Summer/Back to School 2024 MINNESOTA'S K-12 EDUCATION CONNECTION



Moorhead House Remodel Demonstrates Former MHS Teacher's Legacy



Moorhead Area Public Schools

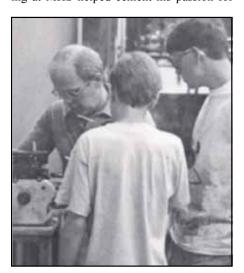
Chris Olson is a music teacher at Probstfield Elementary whose family has a long history with Moorhead Area Public Schools. Chris himself is a Moorhead High School alum, having graduated in 1992, as were his parents Stan and Margie, both in the MHS Class of 1961. He also follows in the professional footsteps of his mom and dad: Stan was an MHS woodworking teacher for 31 years; Margie was a family and consumer sciences teacher and later substitute at MHS for 39 years.

When Margie passed away in February at age 80—Stan had passed in 2020 at age 77—Chris and his wife Lynne decided to renovate and then move into Stan and Margie's house. The Olsons contacted a custom home builder in Fargo to inquire about the project.

The builder sent Tyler Spriggs to meet with the Olsons and as they walked through the house, he immediately noticed the gun cabinet in the corner. "Tyler said it looks just like the one he made in high school," Chris recalled. "So I asked him, 'Who was your teacher?' and he said 'Stan Olson.'

When Tyler learned he was standing in Stan Olson's basement, he was blown away. His words impacted Chris deeply. "He told me that dad was his favorite teacher and those classes are a big reason why he's working in construction now."

Spriggs, MHS Class of 2005, took woodworking with the elder Mr. Olson before he retired in 2003. He grew up in a family of contractors but taking woodworking at MHS helped cement his passion for



Continued on Page 12

Minnesota Finalists Chosen for Presidential Awards for Excellence in Mathematics and Science Teaching

The Minnesota Department of Education (MDE) is pleased to announce that six Minnesota teachers have been selected as 2024 finalists for the Presidential Awards for Excellence in Mathematics and Science Teaching (PAEMST).

The Minnesota finalists are:

Mathematics

Kristin Cayo, Eden Prairie Schools, Forest Hills Elementary School

Sarah Donovan, Anoka-Hennepin Schools, Hamilton Elementary School

Mark Nechanicky, Albert Lea Area Schools, Lakeview Elementary School

Science

Krista Wyvell-Fink, Anoka-Hennepin Schools, Rum River Elementary School Kelly Gibson, Saint Paul Public Schools, Battle Creek Elementary School Deanne Trottier, Pequot Lakes Schools,

Deanne Trottier, Pequot Lakes Schools
Eagle View Elementary School

The PAEMST are the highest honors bestowed by the U.S. government specifically for K-12 science, technology, engineering, and mathematics teaching. The awards were established by Congress in 1983 and the President recognizes around 100 exemplary teachers each year.

The award recognizes teachers who have deep content knowledge of the subjects they teach and the ability to motivate and enable students to succeed in those areas. The award is administered by the National Science

Continued on Page 25



Kristin Cayo

Mark Nechanicky



Sarah Donovan

Krista Wyvall-Fink



Kelly Gibson



Deanne Trottier

THANK YOU TO OUR ADVERTISERS FOR YOUR GENEROUS SUPPORT!

Northland Community & Technical College • North Dakota State College of Science • St. Cloud State University • Project Build Minnesota North Central States Regional Council of Carpenters • South Dakota State University CIM • University of Minnesota Duluth LiUNA Minnesota & North Dakota • Metro State University • Electrical Association • Ziegler Cat • Finishing Trades Institute of the Upper Midwest International Wolf Center • Minnesota Asphalt Pavement Association • Hamline University • UW Milwaukee







OPPORTUNITY FOR ALL

Whether you're looking for a stepping stone to a four-year degree, hands-on training to jump-start your career, or something in between – you'll find it at Northland. We offer fast-paced, real-world training that prepares you to be workforce-ready immediately. This means you will be learning valuable on-the-job experience before some of your peers do!

- **▲** Aerospace
- **▲** Agriculture
- **▲** Automotive & Transportation
- **▲ Building Trades**
- **▲** Business, Management & Marketing
- **▲** Education

- **▲ Health & Human Services**
- **▲** Information Technology
- ▲ Law, Public Safety & Security
- ▲ Liberal Arts & Transfer Pathways
- **▲ Manufacturing & Industry**





Visit **northlandcollege.edu**, or **scan the QR code** to get started today.



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

questions or comments to:

Teaching Today MNTM
PO Box 1704
Eau Claire,WI 54702
Phone/Fax 715-839-7074

www.teachingtodaymn.com

Please direct all inquiries to: renee@teachingtodaymn.com

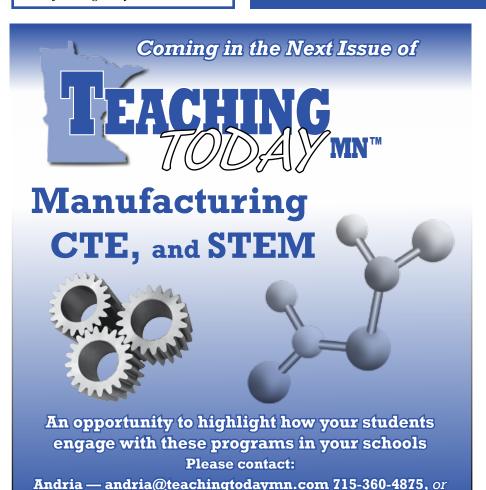
Teaching Today $MN^{\rm TM}$ is an independent publication for educators.

