.”

Student Kody Schumacher, who acts as a class production manager, responded that “Communication is key.” As a student in a leadership role and hopeful future elevator trades member, the lesson is invaluable.

Still, some students are able to learn important lessons about themselves. Student John Deschenes was able to discover a future career through his participation in Saints Manufacturing.

“I started out not knowing what it is I wanted to do (in the future), but after three years in the program I know I want to go into CNC programming,” Deschenes said. “I feel pretty lucky to have (Saints Manufacturing). I don’t know what would have happened if I didn’t have this.”

With the way that the program has come together, with an education-first approach and

with understanding partnerships, Trost says that this sort of self-discovery is exactly what’s intended within the program.

“It’s a great opportunity,” Trost said. “If students think maybe they want to go into welding, that student can come in and try it — and if they don’t like it, they can try machining or another facet of manufacturing. The important part is that it’s not a business, it’s a class. You can switch gears.”

Trost has received welcome responses outside of the program, as well. Saints Manufacturing finds plenty of support with the St. Francis School Board, President Mike Starr included.

“It’s outstanding that we have something like this,” Starr said. “As a school board president, I’m amazed with what these kids are doing every time I walk in.”

Industries have also been receptive, Trost says, even with the misconception that industry leaders would be upset that students are “taking their work.” Trost heard as much when attending a conference in Wisconsin where another school was presenting their own manufacturing program.

“Someone asked what the industry thought about ‘you taking their work,’” Trost said. “Before anybody could even call on him, (a business owner) raised his hand and said, ‘As a business owner of multiple businesses, my quote to you is if you can’t compete with a high school, you shouldn’t be in business.’”

Local businesses have donated equipment and experience to Saints Manufacturing, with Trost reporting one business donating upwards of six figures in equipment and materials. For Trost, though, the most important thing that his students can receive is knowledge.

“I’m not worried as much about the financial piece as we’ve got most of that covered,” Trost said. “The way that you can be most beneficial to this program is your intellectual

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## St Cloud State University

# Technology, Engineering & Careers (TEC) Network

The TEC Network is all about building partnerships with school and businesses around the state. The TEC Network has recently received grants and contracts to support CNC training, robotics teams and youth apprenticeships across the state. There are 2 specific programs that will be partnering with schools and businesses:

- DEED Grant for Robotics Teams and STEM Internship Programs
- America's Cutting Edge (ACE) CNC Training

### DEED Grant for Robotics Teams and STEM Internship Programs

This program will support 40 high school robotics teams, comprising approximately 800 students, in Greater Minnesota through direct team funding support, including access to practice fields and advanced equipment through SCSU's Technology, Engineering & Career Network. The project also includes career awareness workshops and events for teams and students. The student internships component of the program includes mentorship training and support for both the students and their company mentors.

### America's Cutting Edge (ACE) CNC Training

St. Cloud State University—TEC Network has been awarded a contract to provide free CNC training to students, teachers, and industry workers in outstate Minnesota. The ACE Net (America's Cutting Edge - <https://www.americascuttingedge.org/>) is designed to allow people to gain the skills needed to answer America's call for more machine tool professionals with free online and in-person training.

The first phase of training will be to train teachers who will then be able to bring the training to their students. Equipment and supplies will be available to the schools at no cost. As part of this program, SCSU TEC Network will provide training and have the opportunity for delivery and use of a HAAS or Forest Scientific mill at your school. The second phase of the program will be a mobile training center, including 2 mills, CNC trailers and laptop computers to do training at schools and/or businesses.

This is a 2-part training:

1. 6–10 hours of online training
2. 32–40 hours of in person training at SCSU or in your area

If you are interested or would like more information, complete the survey at: [https://www.surveymonkey.com/r/ACE\\_edu](https://www.surveymonkey.com/r/ACE_edu)

### TEC Network Program

The TEC Network program continues to support Technology Education, CTE and STEM programs around the state. Schools which are a part of the Technology Network will engage in:

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  - b. Maintenance support for the equipment
  - c. Opportunity to purchase equipment at demo rate
  - d. New equipment added regularly to meet changing needs of industry
  - e. Equipment is scheduled for 3–4 weeks at a time throughout the year.
  - f. Concrete & Masonry tools, equipment, and demonstrations
2. Professional development:
  - a. Graduate courses
    - i. Credits for lane change
    - ii. Graduate Certificates
    - iii. Master's Degree in Technology Education
  - b. Summer workshops
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  - d. CTE License
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3. Program development and review
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#### For additional information:

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## Saints Manufacturing Student Success

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support. We can always use help with machining, help with fabrication and working with students.”

If Trost has any regrets about the program, it's that he doesn't have an exact number for how many students entered a trade they learned while in Saints Manufacturing. Former students are some of the industry members who come back to teach students how to use equipment or provide valuable workplace insight.

Looking forward, Trost hopes the program can give more back to the students. Before the COVID-19 pandemic, the Saints Manufacturing program was in talks with the state legislature to get a bill passed that would allow program profits to go toward scholarships for its graduating students. He was in the room with leaders from the Department of Education, Department of Labor and Industry and Minnesota's Governor himself before subsequent lockdowns derailed those plans. Trost hasn't lost focus on that opportunity.

“Within five years, the biggest thing I'd like to see moving forward is that scholarship program put in place,” Trost said. “How can this become more advantageous, more benefi-

cial to my students? . . . I want to make sure I'm doing what's best for students from a scholarship perspective. . . . When COVID hit, not only were we on the backburner, we fell off the stove at that point. We're trying to figure out what that looks like moving ahead. Who do we need to get to the table to start having those conversations again?”

In the meantime, though, Trost and Saints Manufacturing will continue to focus on building well-rounded learners and workers, maintaining and growing partnerships with their local community and putting students ahead of the curve when they take their next steps outside of the program.

“When kids get done with Saints Manufacturing they have a leg up,” Trost said. “They can say they're from Saints Manufacturing, and people know what that means.”

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## Otter Tail County & Fergus Falls High School Collaborate on Welding Project

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the tightly packed branches out of the larger culvert. Before it is used this spring, a few minor adjustments will be made for smaller culverts. Overall, the Culvert Grapple Hook was a success.

“Working with the High School shows the talent that will be in the workforce soon, shows students what types of positions are offered in County employment, and what types of problems county workers solve every day,” remarked Inspector Palmersheim. “This project highlights our ability to tackle challenges, thanks to the ingenuity and dedication of our local talent.”

Students and employers are encouraged to use the K12 Navigator to make connections and partner on engaging career exploration experiences. More information is available at the K-12 Navigator site. Otter Tail County also offers summer employment opportunities.



[www.fergusotters.org](http://www.fergusotters.org)







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#### • **Career and Technical Education (CTE) Graduate Certificate**

#### • **Work Based Learning (WBL) Graduate Certificate**

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## E3 Designs and Manufacturing

*Grand Rapids High School*

NEXT career pathways were started in our area in 2017. We were determined to develop a better process to get students exposed to and experience career pathways and this was a way to give students the best opportunity to experience careers that exist in our community, around the state, and world-wide.

Manufacturing and Healthcare were our main focus to start with as they were the greatest areas of need for employees throughout our area and around the country. This is where the fabrication and design class first originated. It is currently & better known as E3 Designs and Manufacturing, which is the name the students came up with the inaugural year of the class.

One of the great things about Next career pathways is that it involves not just Grand Rapids High School, it also includes seven of the schools under the IASC (Itasca Area Schools Collaborative) umbrella. This allows programming to cross borders that have never been crossed before.

Students attending one school have the ability to take classes at another school. This is a wonderful thing as we know not all schools can offer everything, so we have specialty hubs at locations for students to get advanced programming. In the first years we started with Grand Rapids High School, Greenways High School and Nashwauk-Keewatin High school as this made the most sense geographically. Next continued expanding to all the schools in the area, and this is where the Next career pathways name originated. As we got up and running, everyone kept saying: What is next? I want to do this next. Next we need to offer this to students.

The name stuck and we are always looking to what we can do Next to improve and make the student experience better.

The first year we really tried to form our own identity as we had students from three different schools. Being as close as we are there is always some rivalry, so we thought to overcome that by creating an identity that was unique to our class. 3 had to be involved as there were 3 schools participating. In developing the pathways, we wanted to have students Explore, Experience and Excel so the E was easily incorporated as well. One of the students said, "let's do E3 Designs and Manufacturing". It was a hit, and everyone agreed.

We tackled the colors and decided black needed to be in there as every school had black in its logo and added yellow to be different. We are lucky to have a Graphic design class in our building. Mrs. Boedigheimer and her students did a wonderful job of coming up with designs for our new class logo. It was easy as Lily had a killer design that all the students loved. To this day we still get tons of help/support from Mr. Boedigheimer and Mrs. Storlie in the print shop as they make all of our decals to go on our products so they look just as professional



as if from a regular manufacturing company. Little details like this make huge steps towards the authenticity of our products.

### Design and Fabrication . . . E3 Designs and Manufacturing

What do we do? How to me make it a capstone class? How can we make it the best learning experience for students within the school walls?

We got ideas from and took tours of Cardinal Manufacturing in Wisconsin, looked at other programs, and in the end, we blended it together and came up with our own plan for success.

We went all-in and developed a full-fledged business within the school. We researched ideas, looked for holes in the market, developed products, tested them and sold them on the open market like any other business would do. We wanted our own product line where we did everything to make it from ground zero. I don't know of any other program that does it this way and we wanted to make it something special for the students.

This way, everyone has a place in the business. There are positions from the business manager to the team that develops new products for us. It sounds like amazing company and it is, but there were a lot of bumps and bruises on the path we took. Those trials and tribulations, failures and successes have taught us way more than we could have ever imagined.

What product do you make that fills all those needs and gets kids excited to do the work?

Custom ice fishing gear that individuals could personalize was the answer.

We developed our first product by trying to fix an issue with an existing product. There are depth finders manufactured with a plastic

arm which articulates out to hold your transducer instead of the classic float. The arm is short and prone to breaking in the extreme conditions of winter fishing.

Our team developed the Hole Hooper. This arm is longer, providing easier access to the ice hole, and is machined out of aluminum which makes it much stronger. It's directly bolted on and can be custom engraved. Having no idea how to market this to the public we used social media and fishing forms to advertise our product.



Looking back, we were building the plane as we flew it, but this provided an amount of learning which can never be measured. We got our first real break with a Minnesota based custom rod manufacturer. They placed a large order with us, and this really built our confidence that we could do this, and that people liked our products. We crawled and clawed our ways through that first year not knowing where it would bring us. It was a wild ride for



all, but we all came out better and we had set something in motion that was truly unique.

Looking back at how far we have come over the years, the progress the students have made is amazing. They have elevated their game. We now make custom arms for several companies, including some big names.

Over the years we have designed and developed adapters for all of them so they are a direct fit and can easily be attached to your ice fishing unit.



We now have two Haas mills and one Haas lathe and are in the process of getting a live tooling lathe to fit our growing needs. We have spent the past two years developing products that we can now build with our new lathe. This year students took the initiative and developed a fishing plastic, that of course is for ice fishing and is sold at a local sports shop that has supported us since our inception. We hope to continue to grow this student run business and see where our students can take us. The possibilities are limitless as long as we give them the opportunities to succeed.







# Lakeville South Seniors Organize ‘Breaking Barriers: EmpowHERing Futures’ Career Event for 8th–12th Grade Girls



Lakeville Area Schools

In January, Lakeville Area Schools 8th–12th grade female students attended ‘Breaking Barriers: EmpowHERing Futures’— a career event organized by a group of Lakeville South High School seniors. The main idea behind the event was to inspire the next generation of girls to explore job opportunities in fields where women are the minority.

Throughout the event, students traveled

around to stations hosted by women from underrepresented fields. At each station, students learned about a different career field and participated in an activity related to that field.

Lakeville South seniors Halle Eastling, Anna Goodman, Ashley Sutton, and Tori Tschida put this event together for their STEM senior capstone project. Their event was inspired by the ‘Grit to Great’ career exposure event that was hosted at Apple Valley High

School a few years ago.

“As a group of young females, we felt the desire to inspire the younger generation of girls to explore some career paths they may have not already considered,” said Sutton. “Even though we have come a long way, there is still a stigma surrounding women in some professions, whether intentional or not.”

The student organizers started planning this event in the fall of 2023 with support from Lakeville South STEM teacher Dan Rawley and Century Middle School STEM teacher Jodie Bray. Their organization process included: searching for a venue; communicating and coordinating with event speakers and volunteers; reaching out to local companies for sponsorship and food donations; attending other STEM nights throughout the district; and advertising for the event.

One of their biggest takeaways from organizing and hosting this event was how important it is to keep moving forward despite setbacks.

“Planning this event taught us the importance of working through failures and how to keep moving forward when things don’t go as planned,” said Sutton. “We had problems such as communication failures, venue changes, and time constraints, but we kept moving forward and worked out conflicts that arose.”

The student organizers also mentioned how planning this event gave them confidence in their ability to bring people together and create change, even on a small scale.

“So often ‘change’ is seen as something that has to be miraculous and on a massive scale,” said Sutton. “This event showed us that by bringing even a small group of people together we could instigate change and inspire others even if it wasn’t the biggest event in the world.”

The students noted one of the most rewarding aspects of this event was meeting a group of positive, strong, and amazing women.

“We would love to give our gratitude to all of our amazing speakers,” said Eastling, Goodman, Sutton, and Tschida. “It was a gift meeting them all and we are so grateful for their time spent dedicated to our event, goals, and vision.”

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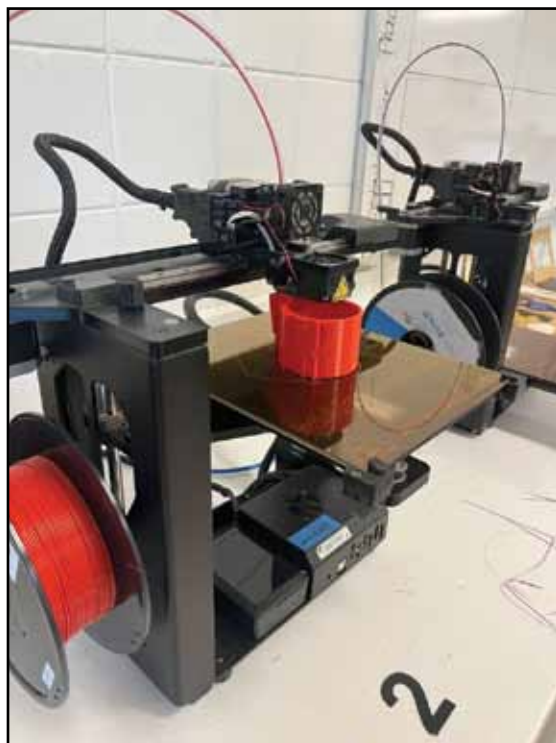
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## How To Make Almost Anything



Spring Lake Park High School

The 3D Student-designed objects for *How To Make Almost Anything*, is one of the most popular courses at Spring Lake Park High School. The Technology, Engineering and Design elective within the Career and College Pathways offerings provides a jumping off point for students to explore careers as they learn.

Course instructor, Karen Kutz, describes *How To Make Almost Anything* as “engineering meets arts and crafts.” The course attracts students across grade levels with a variety of backgrounds and interests. Some discover an interest and aptitude that leads them toward engineering courses. Some discover the same for art and design. Some discover none of this is for them — and that’s okay, too.

The career exploration is rich. The course also focuses on developing collaboration, creativity, problem-solving, and communication skills as students explore ideas and problems.

“I think it’s really fun to see something you make come off a 3D printer,” says Karen. “People really like the idea that they did that, and they were able to design and make that. I’m not grading them on quality of the thing they made, I meet kids where they are. I want them to learn new skills and show me their thinking.”

### 3D design process

To design the learning, Karen pulls experience gained in her pre-teaching career at a major medical equipment provider. There, she had roles in customer service, IT program management and business analysis and continuous process improvement (if you know the lingo, she’s Lean Six Sigma Master Black Belt certified). The course is anchored in the district’s

3D design process and concepts of human-centered design.

“Discover is really about figuring out what you want to design,” says Diana Quevedo, 9th grader. “Design is designing it the way you want — seeing and figuring out the problems and making your design. Deliver is getting your product and finding out what you like about it and what you could improve.”

A magnetic whiteboard on the wall has magnets with each student’s name and columns for each of the “D’s.” As students move through the steps, they move their magnet to the step they are on. There are four main projects students tackle in the course — a shoe design, 3D printing, laser cutting and a group problem solving project.

Shoe design kicks everything off to introduce and get students using the 3D design process. Small groups are assigned a persona pulled from Karen’s daughter’s Old

Maid game. There’s Officer Olivia, Builder Benjamin, and others. Each persona comes with a story, daily activities and design problems. The assignment is to discover more about their persona’s life and work and design a shoe for them.

Senior Alex Lueth was in a small group for “Bob the Builder.” Alex knew a lot about construction after taking the Intro to Trades course last year. He’s experienced stepping on chicken wire that went through the sole of a tennis shoe and knew firsthand some of the safety issues Bob would have. That firsthand experience helped inform the team’s design.

“We designed a shoe — or boot — with thicker soles,” says Alex.

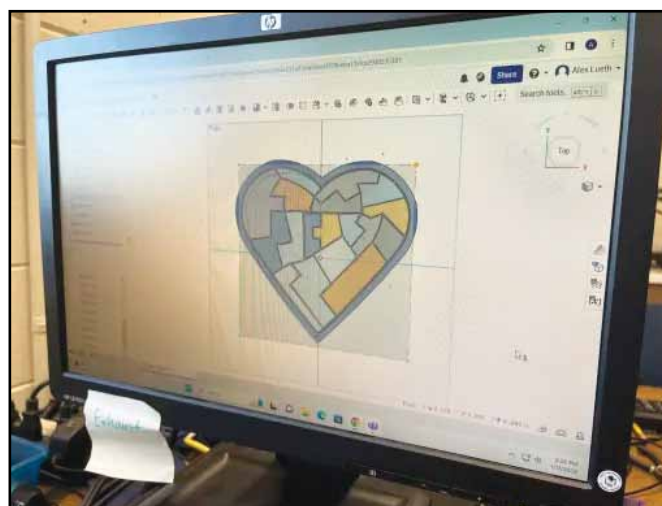
The chef’s shoe had extra padding for standing a lot in a busy kitchen. The athlete’s shoe had a grippier tread because grip is the core issue their athlete faced.

Alex likes how Ms. Kutz has the class set up. She gives all the work and does instruction up front and then she is available as students direct their own work time.

“You’re able to move at your own pace . . . the steps are clear,” says Alex. “I like learning how to make things on my own. If there’s something not working, I try different things and get help from classmates or Ms. Kutz.”

### Design for self, others

After learning and practicing the 3D design process, students work on two projects on their own — 3D printing and laser cutting. For the 3D printing project, students learn to use OnShape, a computer-aided design (CAD) software, similar to what engineers use, to create their designs. For this assignment students design something for themselves based on their likes and interests.



Diana made a bookend that has a dog and a cat cut out. It can double as a phone holder. She’s in the deliver phase of her project and has her final product in hand.