The opinions expressed in *Teaching Today MN*TM are not necessarily the opinions of *Teaching Today MN*TM. We reserve the right to edit any and all materials submitted due to grammar, content and space allowances. Articles, photos and artwork submitted to *Teaching Today MN*TM are assumed to be released by the submitter for publication.

Teaching Today WITM
Teaching Today MNTM
Transportation Today WITM
Manufacturing Today WITM

In this issue of Teaching Today MN

Beyond the Classroom: ACE Mentor Programs Open the Walls to Career Exploration	Page 4	Makerspace Opens Doors to a New World of Creativity	Page 15
Stillwater Students Construct Connections	Page 4	White Bear Lake, Putting Students in	
SMS Students Shine at National STEM		the Driver's Seat	Page 17
Competition	Page 4	BHS Automotive Program Receives National Accreditation	Page 17
LEARN2BUILD Demolishes Gender Stigmas in The Construction Trades	Page 6	Rogers Small Business Owner Brings	raye ir
Urgent! Electricians Needed!		Wealth of Experience, Service to ISD 728	Page 18
Community Partnerships Foster Real-World	r ugo r	SDSU CIM Student Focus: Anthony "Tony" Valland .	Page 20
Learning	Page 8	2024 Youth Skills Training Grant Recipients	Page 20
Careers in Construction	Page 9	RAHS Auto Shop Provides Career Experience	
Irondale Work Based Learning Coordinator		and Affordable Services	Page 22
Angela Zappa Pairs Tech Ed Courses and Career Planning	Page 10	Minneapolis educator Tracy Byrd is 2024 Minnesota Teacher of the Year	Page 23
Spanier Earns Outstanding Teacher Award		Highwood Hills Elementary Principal Dr.	
	Page 10	Fatima Lawson Named Minnesota 2024 NAESP National Distinguished Principal	Pane 24
From Popsicle Stick Miniatures to Carpentry: The Story of a Brooklyn Center High		MHS Career Academy's Heigaard Earns	rugo 2-
School Senior	Page 12	Statewide Teaching Award	Page 24
Technology, Engineering & Careers (TEC)		Finalists for 2024 Minnesota Teacher of the Year	Page 25
	Page 13	District Indian Education Teacher Wins	
William's Journey into Engineering and	- 12	Outstanding Elementary Teacher of the	
Robotics	Page 13	Year Award	Page 25



Renee — renee@teachingtodaymn.com 715-839-7074



Through two-way videoconferencing on Zoom, our educators and ambassador wolves will keep your students on the edge of their seats while learning about these mysterious predators in a LIVE

program from northern Minnesota!



1396 Highway 169, Ely, MN 55731 218-365-4695 WOLF.ORG

Discount not available for non-school groups.

Non-school groups will be invoiced \$75.

Beyond the Classroom: ACE Mentor Programs Open the Walls to Career Exploration

By Jake Boerboon, Chair ACE Twin Cities Executive Board

There's a lot of buzz these days about Career Training Education (CTE) centers, providing vocational training that allows students to explore well-paying professions while working to address critical shortages in vital trades skills across the country, from auto mechanics to manufacturing to culinary arts. However, some industries just don't fit inside a classroom, even a non-traditional one. For more than a generation, the ACE Mentor Program has teamed with schools across the country to provide hands-on learning experiences exposing high school students to careers in the (literally) wide-open fields of Architecture, Construction and Engineering.

A Conduit to Careers

Now in its 30th year, the ACE Mentor Program was created by the integrated construction industry to attract students into pursuing industry-related careers. Today its 74 affiliate chapters nationwide engage 10,000 high school students in a free after school program that meets weekly from January — May during the school year. Over 4,000 volunteer industry professionals mentor students and lead them through a hands-on simulation of designing and constructing a project, culminating in team competitions and scholarship awards. Since 1994 ACE has



ARCHITECTURE - CONSTRUCTION - ENGINEERING

awarded more than \$32 million in scholarships to help its students with post-secondary education and skilled crafts training.

Building Diversity in the ACE Industries

The program is also an important conduit for introducing a more diverse next gen to the ACE industries: Data indicates that nationwide, 70% of ACE Mentor Program students identify as people of color. Over 40% are female. Those numbers exceed industry standards by an impressive margin.

* Construction Industry: 33% people of color, 11% women; Architecture & Engineering: 24% people of color, 26% women (2022 – US Bureau of Labor Statistics Current Population Survey)

The Twin Cities chapter of ACE is now in its 13th year and going strong. During the

2023/24 school year, 33 mentors worked with 62 students from 7 school districts around the Twin Cities metro area, culminating in a competition March 6. The Twin Cities ACE Chapter has awarded over \$168,000 in scholarships since 2011 to 101 students.

In addition, former Twin Cities chapter Mentor Leah Roue was inspired to launch the Southern Minnesota chapter in 2019 and today is Board Chair of that chapter.

No Cost, High Impact

The program is made possible by sponsorship funding and the dedication of volunteer mentors providing engaging hands-on projects and field trips. The program is designed to create collaborations not just among the student teams, but among teachers and the industry professionals who serve as mentors. Activities reinforce learning in math, science, physics, art, computer skills and other relevant studies, establishing a direct link between curricular and career success.