“So far, the class has been really fun,” says Diana. “I was curious — trying to find something I want to do when I’m older.”

Alex is in the design phase and working on the details of a brain teaser puzzle shaped like a heart. There’s a base holder and then multiple pieces that fit within it to make the heart.

“I like that I can make my own stuff to match my personality,” says Alex.

Senior Dawn Mack likes engineering a lot and has gone deep in the Technology, Engineering and Design pathway and taken all of the courses other than construction. Dawn’s project is a scale model of the robot the robotics team built last year — complete with articulated parts.

After the 3D printers quiet and projects are wrapped up, the class turns to laser cutting. For this project, students learn how to use Adobe Illustrator to design what will get burned into their wooden projects (coasters, bookmarks, wall art). The assignment also has a twist. They are designing for another person as they explore bias in design.

Alex and Dawn are partners — each other’s “clients.” Alex interviewed Dawn and found out Dawn wants to be an environmental engineer and is interested in Dungeons and Dragons. Alex is designing a piece of D&D wall art (or a coaster) for Dawn. Dawn is making a cat puzzle for Alex — who enjoys both cats and puzzles.

“Designing for someone else has been fun, because it draws on a strength of mind — being able to get in someone else’s head,” says Dawn.

Soon, the class will be working in small groups to solve a real problem for the final unit of the trimester. The students will choose a venue, and scenario and imagine problems, before identifying and solving for those problems.

“One venue might be a kitchen and the scenario is making dinner. What prob-



lems might happen?” asks Karen. “Or, I’m at Panther Stadium for a game, what could be some problems that could happen?”

The groups independently choose a scenario and design a solution. Over the last six years, Karen has seen prototypes for just about anything you can imagine. There are sunglasses goggles — for the beach on a windy day. There are creative nose plugs for walking the halls of the high school — you know, teenage smells. Each group makes a prototype, tests it, and makes a revision.

“Collaboration is a big thing in this class — how do we work together?” says Karen. “For the final project, the groups assign roles and have daily check ins, much like a real job, as they learn how to collaborate and work together toward their goal.”

### Discovering what’s next

The use of OnShape and Adobe Illustrator — both industry standard software products — ignites strong feelings among the class. It also can be an indicator of potential future paths.

“OnShape appeals more to the Engineering side as it provides clear dimensions, scale,” says Karen. “For people who like computer-aided design (CAD) using OnShape that they can move on to upper-level engineering classes



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## Student Interest in Manufacturing Path Continues to Grow



Shannon Granholm

Managing Editor, Quad Community Press

When teacher Andy Angell started working in the Centennial School District 12 years ago, his classroom looked very different.

He was teaching photography and video production. “The room that the shop is in right now was actually a technology room; where our garage door is now was a green screen. Things have made a full 180,” Angell said.

Around five years ago, Centennial Schools began offering elective courses in manufacturing. The offerings have continued to evolve as more students have become interested in that career path.

“We recognize that there is a huge need and demand for skilled workers in this area,” Angell explained. He added that the Lino Lakes/Blaine area happens to be congested with manufacturing companies that are seeking highly skilled workers.

The district began offering small engines and robotics classes. As student interest continued to grow and class enrollment grew, the course morphed into small engines and welding. Beginning next year, the district will officially kick off its Manufacturing Pathways, a series of

career-ready courses in general metals, metals technology, advanced metal technology and Cougar Manufacturing, a high school career technical education class that gives students hands-on instruction in the highly demanded engineering and manufacturing trades.

The program will teach students skills the industry is looking for while giving them an opportunity to explore career paths and options.

“I think it’s important for kids at the high school, and even at the middle school, to be thinking about their future,” Angell said. “Our education system is so focused on the core subject areas; a lot of kids just don’t know what they know ... This gives them exposure into some of those areas that are sought after and can be high-paid careers.”

As an educator, Angell said his job is to get students excited about the possibilities in manufacturing. “I could burn them out, doing all of the technical aspects of the welding test and how to get certified to be a welder, but I think that’s tech school’s job,” he said. “I want to get these kids hooked in manufacturing, get them excited about it and then ultimately help them find that next step from here, whether it is right to a job, or helping them get into a two-year program to further their education in manufacturing.”



A key part of the program is partnering with area businesses. So far, about eight companies have offered facility tours and donated materials for the program. Last year, five local companies joined forces to purchase over \$35,000 in equipment for the lab. Angell also regularly reviews his curriculum and ideas for projects with industry partners to make sure he is on track with what the industry needs.

Senior Tyler Celotta took Project Lead the Way (PLTW) introduction to engineering course last year. This year, he is taking small engines and welding. In the PLTW course, he learned about the engineering design process and developing products in computer-aided design, or CAD.

“Originally, when I was in middle school I had all of my courses prescribed to me, so when I got to high school and I was looking through the course catalog, I thought that was insanely cool that I could do welding in high school,” Celotta said. “As I progressed through my core class education, I realized like that I really like science, physics and math, so I took engineering and ended up really loving it.”

He has really enjoyed the courses because they are hands-on and industry-based.

“When I take a math or English class, it is hard to see the translation into real-world issues and or careers. I know I need those classes to

get into college, but I know I can take these skills into the real world tomorrow ... It really translates to real life.”

Celotta is planning to attend a four-year college to major in mechanical engineering, although he hasn’t decided on a school just yet. No matter what he decides, he knows he will be prepared.

“Looking at a lot of these higher colleges and seeing the caliber and the level of equipment that they are using, this really gives me a lot of confidence to be able to go in there and hold my own against incredibly talented students,” Celotta explained.

“In middle school, I was never expecting to be able to have access to the resources we do, and I know a lot of kids don’t, but I feel really blessed and fortunate to have access to this. Now I know if I go to some of these labs, I’m able to hold my own and understand the materials and get more out of the course rather than focusing all my time on operating the machines.”

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## How To Make Almost Anything

Continued from Page 10

here,” says Karen. “There are also careers for CAD technicians. With a two-year degree, they can earn a good living short of being a full 4-year degree engineer.”

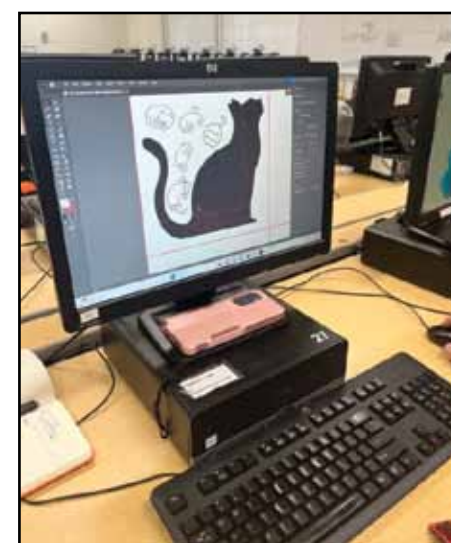
For those who are more arts and less engineer, there is another path.

“When students spend time using the pen tool in Adobe Illustrator, they really like the freedom of Adobe. It appeals more to the artists,” says Karen. “For those who really like using Adobe Illustrator, they often look at our design classes and graphic design or computer art through the art department,” says Karen.

From How to Make Almost Anything, students can go deeper into engineering, art, design or try out something totally different. Before they move on, they get to bask in some success and share their work. Projects are posted online and students “vote” and comment on the projects they thought were the best. Alex’s heart shaped puzzle was voted 3rd for the 3D printing project.

“The puzzle turned out really well,” says Alex. “I even forgot how to do it. It had me stumped and then I figured it out.”

For Karen, it’s amazing to see what kids figure out. She has shelves dedicated to some of the best and most intricate or complex projects. There are amazing examples. There’s a rocket pencil case, an AT-AT (from Star Wars),



ear buds, a chess set, and her personal favorite, keycaps.

“A student was learning Japanese so he made caps for the keyboard to help him be able to type in Japanese,” says Karen shaking her head. “Now, that was a fun one.”

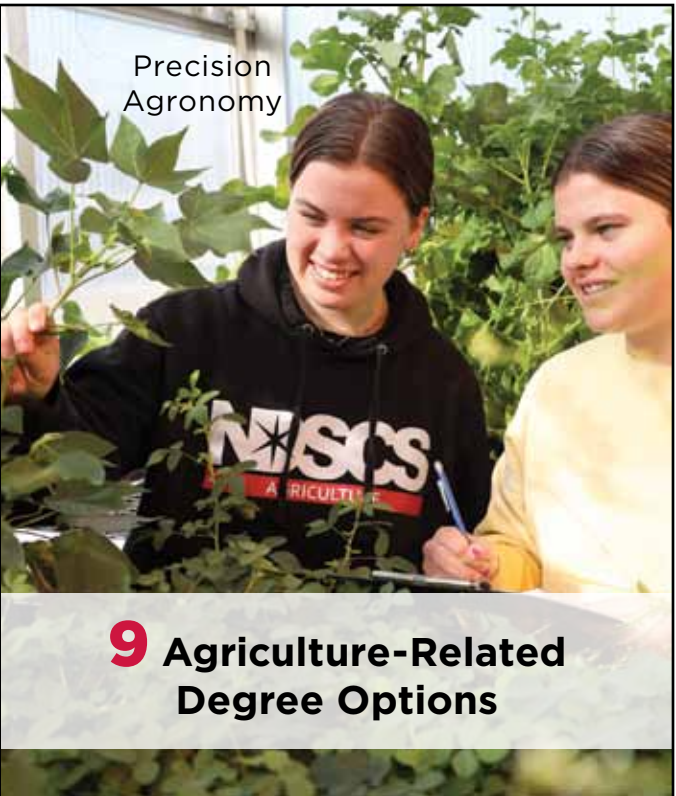
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## Working Together to Shape the Future



### White Bear Lake Area Schools

To support our mission of preparing students for success beyond high school, the White Bear Lake Area School (WBLAS) District 624, has developed career pathway opportunities. Our first career pathway in Manufacturing launched in 2015. WBLAS was fortunate to receive a Greater Twin Cities United Way grant that helped create that original WBLAS Career Pathway. Thanks to the work of faculty, staff, and dedicated industry partners, WBLAS Career Pathways now focuses on seven industries: Automotive, Business, Construction, Education, Engineering & Manufacturing, Health & Wellness and Information Technology. All of these pathways are experiencing local, statewide, and national workforce shortages.