Results

Unlike CTE programs, which may be positioned as a technical training alternative to post-secondary educational opportunities (PSEO), ACE Mentor drives PSEO attendance. About 90% of ACE alums go on to college or skilled trades training programs. ACE Mentor Program alums say the experience motivated them to attend college, improved their chances of admittance, and helped them learn relevant skills and knowledge leading to greater success in college.

"ACE Mentors respect us so much as students, making it possible for us to be comfortable pitching a risk design or debating the right pathway forward," writes one ACE Mentor student. "... As a cautious person, I've gained an incredible lesson from ACE: don't be afraid to be bold."

To learn more about being part of the Twin Cities ACE Mentor Program or the Southern Minnesota ACE Mentor chapter, email TwinCitiesMN@acementor.org or the Southern Minnesota ACE Mentor Chapter, email info@aceofsm.org

https://www.acementor.org/affiliates/ twin-cities-mn

Stillwater Students Construct Connections



Stillwater Area Public Schools

In partnership with Discover Stillwater, there is a new photo opportunity for visitors to downtown thanks to students from the Stillwater Area High School Industrial Technology program.

Highlighting the backdrop of the St. Croix River and the Historic Lift Bridge, students designed and built a photo frame to capture memorable moments. A collaborative effort between students in the Industrial Technology program, teacher Matt Howe, Brad Pike, and Discover Stillwater, the project highlights the talent, creativity, and community spirit flourishing within students at Stillwater Area High School.

"Helping students find their passions

with hands-on experience is what it is all about," said Howe. "We enjoy partnering with local businesses and organizations where we can allow students to have a client-based work experience. Doing projects like this is by far the most rewarding part of our jobs as teachers."

While gaining valuable hands-on experience, these students

added a tangible addition to the Stillwater community. The structure is also designed with inclusivity in mind, ensuring that individuals of all abilities can comfortably access the structure by way of a small ramp.

The wood and rustic elements were chosen to reflect the community's lumber history, and allow the stunning backdrop remain the focus. The structure not only serves as a visually appealing photo spot, but also ensures a secure environment for individuals to capture memories in a safe setting.



SMS Students Shine at National STEM Competition

Stillwater Area Public Schools

Sixth graders from Stillwater Middle School (SMS) presented at the Samsung Solve for Tomorrow competition in Washington, D.C. They were one of just 10 schools across the country to be named national finalists, earning them \$50,000 in Samsung technology and supplies for their classroom.

The competition challenged public school students in grades 6-12 to create positive change in their communities by using science, technology, engineering, and math (STEM) skills to solve pressing local issues.

SMS students, led by teacher Corrie Christensen, created a bioluminescent light to help fight light pollution that threatens bird migration. The downward-facing solar lights they dubbed Lumen Bloom - are shaped like a flower, with petals that incorporate robotics to open and close based on the time of day.



Three students - Maria Donnay, Eleanor Keyser and Arthur Lee - presented the project at a live pitch event at the Samsung Solutions Center in Washington, D.C., answering questions before a panel of expert judges.

The project was named Community Choice Winner based on a month-long online public vote, earning them an additional \$10,000 in prizes.

stillwaterschools.org

MAY 1-2, 2025

MINNESOTA CONSTRUCTION TEACHER CONFERENCE



The Minnesota Construction Teacher
Conference engages Career and Technical
Education (CTE) educators of the construction
trades in cutting-edge professional
development supported by the industry.

REGISTER TODAY:

- NETWORKING
- PROGRAM SHARING
- TRAIN-THE-TRAINER
- JOB SITE TOUR
- WORK-BASED LEARNING INITIATIVES



mnconstructionteachers.org

Organized By: Project Build Minnesota ABC of Minnesota/North Dakota Electrical Association

LEARN2BUILD Demolishes Gender Stigmas in The Construction Trades



Karin Ellefson, Courtesy of the Construction Careers Foundation

Before signing up for the Learn2Build summer construction experience program, 12-year-old Aylli Alford had never considered that she might enjoy working hands-on with tools and supplies.

Aylli, a 7th grader from Washington Technology Magnet School has always had a passion for drawing. She excels in art class and spends her free time with a sketchbook in her hands. She frequently draws characters from movies she watches.

ThroughLearn2Build, Aylli has pushed her creativity and curiosity about building to the next level by seeing what construction is all about. "My mom helped me get signed up for this [Learn2Build] when we saw it on a flyer from school," Aylli said. "I'm really glad we did. Everything has been so fun!"

Learn2Build is a program that exposes students in grades 4-9 around the Twin Cities

to the construction building trades industry. By combining fun and games with Science, Technology, Engineering and Math (STEM) students are introduced to career paths such as pipefitting, civil engineering, plumbing, painting and more. Their time with the program is spent doing exciting activities focused on the construction trades while meeting other students who share similar interests.

The students participating in this two-week Learn2Build camp had the opportunity to visit the local community & technical college and its Plumbing Lab, where apprentices studying plumbing learn the trade through hands-on experience. With the help of a few plumbers from the Local 34, Aylli and the other students got to measure, cut and construct their own marshmallow launchers out of PVC pipes.

"I never really thought I enjoyed math or science, but Learn2Build has made me rethink that a little," Aylli said. "I love being able to work with my hands and be creative."

One of the main goals of Learn2Build is to direct more young students, especially girls, to careers in STEM and the construction trades to build a more diverse workforce in the future.

Aylli, along with a handful of other girls that signed up for Learn2Build, are seeing both men and women working alongside

each other in a variety of construction-related trades through this summer program.

"We're excited to see our summer program growing," said Learn2Build director, Mary DesJarlais. "It's exciting to see so many girls in this class, we are working on establishing more programs for girls interested in STEM, it's good for them to see that women can work in construction and the trades and be successful."

Along with Learn2Build, schools across Minnesota are beginning to implement more classes that can prepare students for post graduation plans that don't include a traditional four-year university. Schools such as where Aylli attends, Washington Technology Magnet School, pride themselves in specializing in BioSMART (Biological Science, Math, Academic Rigor, and Technology) courses, to give students a more diverse education.

"Now I know there are jobs like this out there, I might consider taking classes in school that are construction based," Aylli said. "I could even be able to help out at home with fixing stuff now!"



Urgent! Electricians Needed!

Electricians, oh how we need them! To keep our lights on, to make certain all of our gadgets are charged, to make certain WiFi is up and running. Electricians power our homes, schools, and communities. Now add all the movement to clean energy by 2040 to their workload including electrical vehicle charging stations, solar and other renewable energy, building automation, we need more electricians!

At a recent career fair in Monticello, 1100 students were required to have a certain number of vendors sign off on their career fair sheet. I must have looked like an easy target because many students not interested in construction still visited my table. I was able to ask dozens of students if they were familiar with the apprenticeship model of education. Most weren't. We need to do better as explaining apprenticeship as a great way to train for a career.

Apprenticeship is a method of training where an apprentice electrician is partnered with a licensed electrician and supervised until that apprentice gains licensure. This process takes four years. While not mandatory to gain license, many apprenticeships pair the on-the-job training with related technical instruction (RTI). Electrical Association offers this RTI to electricians of both member and nonmember contractors.

Check out this link and the ad below for information on our Apprenticeship education. https://www.electricalassociation.com/Online/Online/Education/Apprentice.aspx

The strong need for electricians results in high wages. Typical starting wages are \$18.00-\$24.00 per hour. Wages will vary geographically, but licensed electricians in the Twin Cities metro area are making over \$50.00 per hour. Regardless where you live, as an electrician you will make well over the median wage for your area. You can find more career information at https://www.electricalassociation.com/Online/Online/CareerCenter/Aspiring_Electricians.aspx

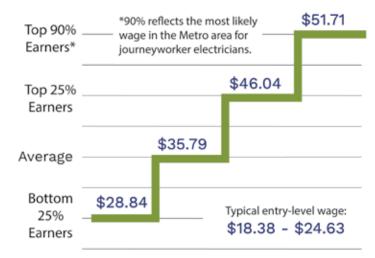
The Electrical Association has compiled a lot of career exploration information on our website. I will also speak to classes or attend career fairs or potentially find a contractor member to do so if schedules allow. Please reach out if you would like me to talk to your students.

Michelle Dreier

Director of Member Engagement & Government Affairs Electrical Association P: 612.827.6117

mdreier@Electricalassociation.com

Hourly Wages for Electricians in Minnesota



^{*}Source: MN Employment and Economic Development

Construction Teacher Conference!

The Electrical Association partners with Project Build Minnesota to bring other construction trades information to you and your students. Every year we bring you a Construction Teacher Conference. The next one is May 1-2, 2025. It will be hosted by ISD 916 and participants will get to tour the home built by students as part of their construction program. We'll also have more information on the MN Housing Finance Agency's Housing Challenge initiative (also see page 8) that may help to fund your school's construction program. https://projectbuildmn.org

ELECTRICAL APPRENTICESHIP PROGRAM

LAUNCH YOUR CAREER

TODAY'S ELECTRICIANS...



Are in high demand!



Earn an excellent living!



Have endless career choices that fit their lifestyle at any age

OUR STUDENTS RECEIVE...

- 4-yr course
- 144 hrs of annual related-training recommended to apply for the Journeyworker license
- Flexible, online training
- · Recordings make missed classes easy to make up

ASPIRING ELECTRICIANS...

(1) Find a position as an "entry-level apprentice" with an electrical contractor

(2) Visit our Career Center* for step-by-step help (see below)



REGISTER (if you are already employed as an apprentice)

612-827-6117 • www.electricalassociation.com/apprentice
*www.electricalassociation.com/careercenter



Community Partnerships Foster Real-World Learning

Minnetonka High School MOMENTUM Program Partners with the Minnesota Asphalt Paving Association for Hands-On Mathematics Unit



Minnetonka Public Schools

At Minnetonka High School, MOMEN-TUM provides opportunities for students with a passion for real-world, hands-on learning to take courses that can lead to skilled trade careers. The program began as a reimagining of aspects of Minnetonka High School's technical education program, with its first courses launching in Fall 2020. Four years later, there are more than 400 students involved in classes within MOMENTUM's four different areas of study — Construction Systems, Manufacturing, Design, and Transportation.

This spring, a team from the Minnesota Asphalt Paving Association (MAPA) and Valley Paving worked extensively with Minnetonka High School MOMENTUM students taking the program's Physics and Mathematics in Home Renovation classes as part of a pioneering, project-based learning initiative. Both Physics in Home Renovation and Mathematics in Home Renovation are interdisciplinary courses that allow students to fulfill graduation requirements in core subjects areas while applying knowledge directly to the trades.