These pathway programs allow students to take one or two courses or a series of courses and include opportunities for job shadowing, industry site visits, and credentials or certifications recognized in the field. The career pathway courses are appropriate for students

looking to continue their education at a two or four-year post-secondary institution and/or for students who are looking to enter the workforce after high school.

White Bear Lake Area High School (WBLAHS) students are priority number one. Teachers, counselors, equity specialists and members of the administration help students make informed decisions about their career choice and appropriately match post-secondary plans related to their interests and skills. Students have the opportunity to participate in listening sessions, job shadows, job site tours, and paid internships to name a few. Second, faculty and staff are able to focus on quality instruction and student relationships by receiving additional resources such as industry connections, teacher externships, and grant writing support. Finally, WBLAS Career Pathways creates and aligns educational opportunities based on the local community's workforce needs.

Through various grant opportunities, Career Pathways teachers are able to pur-

chase a variety of industry relevant equipment and curriculum that deepens their classroom instruction. Teacher Externships allow teachers to work at a local employer for a week in the summer to learn more about the industry. The Manufacturing Lab has machines that include but are not limited to: Haas and Tormach Mills, Bridgeports, Lasers, and 3D printers with the same or similar technology currently used in today's industry.

The Manufacturing Career Pathway starts with career exploration embedded in the classroom instruction. As WBLAS continues to pursue concurrent enrollment opportunities along with industry credentialing, additional experiences such as listening sessions, job shadows, job site tours, scholarships, and paid internships are offered to students in the related pathway. The district's Career Pathways also supports students' desires to be in a variety of elective courses. In an effort to close the opportunity gap, all students are encouraged to sign up to be a part of the program. As the district's Manufacturing Career Pathway continues to evolve, opportunities for students to participate in apprentice programs are also expanding.

WBLAS Career Pathways and the Manu-



facturing Career Pathway continue to grow into a program for all students regardless of their academic ability. As industry partners continue to create and align educational opportunities with their workforce needs, students make more informed decisions about their career path and WBLAS employees work to understand the reality of the future workforce, the White Bear Lake community proves that working together to shape the future is possible.

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## Excitement Over Ag is Growing at WCA



Eric Sawatzke  
West Central Area Agriculture Instructor

For the past seven years, work has been ongoing to prepare new and exciting opportunities for high quality educational experiences in Agriculture Education at West Central Area schools (WCA). This has created an environment that is teeming with excitement within the student body.

WCA Ag Education has held a consistent enrollment of about 110 students annually from 2018-2023. After the addition of a school greenhouse, which serves the local food shelf freshly grown produce, during the 2022-2023 school year and an all-new meat processing training trailer, student enrollment jumped by 41.8% in the 2023-2024 school year alone for a record enrollment of 156 unduplicated students! This represents 71% of the entire

student population 9-12 at WCA High School.

This incredible success was no accident. Through strong, purposeful community engagement, a movement in Ag Education at WCA occurred and over 60 community partners from business and industry to civic organizations got involved in deliberately offering high quality, high demand career training in plant production, greenhouse management, food processing, ag systems, as well as service learning. Beginning in 2019, community meetings have been hosted by the Ag Ed Department in the form of public forums known as "Coffee and Corduroy" in which community members voiced their opinions and opportunities to increase student engagement in Ag Education. The WCA Ag Education Boosters 501(c)(3) and the Growing Grant County 501(c)(3) were both borne out of these public forums to continue to foster

Ag Education opportunities for all students at WCA High School.

Most recently, the WCA Ag Education Department offered 11 different courses with most classes reaching capacity. The Ag Mechanics and Welding courses have been working with a local implement dealer which delivered a brand-new utility tractor that the students used to install an autosteer system for the end customer. Another project includes a tractor restoration that is being used to introduce mechanical systems to students such as transmissions, electrical, carburetion, and much more. Students will use the summer to bring the completed tractor to the county fairs, town events, and possibly the state fair to use as an educational exhibit.

Students in Plant Science and Greenhouse Management are working with the West Central Initiative Foundation in partnership with five local Lions Clubs and the local CHS Agronomy Cooperative to grow apples in the school apple orchard, sweet corn in the school sweet corn ½ acre plot, and vegetables and herbs in the school's greenhouse, hydroponic shed, and nine hydroponic towers to consistently grow and harvest fresh, local food year-round and then will use the new 36' food processing trailer funded in partnership with Ashby schools and the USDA to clean, process, and package the food. The students will then use a commercial freeze dryer, purchased using Carl Perkins funding, to freeze dry and then package the food in mylar bags. All of this food, most of which is harvested

during the summer months, will then be donated to the Grant County Food Shelf.

Students learned the skills related to these ongoing projects as a part of their regular class experiences and then engage actively in that learning process in a continuous system throughout the summer. Students will plant the sweet corn plot by operating an auto-steer tractor provided by CHS Cooperative with CHS agronomists and technicians providing 21st Century career training with the most direct hands-on experience possible. Students that have mastered plant production in the greenhouse and hydroponics systems will be operating those systems throughout the summer as Greenhouse Managers. Those same managers will be in direct communication with the Grant County Food Shelf Coordinator with constant dialogue about what will be harvested and available each week and what needs to be planted to prepare for future demand.

One major project beginning during the spring of 2024 includes students working on communication systems with end users of the foods grown and processed by the Ag Ed students. Work is being done to create simple, culturally appropriate recipes that will be printed and given to Food Shelf users any time they are provided with food from the WCA Ag Ed Department.

[www.isd2342.org](http://www.isd2342.org)



## Equine Program Centers on the Horse



Photo by Lucia Macedo on Unsplash

By Associate Professor Joanna Hergenreder

Tucked away in the hills of southwest Nebraska is an experience unlike any other, one that is challenging yet infinitely rewarding. The experience is offered through the NCTA Equine Industry Management Option which uses a unique teaching model, the horse at its center.

Students come to NCTA's equine program to gain the technical skills required for entry to

multiple areas within the industry, but they also gain proficiency in transferable skills. Such skills are difficult to teach in a traditional classroom setting. The teaching model employed in the equine program is able to build such effortlessly.

Classes such as the basic equitation class or equine practicum classes improve students' self-perceptions regarding their patience, confidence,

verbal communication skills and ability to work with others all while working within students' areas of interest.

Perhaps working with another species that has its own needs, devices and agendas facilitates this element to the learning process.

This teaching model is by far my favorite aspect of the equine program at NCTA. I currently serve the institution as an Associate

Professor, as the LTC and Equine Coordinator and as the Ranch Horse Team Coach. In my roles on campus, I have the privilege to work with our students and incorporate the horse in our daily interaction.

The greatest challenge with the teaching model and transferable skills is that it requires a high level of involvement from educators. I am confident in saying that the educators at NCTA, in all areas, are up to and work to meet this challenge. It is also what many of us enjoy most about this unique and incredible institution.

In addition to the hands-on, experiential learning based model, the equine program also structures opportunities for students to connect and network directly with industry. Students get to experience professionals we bring to campus, like Sherman Tegtmeier, as well as internship experiences all over the country, like one student that recently completed her time at Claiborne Farm in Kentucky.

This lends our students the distinct advantage to build a network with the industry prior to graduation, which results in high access to job opportunities.

Access to the industry and the employment opportunities it provides is also met through our

incredible array of extracurricular activities on campus. The equine program boasts two of the six competitive teams on campus, the Rodeo Team and the Ranch Horse Team.

The Ranch Horse Team students practice regularly and get to work with myself as well as various other trainers to hone skills for competition in events such as; ranch pleasure, ranch trail, reining, and the coveted cow work.

Unique to the collegiate ranch horse experience, competitions include collegiate riders but also bring professional trainers, clients as non-pro competitors, and future NCTA students in the youth divisions to the events. The Ranch Horse Team experience is like no other, just ask a team member!

The team travels to Colorado, Wyoming, and Nebraska and as far as Amarillo, TX for the Collegiate National Championships in April.

We also host one of the region's largest events, the Punchy In Pink Spring Round Up, in McCook, NE. The students plan, organize, and host this event.

For more information about NCTA, visit our website @ [ncta.unl.edu](http://ncta.unl.edu)





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## FFA Busy Bees at GHEC



*Mrs. McKenzie Wagelie,  
GHEC Ag Ed Instructor / FFA Advisor  
Granada Huntley East Chain School District*

Chartered in 2020, the Granada Huntley East Chain School District (GHEC) FFA chapter continues to grow with new members every year. Now in year 4, it is affiliated, meaning all students enrolled in an Ag class are in FFA. With 100 total members, the chapter is for students in grades 6-12. The chapter has 60 students who are active and participate in events and attend meetings throughout the year.

The GHEC FFA chapter focuses on community service and student leadership. The chapter

The second game was GHEC FFA Alumni & Supporters vs BEA FFA staff & parents. The winners of each game played in the championship game. This was an entertaining night with many laughs and memories for all participants and attendees. The GHEC FFA chapter donated their \$2000 proceeds to Heaven's Table in Fairmont, MN during Food Share Month in MN.