Inspired by a project from Purdue University, MOMENTUM instructors together with MAPA partners designed a "bidding challenge" unit where students determined funding for the hypothetical paving of a district school site, Minnetonka Middle School West. At the completion of the project, students presented their findings in the City of Minnetonka council chambers.

The unit took place over eight weeks, and MOMENTUM instructors and MAPA professionals worked together to plan the intersection of academics and applied skills to give students an unmatched experience.

"During the first five weeks of the project, industry experts and our instructional team incorporated lessons on reading blueprints and the major elements of the project, from removal and aggregates to utilities, paving, and excavation," explained MOMENTUM program instructor Brent Veninga. "Students were able to visit the site in question at the local middle school, and then each team had the opportunity to give their bid presentation to a review panel, followed by a 'bid opening' event so everyone could hear what the other teams did."

"We wanted to essentially create a giant "word problem" with asphalt paving as the subject. It's a way students can achieve their learning objectives, while exposing them to an industry they might not be aware of," said Abbey Bryduck, Executive Director of MAPA. "Putting the curriculum into a practical application with an incentive, just like in the construction world, hopefully gave the students an experience where they could envision themselves being in the future. That was MAPA's goal in the project." Bryduck is involved in MAPA's workforce development committee and noted that the organization approached this project as an opportunity to help students envision future careers.

As part of this challenge, seven student teams traveled to Valley Paving for site visits. From welding to crawling inside the driver's seat of motor graders, dozers, dump trucks and other massive machines, students had firsthand exposure to the many elements it takes to complete a large transportation paving project.

"My favorite part of the project was the progression week after week, of seeing the kids start to understand what to do on their own and then come up with their own ways to get to the answer," shared Brent Carron, an industry professional from Valley Paving.

Carron noted that real-world projects, like the bidding simulation, provide invaluable experiences for students to participate in. "One of the kids said it best, 'There is no real exact answer,' and that is the truth," said Carron. "At first, many kids were under the impression that there was a right and wrong answer for the project,

but there was not, based on what students felt they could achieve with the production, equipment and sources we gave to them."

The project revealed an interesting tension in requiring mathematics skills, and yet not having an exact answer that instructors were seeking from students. "That's the real world, in our world of construction," said Carron. "It's a choose your own adventure every day. There are many ways to get from 'A to B,' and all of them can be right."

Throughout the experience, students strengthened skills to levels beyond what they might achieve in a typical classroom environment. "From the hard skills related to math and physics, to soft skills of working with professionals on a weekly basis, a new type of

learning was created thanks to these industry experts," said Veninga. "Budgeting and estimating is a lifelong skill for us all to acquire, and this took place throughout the challenge. Now students have a new understanding of the consistency of the materials applied, labor required and resources implanted, this experience really differentiates our MOMENTUM students in new and positive ways."

Learn more about the Minnetonka High School MOMENTUM program at minnetonkaschools.org/MOMENTUM





Funding Available for Schools!

Minnesota Housing is excited to announce funding availability for school districts to provide affordable homeownership opportunities through the 2024 Single Family Request for Proposals (RFP)!

School districts, charter schools and educational cooperatives are eligible to receive up to \$100,000 in grant funds to construct homes for owner-occupants. Grant funds can be used for certain costs directly related to constructing homes such as materials and supplies. In connection with the grant, any funds used to purchase materials and supplies must result in the construction of a home or homes. These home(s) must then be sold to eligible owneroccupants with household incomes at or below 115% area median income. The homebuyers who purchase these homes must participate in homebuyer education through the Homeownership Education, Counseling and Training (HECAT) program.

School districts, charter schools and

educational cooperatives can apply for these funds through the 2024 Single Family RFP. The application deadline is Thursday, July 11, 2024 at noon Central time.

Application instructions and documents are available on Minnesota Housing's Impact Fund webpage https://www.mnhousing.gov/homeownership/community-initiatives-programs/impact-fund.html.

Those interested in applying should review the Single Family RFP Application Instructions. In addition to other required documents, applicants must also complete the: Schools Workbook and School Supplemental Activity Application.

We encourage school districts, charter schools and educational cooperatives interested in applying for funds to reach out to the Impact Fund team for training and technical assistance on program requirements and the application process.

CAREERS IN CONSTRUCTION

Construction Laborers

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

Construction Carpenters

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

Construction Managers

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

Construction and Building Inspectors

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

Civil Engineers

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

Operating Engineers and Other Construction Equipment Operators

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

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

Paving, Surfacing, and Tamping Equipment Operators

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

Structural Iron and Steel Workers

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

Architectural and Civil Drafters

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

Electrical Power-Line Installers and Repairers

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

Highway Maintenance Workers

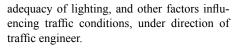
Maintain highways, municipal and rural roads, airport runways, and rights-of-way. Duties include patching broken or eroded pavement and repairing guard rails, highway markers, and snow fences. May also mow or clear brush from along road, or plow snow from roadway.

Painters, Construction and Maintenance

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

Traffic Technicians

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



Surveyors

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

Transportation Engineers

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

Electricians

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

Mobile Heavy Equipment Mechanics

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

Career/Technical Education Teachers, Postsecondary

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

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



Minnesota Asphalt
Pavement Association

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

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

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



Irondale Work Based Learning Coordinator Angela Zappa Pairs Tech Ed Courses and Career Planning



Irondale High School Career Navigator and Work-Based Learning Coordinator Angela Zappa challenges her students to think about their future after high school.

Zappa has conversations about careers with her students and has built a curriculum

around helping students with an interest in construction connect with relevant work opportunities and programs that support their career exploration process.

"More than 1,700 students are enrolled at Irondale High School (located in New Brighton). I help students identify their skills, explore careers of interest, and investigate steps needed to enter that specific career pathway," Zappa said. "A fouryear college degree isn't the right fit for all students, especially with the variety of training options through apprenticeship programs, technical colleges and workforce training programs intended to propel students into a highdemand career."

In her career at Irondale, Zappa's experiences as an educator have made her realize the importance of developing foundational academic skills alongside employability skills so that students can find success in a fulfilling career after high school.

"I've taught English, Special Education and eventually moved into the Work-Based Learning coordinator role. During my time as a work coordinator, I've heard the cries from trades and manufacturing fields due to the shortage of skilled workers. There's so much opportunity for

our students who want to work with their hands," Zappa said.

Zappa teaches two courses at Irondale: Careers Plus and Trades and Manufacturing Career Exploration.

"The 'Plus' in Career Plus is the On-the-Job training part of our program; at Irondale we recognize many of our students already work part-time jobs. When possible, we try to match their career interests with their part-time jobs," Zappa said. "Some students are helping their families by contributing to monthly bills and it's important that they understand their salary, benefits, and career advancement opportunities."

Career Exploration Courses at Irondale

Irondale High School offers a variety of technical education courses to students including Engineering, Small Engines, Digital Electronics, Welding, and a course titled "How to Make Almost Anything" (a woodshop and general construction focused course). Mounds View students also have the opportunity to enroll in these courses.

In addition to these skills courses, Zappa supports trades and manufacturing focused students with career exploration courses such as her Careers Plus program and a new course called Trades and Manufacturing Career Exploration.

"I know that name is a mouthful, but we wanted to be clear about what exactly happens in this new course: OSHA 10 Safety Training, job site tours, apprenticeship training center tours, guest speakers, and field trips," Zappa said.

We didn't know how many students would register for this new class, but the response represented an overwhelming interest in the construction trades and excitement for touring real workplaces.

"There was enough student interest to offer two full classes next year," Zappa said. "We worked with the dean team to identify students whose interests would be a good fit for this program, and we're double what we had hoped for in response."

As an educator who thrives on helping students 'find their fit,' Zappa is thrilled at the student body interest in her new course.

In response to a growing demand for trades professionals nationally, Zappa also investigated internship opportunities that her trades students could explore locally through community partnerships and employers.

"Our goal in the Career and Technical Education department is to prepare students for a successful career by connecting skills learned in the classroom to skills needed for success and growth in a career," Zappa said. Courtesy of the Construction Careers Foundation

irondale. mvpschools.org



Spanier Earns Outstanding Teacher Award from Project Lead The Way



Delano Public Schools

Tory Spanier, a Project Lead the Way teacher at Delano High School, is one of only 38 teachers across the U.S. to earn the 2023-24 Outstanding Project Lead the

Way (PLTW) Teacher Award, which recognizes educators who demonstrate a strong record of delivering an inspiring and empowering student experience while expanding access to PLTW programs and transforming teaching.

"Delano is proud of Tory's dedication to students and to applied learning," said Delano Public Schools Superintendent, Matt Schoen. "Although Tory has many great qualities, his greatest

strength is his commitment and studentcentered approach to teaching and learning. His encouragement, unfailing enthusiasm, and commitment to PLTW and students allow all students, from all levels of learning, to advance in engineering, architecture, science, math and technology."

Spanier, a PLTW Master Teacher, has been a teacher at Delano for nearly 20 years with the last 15 years teaching PLTW Gateway to seventh and eighth-grade students. PLTW honored Tory Spanier for his leadership and dedication to PLTW. For the past 15 years, Spanier has engaged students in Design and Modeling curriculum and in Automation and Robotics curriculum. In 7th grade, students discover design processes and develop an understanding of the influence of creativity and innovation in their lives. Eighth-grade students combine mechanisms with input and output devices to automate mechanisms and are challenged to apply what they have learned.

"DHS students are lucky to have Mr. Spanier as a teacher," said, Delano High School Principal, Barry Voight. "He is an innovator who is consistently looking to

adjust his classroom and lessons to reflect the latest in curriculum and technology."

Each year PLTW honors outstanding teachers and administrators across the network who play an immeasurable role in preparing students to thrive in college, careers and beyond. When Spanier is not teaching PTLW Gateway classes, as a PTLW Master Teacher he trains and mentors other PTLW teachers across the U.S.

www.delano.k12.mn.us





CARPENTERS | FLOOR COVERERS | MILLWRIGHTS | PILE DRIVERS www.NorthCountryCarpenter.org



From Popsicle Stick Miniatures to Carpentry: The Story of a Brooklyn Center High School Senior



Meet Meya Xiong, a talented 12th grader at Brooklyn Center High School, whose journey into the world of construction is nothing short of inspiring.

Like many of her peers navigating the challenges of online learning during the pandemic, Meya found herself yearning for a more hands-on experience. Always creative

and artistic, she sought solace in crafting miniature houses out of popsicle sticks, inspired by tutorials she discovered on YouTube.

It wasn't long before Meya's curiosity led her to explore the construction world.