Each year the GHEC hosts Baby Animal Day for our elementary school students. Members bring in their animals and share facts and animal safety info with the kids. This allows FFA members to show off their animals as well as educate kids more about animals! Last year we

had over 10 animals! We look forward to hosting this event for our elementary students again this year on May 8th!

Here are some highlights from this year:

During FFA Week, some of the chapter officers passed out FFA/Ag themed cookies to all middle and high school students during lunch. This is a way to show our members appreciation for all their hard work in Ag classes and events.

Three of our chapter members earned an award at the Region 7 Awards Banquet. Lylah Becker received a plaque for winning 1st place in her Beef Production Placement Proficiency application and interview. Lysie Salic earned a plaque for placing 3rd place individually in the Livestock Evaluation CDE contest. Jorvik Jensen earned his plaque for placing 2nd in the Extemporaneous Speaking LDE contest.

This year we had 4 members at the Region 7 Interview Day. Two senior members, Jorvik Jensen and Tessa Johnson interviewed for their state degree, which they will receive in April at the State FFA Convention. Lysie Salic and Lylah Becker interviewed for their proficiency applications. Lylah received 1st place in the Beef Production Placement category and Lysie received 2nd place in the Swine Production Entrepreneurship category.

Participants in the GHEC FFA H2O leadership conference learned many new leadership skills and how to become better leaders. They also learned how to put these skills to use in different situations. They were able to bring back

what they learned to the officer team and apply it to better the chapter.

We had six members receive a free FFA jacket through the MN FFA Foundation Blue Jackets Bright Futures application. Students sent in an application about why they would like to receive a jacket and what it would mean to them.

Our members have been making holiday cards on a monthly basis to the Lakeview Nursing home residents. At the end of the school year a group of students goes to meet the residents and play bingo with them.

For a community service project, we had members tie blankets at the January FFA meeting. These blankets were delivered to the UHD hospital in Blue Earth.

The Granada Huntley East Chain School District is located in beautiful South Central Minnesota. GHEC schools serve the communities of Granada, Huntley, and East Chain as well as students from the Fairmont, Blue Earth, Winnebago, Truman, Elmore, Welcome, and Delavan areas.

As a small community school, we place a great emphasis on living the vision of being "committed to excellence in technology, academics, leadership, and extracurricular activities" and being a school "where everyone matters."

[www.ghec.k12.mn.us](http://www.ghec.k12.mn.us)



stays busy throughout the year with numerous community service projects, monthly meetings, community and school events. Some of our highlight events throughout the year include: Grain Drive, National Convention, CDE/LDE contests, Donkey Basketball, FFA Week, Egg My Yard, Baby Animal Day, County Fair, and much more!

This year the FFA chapter partnered with BEA FFA to host a Donkey Basketball Fundraiser during FFA Week. This event was a great fundraiser for local food shelves. Members from both chapters started the event by hosting a free will donation meal. After that ticket sales and concessions took place. Then the main event started with GHEC FFA members vs BEA FFA.





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## Martin County West Agricultural Education — CTE in Action



*Stephanie Wohlhuter*  
AgriScience Teacher/FFA Advisor  
Martin County West Jr/Sr High School  
District 2448

The Martin County West Agricultural Education program is a comprehensive program that covers a wide array of interest areas and career options. There are three agricultural educators that deliver courses in all of the agricultural pathways, focusing on providing opportunities for students in all potential post-secondary paths, including those directly entering the workforce, those going on to a diploma or associate's degree

program, or pursuing a four year degree or beyond.

If students are interested in attending a two- or four-year college after graduation, they are able to take four concurrent enrollment courses through local colleges and one of the instructors at the high school. College Food Science gives students the opportunity to delve into food processing methods and create their own unique food product. They go through the whole process of developing an idea, calculating the nutrition facts panel, creating a package and designing a sale campaign. In the College Horticulture class,

students gain hands-on experience in the greenhouse conducting a variety of propagation labs, and then they seed vegetables and transfer plugs for a sale later in the spring. The College Animal Science class offers students the opportunity to complete their intro animal science credits while gaining valuable knowledge of genetics, nutrition and reproduction. Finally, a unique offering is the Intro to Education course. This course allows students to learn about being an educator and complete a field experience in a content area and grade level they are interested in.

If students are interested in immedi-

ately entering the workforce, or continuing their education in the trades, there is a large variety of ag mechanics classes at MCW. The program's main goal is to give students a good foundation on how to use different tools safely and effectively to complete a task at hand, whether it be in the wood shop, metals shop, or engine shop. Following the introductory level classes, the department offers advanced and more specific courses to build on their skills and to teach students different trades.

The main foundation for the program is found in Welding 1, Woods 1, and Small Engines. These classes are designed to give students a taste of what different trades have to offer. From there, students can take Welding 2, Woods 2, and eventually Advanced Ag Fabrication where they can design and build their own shop project. Some of the coolest projects to come out of Advanced Ag Fabrication have been the restoration of a Farmall M, the fabrication of a 1 ton hydraulic press, and the building of a large cedar bench.

The department also targets a few different careers in stand-alone classes, including an Electricity, Plumbing, and HVAC course that covers three excellent trades in one semester. This class gives students a good

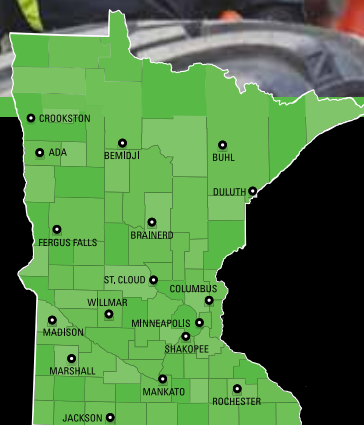
**Continued on Page 24**



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## The Academy for Sciences & Agriculture (AFSA K-12)



Stephanie Forliti, Marketing and Communications

Laura Wyatt, AFSA High School Ag Teacher

Things are blooming at AFSA K-12! Spring brings growth in many forms. Preparation for AFSA's annual plant sale begins in January with Plant Science students sowing over 1,000 seeds.

The Greenhouse Management class takes over to finish seeding and transplant flower plugs into larger pots.

Stepping into the greenhouse brings a sense of calm to the busyness of the school day. Students take a moment to connect with the soil and take care of the young seedlings they started weeks ago. From varieties of tomatoes, peppers, melon, cucumbers, and lettuce to herbs including thyme, rosemary, basil, and chamomile to flowers including marigolds, dahlias, begonias, petunias, and more. There is something for everyone.

As the high school students work in the greenhouse, our K-6 students create seed art, learn about seeds and the plant growth process from the ground up. Seeds planted by the younger grades will find their way to the high school giving gardens. The harvest from these gardens is donated to the local food shelf.

Not only are our plants blooming but our students are as well! Sciences and Agriculture are the foundation of everything at AFSA. Our science and ag roots allow us to have close connections with the National FFA Organization. FFA provides the base for a variety of

student growth activities such as agri-science fair, Career Development Events (CDE's), and Supervised Agricultural Experience (SAE's). As this year's science fair season comes to a close we celebrate the multitude of students whose projects have progressed beyond the region and state levels.

Student's opportunities are continuously growing and evolving and don't stop at the classroom door. All grade levels are exposed to a wide variety of content areas and unique experiences within hands-on and practical learning applications that go above and beyond a typical classroom setting. With our own buses available to us, students K-12 have ample field trip opportunities which extend classroom learning.

Community is a big part of the AFSA K-12 culture. The school emphasizes family involvement, community support, and partnerships with agribusiness and educational organizations. Throughout the year we host a variety of events that open the door for our students to grow in educational and social opportunities. Two large events that help us connect to the community are our annual spring plant sale and the fall Potato Hug.

AFSA's FFA Alumni coordinates the Annual Potato Hug each fall providing students the opportunity to sell wares that they have produced during their Supervised Agricultural Experience (SAE) projects. Students

have a chance to truly experience being an entrepreneur.

AFSA's K-12 program combines the importance of education, community, sciences and agriculture all in one. To learn more about AFSA K-12, our annual plant sale (May 9-11, 2024), the Potato Hug (October 5, 2024) and other school events please check out our website [www.afsak12.com](http://www.afsak12.com).

The Academy for Sciences & Agriculture (AFSA) was founded by the Minnesota Agricultural Education Leadership Council (MAELC) in 2001. AFSA began as a 9th-12th grade high school with 41 students. Currently over 425 students are enrolled, and the school will grow to about 600 students over the next three years. AFSA's locations, in Vadnais Heights and Little Canada, allow inclusion of students from all north/east Twin Cities areas. Currently students from 19 different school districts attend AFSA.

AFSA K-12 prepares students to be wise consumers, savvy decision makers, and successful, career-oriented lifelong learners. The unique curriculum with hands-on and experiential learning drives the success of the students through high school and beyond.

[afsahighschool.com](http://afsahighschool.com)



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## Unique AFNR Program at Highland Park



*Harley Braun, AFNR Teacher  
Students Lillian Thuente and Ellie Moore  
Highland Park Senior High  
Saint Paul Public Schools*

If you step into Ms. Braun's classroom at Highland Park Senior High (HPSH) in Saint Paul, you might see students texturing soil samples, practicing their knife skills, or presenting workshops on the importance of communicating about agriculture to the public. These topics might be commonplace in rural Minnesota, but the Agriculture, Food, and Natural Resources (AFNR) program at Highland Park is unique for an inner-city school. Each year, almost 600 students take courses in the AFNR department and take advantage of leadership development opportunities in the Highland Park FFA. The AFNR program provides a pathway to career success by offering a wide range of courses, hands-on activities, and service opportunities that empower students to thrive academically, personally, and professionally. The Highland Park AFNR program has experienced exceptional growth over the past 4 years with the addition of a second instructor, six new classes offered, a new school-based enterprise, and an FFA chapter

that has grown from 20 members to over 150.