In 11th grade, she enrolled in an introductory trades class at school, where she learned through hands-on projects. Her interest was sparked. As she put it, "Before the class, I didn't know how to use a measuring tape. Learning the basics was very interesting."

"There are so many options in the trades. It's so satisfying to see the progression of a project"

Next, Meya enrolled in the Finishing Trades Academy, where high school students spend 2.5 hours during the school day gaining hands-on experience at the Finishing Trades Institute and earning high school credit. There, Meya had the opportunity to meet fellow students and learn from their diverse perspectives. "Making connections with other students was really fun. Everyone is at different levels," said Meya. "I enjoy getting to see how other people think."

Eager to expand her skills, Meya joined Lake Street Works in July 2023. This afterschool program offers juniors and seniors a platform to develop real-world skills in various trades, including carpentry, electrical, plumbing, HVAC, drywalling, and painting. Meya quickly made a lasting impression on everyone she met. Her coach, Sam Ebute, describes her as "a driven and organized student who develops inspirational relationships with her peers."

For Meya, the appeal of the construction industry lies in its ability to blend creativity with practicality. Drawing inspiration from her love of drawing and the aesthetics of buildings, she finds fulfillment in seeing projects come to life from conception to completion. "There are so many options in the trades. It's so satisfying to see the progression of a project," she says.

After graduating from Brooklyn Center High School, Meya will embark on the next chapter in her journey and will spend the summer as a full-time carpentry apprentice for Gardner Builders.

"Five years from now, i would like to be a journeyworker teaching other people how to do the work."

As she explores working in construction, Meya is committed to sharing her knowledge and inspiring future apprentices. Just as she was taught to be a role model for her younger siblings, Meya hopes to pass on her skills and experiences to the next generation of construc-



tion professionals. Meya says "Five years from now, I would like to be a journeyworker teaching other people how to do the work."

Meya Xiong is a true testament to the transformative power of following your passion and embracing new opportunities. The future of construction is bright with talents like hers leading the way.

Courtesy of the Construction Careers Foundation

www.bccs286.org





Moorhead House Remodel Demonstrates Former MHS Teacher's Legacy

Continued from Page 1

building.

"Mr. Olson had a special way with us. He was a fun teacher and had everyone's attention starting on the first day of class," explained Spriggs. "He understood that everyone in his classes had different backgrounds and experience with woodworking. He wanted everyone to try their hardest, improve over the year and, most importantly, feel joy in what they created."

Chris reports that he has been making connections with numerous former MHS students who took classes from his dad in hopes of hiring as many as possible to be a part of the remodel. He sees parallels to his parents' work in the district's present-day mission — particularly at the MHS Career Academy.

"It's super-cool to see kids finding a career in something that they love to do with their hands because they love to create," added Olson, who himself is in his 26th as a teacher in the district. "Today, the district has that with career and technical education at the Career Academy. It's the future of what mom and dad were doing in their time at Moorhead High: hands-on learning for everyone that helps some students discover

the careers they want to pursue as adults."

And while Chris' work at Probstfield makes him the Olson having the most impact on today's generation of students, Stan isn't done yet.

"I have a nine-year-old son that has watched me over the years and has started to take an interest in woodworking," said Spriggs. "He's built a few tables of his own and loves working with his hands. I believe Mr. Olson has played a part in my son's love for woodworking as well!"

www.isd152.org



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

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:

- 1. Equipment access
 - **a.** Nearly \$2,000,000 worth of equipment
 - **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
 - c. On-site support
 - d. CTE License
 - e. WBL License

- 3. Program development and review
- 4. Advisory board support
- **5.** Program enhancement plan (district will determine items needed) Examples include:
 - a. Youth apprenticeship plan
 - **b.** Career awareness /readiness
 - c. Recruitment ideas / plan
 - **d.** STEM activities / curriculum

Technical Programs – Careers for Today and Tomorrow

Undergraduate Programs:

- · Construction Management
- · Technology Education
- · Manufacturing Engineering Technology
- · Environmental Studies & Science

Graduate Programs:

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

For additional information:

Kurt Helgeson

krhelgeson@stcloudstate.edu 320-308-3127

www.stcloudstate.edu/ets



William's Journey into Engineering and Robotics

How William Moe turned a curiosity into a career path with help from robotics competitions and engineering classes.

Burnsville-Eagan-Savage School District 191

It started with a school announcement. There was an open house to learn more about and potentially join the robotics club, and seventh grader William Moe knew he had to attend. He had always been interested in engineering because his father is an engineer, but robots were especially intriguing to him. Little did he know that joining that club would start him on a path to regional and national competitions and a future as an engineer.

District 191 is proud to have Robotics programming including teams that participate in competitions through FIRST, which stands for For Inspiration and Recognition of Science and Technology. With different program options for all grade levels including team-based competitions, FIRST provides a structure for students to learn important STEM and programming skills,

but also find confidence, collaboration and other important skills.

Teams do more than just build and compete with robots, they have to organize, raise funds, find sponsors and market their team like a business. Starting out with the smaller robots, William found that he loved being a part of a team and learning more about the trial and error process of coming up with creative solutions for the challenges of the competition.

"A lot of it is hands-on learning and figuring out how to do things and solve problems," said William. "There are a lot of concepts like learning about force, programming and just being able to build something and then learn all about it."