Due to Highland Park's location in St. Paul, new courses were developed to better connect with student interests and local career opportunities. These courses include AFNR Biotechnology, AFNR Communications, Sustainable Food Production, AFNR Leadership Development, AFNR Business Management, and Landscape Design. Students in these classes model "learning by doing." For example, in AFNR Biotechnology, students have the opportunity to conduct experiments using real-world laboratory techniques and equipment such as micropipettes, gel electrophoresis, and a thermal cycler. Another key aspect of courses at Highland Park is incorporating cultural connections to agriculture, such as highlighting Indigenous methods of maple syrup production or exploring global foods.

In addition to the projects students complete in class, students continue their learning outside of the classroom with their Supervised Agricultural Experience projects. Whether it's creating a cookbook or educating elementary students about agriculture, students are actively engaged in meaningful, experiential

learning experiences that ignite their passion for agriculture and inspire lifelong learning. Part of the SAE program at Highland Park includes a floral design school-based enterprise, an SAE initiative that allows students to get hands-on experience with a flower business run out of the school. Students create fresh floral arrangements for members of the Highland Park community, create posters and social media updates to inform the community about sales, plan the designs, and set prices for items sold. These learning opportunities allow students to apply classroom knowledge in real-world settings, fostering a deeper understanding of agricultural concepts and practices.

Students may choose to continue their learning by joining the Highland Park FFA program, one of the top ten programs in the state. Within FFA, students achieve premier leadership, personal growth, and career success by participating in community service projects, a local Ag Day that reaches thousands of elementary, middle, and high school students, FFA Day at the Capitol, local and state leadership conferences, State and National Convention attendance, and chapter officer retreats. This year, over 70 members have participated in an event beyond the local level with over 40 members qualifying to advance to the State FFA Convention.

We have a strong commitment to com-

munity service within the AFNR department and FFA chapter at Highland Park. Our students actively participate in service projects that benefit local residents, such as creating personalized cards for residents of nearby nursing homes or making tie blankets that will be donated to children in need for Project Linas. These acts of kindness not only bring joy and comfort to those in need but also foster empathy, compassion, and a deep sense of connection to the community for students.

The Highland Park AFNR Program stands as an example of the transformative power of agricultural education. The Highland Park Agricultural Education program is one of the top agriculture programs in the state, offering a comprehensive curriculum, hands-on learning experiences, and meaningful service opportunities. We empower students to realize their full potential and make a positive impact on the world around them. We are proud to share our experiences and insights with fellow educators across the state, inspiring them to create innovative and impactful educational programs in their own communities. Together, we can cultivate a future where every student has the opportunity to thrive and succeed.

[highlandsr.spps.org](http://highlandsr.spps.org)



## Bees, Produce, and Decor Program Honored for Innovation Continued from Page 1

community through partnerships and sales. These are all life-long learning lessons.

Since most Wadena Area Learning Center students stay in the community after graduation, the long-term hope is to have them foster this stewardship in the community as adults as well as have them involved in career opportunities.

The impact of the program has been great in the school, district, and community. Through the Bees, Produce, and Decor program, students' attendance has improved greatly, and staff sees a noticeable difference in student engagement and involvement. Students take pride in their work and are engaged learners in valuable skills.

Freshwater Education District, thank you for investing in your students and developing innovative ways to serve.



Check out this video made after being honored with an Innovation Program Award from MREA in the fall of 2022: <https://www.youtube.com/watch?v=54JmPTmJ5Q>

[www.fed.k12.mn.us](http://www.fed.k12.mn.us)







## Capstone Chronicles: Keerti Tumu's dive into Science Research & Design



Eden Prairie Schools

In Eden Prairie Schools, we inspire each student every day to discover, explore, and pursue their passions. That mission lies at the heart of our Pathways program, which offers a guided course and cocurricular pro-

gression that prepares students for college or career pursuits in five career interest areas.

Eden Prairie High School 12th grader Keerti Tumu is a speech and debate team captain, the vice president of community service for DECA, a proud member of the EPHS Asian Student Union, and a passionate lover of the natural sciences. Keerti credits her family's frequent trips to India for inspiring her love of biology, because "there's so much nature everywhere and the environment is very green...I think I've always loved that kind of atmosphere, and so I've just always loved biology." When she needed to fill a gap in her course schedule last spring and her AP Biology teacher recommended the Science Research & Design Capstone, Keerti jumped at the opportunity. She "wanted to have the experience of conducting [her] own experiment, seeing how it looks over a long period of time, and making [her] own conclusions."

### Planting the seeds for success

Before taking the Science Research & Design Capstone, Keerti had already planted the seeds for success by taking foundational science courses like AP Biology and AP

Chemistry. But she didn't stop there: Jayson Sandeen, who teaches Science Research & Design, shared that "Keerti is a student who is very interested in science and so really wanted to take all the different courses that are offered." She was prepared academically, and her curiosity and determination helped too: "She demonstrated a willingness to learn the process needed to do this and to come up with an experiment with the right kind of protocols," said Sandeen.

### Student-led research: Investigating environmentally friendly pesticides and herbicides

Considering her love of nature, it's no surprise that Keerti's research was focused on helping the environment. She designed an experiment to investigate environmentally friendly alternatives to herbicides and pesticides, because "obviously it impacts the environment, but it can also impact us."

For the experiment, Keerti separated 30 plants into three groups and tested each with a homemade herbicide: a table salt, vinegar, or citric acid solution. Interestingly, the vinegar solution worked best but

like any great scientist, Keerti sees room for improvement. "There are some things I wish I could have changed, like making the sample size bigger," she says — and "my findings aren't necessarily applicable for everyone, because I only tested one plant." Recognizing a margin of error doesn't keep her from celebrating the wins, including an unlikely secret weapon: While many more traditional science classes proved relevant to her Capstone experience, Keerti's AP Statistics class this year taught her about the important correlation between sample size and statistical significance. Knowing what she knows now, Keerti advises students who plan to take the Science Research & Design Capstone to take a Statistics class beforehand to be even better prepared.

### Tools for the journey

The Science Research & Design Capstone is intended to equip students with the skills to perform rigorous scientific study, including the identification of a problem, investigation design, data collection, data

Continued on Page 24

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## OHA Garden Club Grows Friendship and Passion for Gardening



Caroline Burge  
Class of 2024 student at Mahtomedi High  
School and Mahtomedi Public Schools  
Communications Intern

As spring approaches, we will soon see flowers and plants emerge from the ground

around O.H. Anderson (OHA) Elementary School. The curators of this beautiful space are students in the OHA Garden Club, led by special education teacher Amy Finden.

For four years, the OHA Garden Club has brought students together to build friendships, grow their passion for gardening, and beautify

the school. The Club is open to all students and activities are during the school day to ensure all students can participate. The Club was originally started by Amy Finden with support from other special education teachers so that “everyone can find success in the garden.” Ms. Finden shared, “Being a part of a garden club during the school day is a wonderful way to get General and Special Education students working together. This benefits both groups and ensures access and equity for all of our learners!”

The OHA Garden Club’s work has included planting the gardens in front of the schools and increasing plant differentiation. The students are collaboratively responsible for the digging, planting, and mulch laying; the result of their efforts and devotion to the beautification of the community is a bright and lively space for all to enjoy. The Club also allows interested teachers to lead projects with financial support from grants that the OHA Garden Club has received.

The Club’s recent initiative has been reseeding the prairie behind OHA. In 2023, the Club received a grant from the Minnesota Department of Natural Resources and the Washington Conservation District to conduct a planned burn. A field burn rejuvenates and enhances native plant communities, reduces invasive species, and improves wildlife habitat. This spring, the students will work together to overseed and plant seed plugs in the space, adding a variety of species to the area that will bloom while students are in school.

This incredible group encourages individual growth, cultivates an inclusive learning environment for students, and allows friendships to bloom.

[mahtomedi.k12.mn.us](http://mahtomedi.k12.mn.us)



## Martin County West Ag Education — CTE in Action

Continued from Page 20

intro to these trades prior to furthering their education at a trades school in any of those pathways.

There are two new classes that have proven to be very popular. MCW offers a diesel technician style course called Ag Equipment Maintenance and Technology, where over the course of a year students learn about the electrical, hydraulic, drive train, and diesel systems found in ag, construction, and transportation equipment. This class has been made possible by the partnership with local businesses such as Ziegler CAT, Miller Sellner, and No BS Performance and is designed to prepare students to potentially enter the workforce as a diesel technician right after high school.

Lastly, MCW offers a construction course that is paired up with the math department called Geometry in Construc-



tion. Through this course, students have the opportunity to learn geometry alongside construction where they are given practical, real-life applications to the math that they are learning. Students get a construction credit in addition to the full year of geometry credit and build garden sheds for the community.

[www.martin.k12.mn.us](http://www.martin.k12.mn.us)



## Keerti Tumu’s Dive into Science Research & Design

Continued from Page 23

analysis, and drawing conclusions. In addition to building those skills, one of Keerti’s favorite aspects of her Capstone experience was the freedom to conduct her own research on a topic she is passionate about. As she explained, “[the Capstone] really gives you the opportunity to explore what you want to do in your future with more freedom. Obviously it was really fun for me to take AP Bio and Chem, but [the Capstone] allowed me to actually do it myself, so I think that’s a very fun part of taking Capstones.” Now that she’s had a chance to dig into “the details and technicality that it takes to actually have an experiment run,” Keerti is better prepared for the research she plans to conduct in college!

Advice for students considering the Science Research & Design Capstone

*“If an underclassman is looking into [pursuing] a Pathway, I’d say go for it! If I had this opportunity sooner in my high school career, I probably would have intensively pursued a Pathway, because it does make a difference on your college application; it shows colleges that you have a [focus] and so I would say ‘definitely go for*

*it!’ Show off that you participated in a Pathway, because if I had more time, I would have definitely done the same thing!”*

— Keerti Tumu

*“I’d say that you have to have a passion for something. You have to be able to pick something up and refine it and then really dig and do a lot of background reading to figure out what it is you’re trying to answer exactly, because it’s not going to be a repeat of what’s ever been done before by anybody. It’s going to be an extension of that.”*

— Mr. Jayson Sandeen

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# 2024 Minnesota Teacher of the Year Field Narrowed to 27 Semifinalists

The field of possible candidates for this year’s Minnesota Teacher of the Year honor has been narrowed to 27. An independent selection panel of 18 community leaders chose the semifinalists from an initial field of 159 candidates from across the state.

The panel will review the semifinalists’ portfolios again and review semifinalist video submissions in mid-March. The panel will select about 10 finalists from among the group.

This year’s program will name the 60th Minnesota Teacher of the Year. The program celebrates the tradition of excellence in teaching in Minnesota. Eligible candidates include pre-kindergarten through 12th grade, Early Childhood Family Education and Adult Basic Education teachers, from public or private schools.

The current Minnesota Teacher of the Year, Michael Houston, will announce his successor at the Minnesota Teacher of the Year banquet, scheduled for May 5 at the Saint Paul RiverCentre.

The candidates for 2024 Minnesota Teacher of the Year, listed by their school districts or operating entities, are (**\*semi-finalists are bolded**):

- Scott Miller, *Aitkin Public School District*
- Mary Bissen, *Albert Lea Area Schools*
- Starr Kloskin, *Albert Lea Area Schools*
- \*Deena Bayer, Anoka-Hennepin School District, Blaine High School**
- Lana Johnson, *Anoka-Hennepin School District*
- Stephanie Lunseth, *Anoka-Hennepin School District*
- Maia Miller, *Anoka-Hennepin School District*
- \*Tom Powers, Anoka-Hennepin School District, Rum River Elementary**
- Kristin Rutz, *Anoka-Hennepin School District*
- Jamie Weisz, *Anoka-Hennepin School District*
- Lars Johnson, *Austin Public Schools*
- Erin Koshiol, *Belgrade-Brooten-Elrosa Public Schools*
- \*Jacqueline Stoffel, Bemidji Area Schools, Bemidji High School**
- Meredith Aby-Keirstead, *Bloomington Public Schools*
- \*Sarah Dallum, Bloomington Public Schools, Valley View Elementary School**
- Jessica Hodgson, *Bloomington Public Schools*
- Susan Maxey, *Bloomington Public Schools*
- Valerie Petersen, *Bloomington Public Schools*
- Jeremy Storelee, *Bloomington Public Schools*
- Kelly Sully-Yackel, *Bloomington Public Schools*
- Sophie Werner, *Bloomington Public Schools*
- Jeff Anderson, *Brandon-Evansville Public School District*



- \*Rebecca Buck, Burnsville-Eagan-Savage School District, Gideon Pond Elementary**
- \*Marie Hansen, Burnsville-Eagan-Savage School District, Burnsville High School**
- Robyn Van Der Zanden, *Cambridge Isanti Schools*
- Krista Saxton, *Cass Lake-Bena Public Schools*
- Susan Wagner, *Crookston Public Schools*
- Brenda Maulik, *DaVinci Academy of Arts and Science (Charter)*
- \*Amy Spinello, Eastern Carver County Schools, Integrated Arts Academy**
- Maya Booker, *Eden Prairie Schools*
- Katie Horstmann, *Eden Prairie Schools*
- Suzanne Nieson, *Eden Prairie Schools*
- Kathy Smith, *Eden Prairie Schools*
- Rachel Spessard, *Eden Prairie Schools*
- Kristen Strauss, *Eden Prairie Schools*
- Kelly Thierfelder, *Eden Prairie Schools*
- Sarah Fincham, *Edina Public Schools*
- Nicholas Gaudette, *Edina Public Schools*
- Jennifer Heyer, *Edina Public Schools*
- \*Hawley Mathieson, Edina Public Schools, Highlands Elementary/Normandale Elementary**
- Christine McCarthy, *Edina Public Schools*
- \*Bianca Suglia, Edina Public Schools, Normandale French Immersion School**
- Katie Widen, *Edina Public Schools*
- Alaina Zapata-Sirek, *Edina Public Schools*
- Ashley Goihl, *ISD 728 (Elk River-Otsego-Rogers-Zimmerman)*
- Stephanie Harding, *ISD 728 (Elk River-Otsego-Rogers-Zimmerman)*
- Louise Ostlie, *Fairmont Area Schools*
- Alysha Nelson, *Farmington Area Public Schools*
- Sarah Stout, *Farmington Area Public Schools*
- Victoria Techau, *Farmington Area Public Schools*

- Stacy Dahl, *Greenbush-Middle River School District*
- Rachel Bachman, *Hastings Public Schools*
- Ben Lofgren, *Hawley Public Schools*
- Susan Ault, *Hopkins Public Schools*
- \*Sarah Gleason, Hopkins Public Schools, Meadowbrook Elementary School**
- Monica Grubb, *Hopkins Public Schools*
- \*Laura Jensen, Hopkins Public Schools, Hopkins North Middle School**
- Megan Kline, *Hopkins Public Schools*
- Edwing Llangari, *Hopkins Public Schools*
- Tyler Martin, *Hopkins Public Schools*
- Anna Muer, *Hopkins Public Schools*
- Sara Roberts, *Hopkins Public Schools*
- Jean Severson, *Hopkins Public Schools*
- \*Donghong Wang, Hopkins Public Schools, Eisenhower Elementary/Xinxing Chinese Immersion**
- \*Ellen Wu, Hopkins Public Schools, Alice Smith Elementary**
- Jacques Youakim, *Hopkins Public Schools*
- Kailee Byrd, *Howard Lake-Waverly-Winsted Public Schools*
- Laura Heuer, *Howard Lake-Waverly-Winsted Public Schools*
- \*Jon Fila, Intermediate District 287, Northern Star Online**
- Tracy Zahn, *Inver Grove Heights Schools*
- Lori Wall, *Isle Public Schools*
- Sara Bailey, *Kasson-Mantorville Schools*
- Valerie Ashland, *Kenyon-Wanamingo Schools*
- Tony Donkers, *Kenyon-Wanamingo Schools*
- Holli Sauerer, *Kimball Area Public Schools*
- Gina Meihof, *Lakeville Area Schools*
- Matthew Wanken, *Lakeville Area Schools*
- Lyn Gwost, *Little Falls Community Schools*
- Chad Kaddatz, *Little Falls Community Schools*
- Erin Sabyan, *Little Falls Community Schools*

- Cindy Roos, *Long Prairie-Grey Eagle Schools*
- Travis Miller, *Mankato Area Public Schools*
- Katherine Melgaard, *Marshall County Central School District*
- Stephanie Wohlhuter, *Martin County West School District*
- Karen Adams, *Minneapolis Public Schools*
- \*Tracy Byrd, Minneapolis Public Schools, Washburn High School**
- Kenisha Diaz, *Minneapolis Public Schools*
- \*Jason Jirsa, Minneapolis Public Schools, Washburn High School**
- Ryan Olson, *Minneapolis Public Schools*
- Shannon Peterson, *Minneapolis Public Schools*
- Lindsey Thompson, *Minneapolis Public Schools*
- Tracy Ivy, *Minnetonka Public Schools*
- Christie Nugent, *Minnetonka Public Schools*
- \*Angela Hase, Moorhead Area Public Schools, Moorhead High School**
- Kelly O’Leary, *Morris Area School District*
- \*Michelle Morse-Wendt, Mounds View Public Schools, Turtle Lake Elementary School**
- Shawna Poncelet, *Mounds View Public Schools*
- Jessica Raaen-Tolzmnn, *Mounds View Public Schools*
- Amy Dorey, *Northfield Public Schools*
- Beth Albrecht, *Osseo Area Schools*
- Heather Bruun, *Osseo Area Schools*
- Allison Fischer, *Osseo Area Schools*
- Mary Gagnon, *Osseo Area Schools*
- Christopher Gudvangen, *Osseo Area Schools*
- \*Ryan Hennessey, Osseo Area Schools, Maple Grove Senior High School**
- Daniel Prody, *Osseo Area Schools*
- Noel Raph, *Osseo Area Schools*
- Keith Rishavy, *Osseo Area Schools*
- Tiffany Walerius, *Owatonna Public Schools*
- Mindi Brill, *Pequot Lakes Public Schools*
- Isaak Anderson, *Pine River-Backus Schools*
- Paul Young, *Pipestone Area Schools*
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## Rabehl Named Music Educator of the Year



*Buffalo-Hanover-Montrose Schools – ISD877*

Teaching music may not have been Scott Rabehl's first career, but he has been recognized multiple times for excellence since he traded the business world for a podium and baton.

In 2006 he was named the Outstanding Young Band Director for the State of Minnesota by the American School Band Directors Association. In 2018 he became the Schmitt Music Educator of the Year. And earlier this month, the Buffalo High School band director

was named High School Music Educator of the Year by the Minnesota Music Educators Association (MMEA).

When asked about the latest honor, Rabehl said he couldn't help but think of the roles played by his fellow music teachers in Buffalo, Hanover and Montrose.

"I walk out on stage here and put my stick up and wave my arms, and I hear the instruction of all my colleagues coming back at me," he said, explaining that the bedrock of musical excellence so often exhibited by members of the BHS Concert Band was established years before, as students benefited from the instruction of their teachers in elementary and middle school.

"I have all these colleagues with me who are represented in my musicians," Rabehl said. "To have my name be the one that gets called out is humbling and does not recognize, adequately, all the other people that are building the foundation for what happens here at the high school."

On a deeper level, Rabehl said that his way as a leader in the BHS music department has been paved by his highly regarded predecessors.

"This instrumental and vocal music program was established long before I got

here," said Rabehl. "I stand on the shoulders of giants — Lee Kjesbo, Rolf Mohwinkel, Mike Walsh, Mark Minkler — these were incredible music educators."

Rabehl worked with Kjesbo for five years after a phone call from Kjesbo about a job opening changed the trajectory of his career from middle school to high school in 2003. When Kjesbo retired, Rabehl inherited a program that, then and now, is generally recognized in musical circles for its "gravitas" thanks to a long tradition of excellence.

"But I still think about it like it's [Kjesbo's] program," Rabehl said. "I'm just kind of caretaking it for him and those who came before."

### A surprise

Rabehl was not aware he had been nominated for the honor until he received a phone call saying he had been chosen as High School Music Educator of the Year, a title he shares with a choir director from New Prague.

"I was just really surprised," he said. "I was not aware of it until all was said and done."

**Continued on Page 30**

## 2024 Minnesota Teacher of the Year

**Continued from Page 26**

Chad Olsen, *Robbinsdale Area Public Schools*

**\*Jenny Peterson, Robbinsdale Area Public Schools, Robbinsdale Transition Center**

Gretchen Wurzer-Palm, *Robbinsdale Area Public Schools*

Kim Hill, *Rochester Public Schools*

Jerald Ferdig, *Rockford Area Schools*

Jennifer Miller, *Rosemount-Apple Valley-Eagan ISD 196*

**\*Susanne Collins, Roseville Area Schools, Edgerton Elementary School**

Kristen Lonetree, *Roseville Area Schools*

Emily Lockhart, *Saint Paul Public Schools*

Samuel Northey, *Saint Paul Public Schools*

Kathy Romero, *Saint Paul Public Schools*

**\*Jamie Williams, Saint Paul Public Schools, Capitol Hill Gifted and Talented Magnet School**

Nicole Fuechtmann, *Sartell-St. Stephen School District 748*

Aaron Johnson, *Sauk Rapids-Rice Public Schools*

Rachel Mehrwerth, *Sauk Rapids-Rice Public Schools*

Rebecca Garvin, *Shakopee Public Schools*

**\*Jennifer Johnson, Shakopee Public Schools, Eagle Creek Elementary School**

Kristina Pappas, *Shakopee Public Schools*

Amy Rutter, *Shakopee Public Schools*

Tyne Greffe, *South St. Paul Public Schools*

Robert Carrero, *South Washington County Schools*

Stacy Paleen, *South Washington County Schools*

Paul Pressnall, *South Washington County Schools*

Elizabeth Stueve, *South Washington County Schools*

William Neiss, *Spring Lake Park Schools*

Devon Bowker, *St. Cloud Area Schools*

Angela Haus, *St. Cloud Area Schools*

**\*Jean Voigt, St. Cloud Area Schools, Kennedy Community School**

Julie Wiczorek, *St. Francis Area Schools*

Heidi Wold, *St. Francis Area Schools*

**\*Rachel Betterley, St. Louis County Schools, North Woods School**

**\*Joe Osowski, St. Michael – Albertville Schools, St. Michael-Albertville High School**

Mark Bullis, *Waconia Public Schools*



Kari Klein, *Waconia Public Schools*

Courtney Gray-Kuschel, *Wayzata Public School District*

Shannon Kelly, *Wayzata Public School District*

Kathryn Kottke, *Wayzata Public School District*

Jeff Prondzinski, *Wayzata Public School District*

Meredith Braget, *Westonka Public Schools*

Leanna Koepp, *Westonka Public Schools*

Mark Domschot, *White Bear Lake Area School District*

Melissa Wickert, *White Bear Lake Area School District*

Stephanie Frisk, *Win-E-Mac Schools*

Abigail Mooney, *Winona Area Public Schools*  
*Courtesy of Education Minnesota*





## Bach named High School Principal of the Year



### Stillwater Area Public Schools

Stillwater Area High School principal Rob Bach has been named the 2024 Minnesota High School Principal of the Year. He was chosen by the Minnesota Association of Secondary School Principals out of more than 1,200 high school principals in the state. Bach is now one of just 50 educators nationwide in the running for National High School Principal of the Year.

During his 10 years at Stillwater, Bach

has spearheaded several progressive initiatives, including grade reconfiguration. The multi-million-dollar building project added 700 ninth graders and 30 new staff to the high school.

Bach was also instrumental in implementing BARR, Building Assets and Reducing Risks, which has contributed to the shift in adult mindsets. Staff focuses on the strengths of students and builds off that to ensure they are meeting their full potential in academics

and social emotional learning. SAHS serves as an anchor school for others to emulate and is one of just 30 schools in the country selected for the BARR Network for School Improvement funded by the Bill & Melinda Gates Foundation.

Another highlight of Bach's tenure is the Pathways program bringing real-world experiences and interest-based, relevant classes for students. Pathways offers additional opportunities for post-high school success to all students, whether they are pursuing a vocation or college degree, military or going directly into the workforce.

"Rob has a challenging job of leading such a large school, but he does it beautifully," said Director of Schools Dawn Waller Lueck. "He is a strong leader who possesses a growth mindset and keeps students at the center of his work."

Beyond the everyday duties and demands of serving as a building principal, one of Bach's greatest strengths is his ability to connect and relate with students. Stillwater Area High School has a population of about 2,800 students, but as a large school, it feels like a close-knit community because of Bach's leadership in the building.

Bach can often be spotted high-fiving students in the hallways, socializing in the cafeteria with students, and attending sporting

events and activities to cheer on the Ponies. He has an uncanny ability to remember students' names and is able to form meaningful, lasting relationships with students.

"Rob understands building relationships with students is the most important thing," said one teacher. "Rarely do we end a staff meeting without him reminding us to 'Go for every student.' This isn't just a tagline for Rob, he models this for staff every single day."

Students say Bach has allowed their voices to grow at the school and has provided the school board with feedback that accurately represents the student body.

"Mr. Bach truly values every student and prioritizes our needs above all else," said student council president Sam Young. "I am very grateful to have a principal that puts me first."

[stillwaterschools.org](http://stillwaterschools.org)



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## Superintendent Gothard Named 2024 National Superintendent of the Year



### Saint Paul Public Schools

We are extremely proud to announce that our superintendent, Dr. Joe Gothard, tonight was named the 2024 National Superintendent of the Year by the American Association of School Administrators (AASA). 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.

Dr. Gothard was one of four finalists for this award. To be eligible for the

National Superintendent of the Year Award, candidates were first named by their state association (the Minnesota Association of School Administrators) as the State Superintendent of the Year.

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 Education (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.

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 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 assistant superintendent with the Madison Metropolitan School District. Dr. Gothard began his teaching career as a biology teacher at La Follette High School in Madison.

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).

[www.spps.org](http://www.spps.org)



## Rabehl Named Music Educator of the Year Continued from Page 28

A group of colleagues, parents and students had submitted statements on his behalf.

"That the board selected me is less of an honor to me than that these people invested some thought and energy into trying to make it happen," Rabehl said. "I have no ideas what lies they made up about me, but it worked."

### The path to education

Rabehl attended Anoka High School, where he said he was a mediocre musician whose real skills lay in math. When he and a group of friends attended the UM to become engineers, Rabehl joined the marching band.

"I was going to march in that band. That I knew," he said. "That was my undergraduate music education."

After changing his major a couple of times but still "crunching numbers," Rabehl graduated with a degree in business, then earned his Master of Business Administration. He joined General Mills and spent four years focusing on market research before a chance musical experience at a mall changed his direction in life.

It was Christmas time, and Rabehl followed his ears through the busy hallways

until he came upon a community band made up of many of his former music teachers playing carols. After the performance he inquired about the band, was invited to join, and dusted off his trumpet for the first time in years.

"I just thought, 'I kind of miss that in my life,'" he said.

After spending time with his former teachers, Rabehl decided he was in the wrong line of work and went back to school. He earned his degree in music education from St. Cloud State University, went on to complete his master's in education, and landed his first job in the Howard Lake-Waverly-Winsted district at age 30.

Two years later he shifted to Maple Grove Junior High, where he spent eight years before joining Buffalo High School. Since then he has directed a number of honor bands, been involved with various statewide music contests and initiatives, and served on the MMEA board of directors.



### Toward greatness

After becoming a music educator, Rabehl never looked back.

"Every day is a better day for me than when I was in the business world," he said. "One of the things I really appreciate about being a music teacher is that I get immediate feedback every single day about the effectiveness of my instruction. I try a thing, and it either works or it doesn't, and I know immediately. There are not many careers that provide you with that kind of continuous feedback."

A unique aspect of making quality music is the dual importance of technical ability and emotional investment. Rabehl said one of the most gratifying things about teaching students for four years is seeing their focus on "higher, louder, faster" change to playing with the proper expression as they mature.

"A performance that is perfectly accurate and has no feeling behind it has as little meaning as a performance filled

with feeling that's mostly errors," he said. "You have to do both well. That's what we work toward. I get to collaborate with my student colleagues and work toward greatness every day."

The ultimate objective transcends music.

"I would like to be able to say I'm always teaching young people to be better humans," Rabehl said. "I don't know if I always hit that target, but it's my goal."

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