When William started at Burnsville High School (BHS) he dove into engineering classes, while also taking College in the Schools and Advanced Placement classes to earn college credits. Courses like Aerospace, Fabrication and Design, Principles of Engineering and Civil Engineering broadened his understanding of the concepts and applications of the world of engineering. He also became more and more involved in



the Blaze Robotics Team, moving up to the larger robots and tougher challenges of the FIRST Robotics Challenge.

"We had a lot of fun and we started performing really well," said William. "My junior year was a big year with many of my teammates having graduated, so we really pulled together and ended up making the final bracket of the tournaments we competed in. We have great mentors on the team who guide us in learning stuff, but also help to poke holes in our designs and ask ques-



College of Science and Engineering

St. Cloud State University

UNLEASHTOMORROW



Outreach Activities:

Partnering with over 60 schools and businesses to serve over 10,000 K-12 students per year.

- DEED Grant for RoboticsTeams and STEM InternshipPrograms
- Huskies Invent A non-stop weekend "inventa-thon" for collaboration with businesses and students.
- Husky Make It Space Bring ideas to life, from design to the creation of visual models/ functional prototypes.

America's Cutting Edge (ACE) CNC Training

- CNC training to Minnesota for high school students, teachers and industry employees.
- Program includes mobile HAAS mills and Forest Scientific mills.
- Training, equipment and supplies available at no cost.

Degree Options

Undergraduate Programs

Construction Management
 An applied construction field that provides knowledge and skills to manage construction of residential and commercial properties.



Technology Education
 Learn how to inspire in your own students' understanding of the interconnectivity of science, technology, society and the environment. The program leads to a 5–12 teaching license.



Manufacturing
 Engineering Technology

An applied algebra-based engineering field that looks for better ways to manufacture products. This includes reducing cycle times, maintaining quality, increasing safety, and keeping costs reasonable.



(Scan the QR codes to learn more about each program)

- Graduate Programs
 - Technology Education Master's Degree
 - Career and Technical Education (CTE)
 Graduate Certificate
 - Work Based Learning (WBL) Graduate Certificate

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

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

www.stcloudstate.edu/ets



St. Cloud State University,
A member of Minnesota State



Makerspace Opens Doors to a New World of Creativity

Richard Rohlfing, Cleveland Public School

As a fourth-grade teacher, Kim Germscheid's focus was instilling in her students her love of literature and reading.

But three years ago, Germscheid did a 180 when she took on the role of elementary STEM educator, teaching K-4 science, technology, engineering and mathematics labs and supervising the school's "Makerspace," a room dedicated to self-directed learning and play.

Germscheid still uses literature in STEM though.

"Many of our challenges or projects are based on books like "Rosie Revere Engineer," "If I Built a School" or "Hidden Figures," so I still get to share my love of reading and good quality literature. I also use several books on Science Fair projects and things to do with recyclables and cardboard."

Adjacent to the school's media center, Makerspace is a room where elementary students discover, invent and problem solve using a variety of materials and machines.

In short: they use the room tinker, something kids do naturally. They build things; they take things apart, and they learn by doing it. Makerspace is an environment to encourage that process, Germscheid said.

"It's project-based learning. It's play. It's what we used to do. We kind of got away from that, and now we're circling back."

Makerspace is meant to tap into multiple learning styles and intelligences, Germscheid said. The lab encourages high student engagement and allows for undiscovered passions and interests. Students are encouraged to take thoughtful risks, persist in problem solving, collaborate with others and engage in handson learning while developing 21st-century skills.

A first step in encouraging careers in STEM, learning in Makerspace can be high tech or low tech.

Serving the technology-driven end of the spectrum, the room is outfitted with a trio of 3D printers, a laser engraver, a Cricut (paper and sticker cutting) machine with a heat press, robots for learning about engineering and motion control, a programmable plastic mouse for teaching basic computer coding concepts, and kits for hands-on working with electronic circuits and gears.

"I had to learn so much in this position," Germscheid said.

On the lower tech side, students use their hands and simple tools—like scissors and markers and paint brushes—to do their projects, some skewing towards the artistic while others are designed to be functional.

Materials on hand include cardboard, balloons, popsicle sticks, toothpicks, beads, pipe cleaners, tape, straws, playdough, clay, coffee filters, bottle caps, yarn, construction paper, cardboard tubes, recyclables and more. Many of the materials are donated by parents or other community members.

Working in Makerspace embraces failure as part of the learning process, Germscheid said.

"A lot of it is fail fast and figure it out: be a creative thinker, work with others and be



a problem solver. Critical thinking, creativity, collaboration and communication are skills kids are going to need for the future, whatever that may bring. I encourage students to think outside of the box, work together and communicate clearly."

While elementary teachers reserve Makerspace for their students' self-guided projects, Germscheid also teaches K-4 technology labs in the same room. Third graders, for example, are currently learning TinkerCad, an on-line program they use to create 3D designs that come to life on one of the room's 3D printers.

"It teaches us designing, using your imagination, and thinking what you really

like," said third grader Lucas Baker.

Germscheid's fellow elementary teachers can see how their students love having the time and materials just to explore, build and create

Their observations are correct, Germscheid said

"This is where the students want to be. They want to tinker; they want to learn; they want to play."

www.isd391.org



William's Journey into Engineering and Robotics

Continued from Page 13



tions about our process."

His teachers at BHS and the community volunteer mentors for the team all pushed Wiliam to learn as much as he could, try new things and find the best way to solve the problem while still expressing creativity. During his senior year, the team kicked into high gear, ranking number one in the state of Minnesota, winning two regional tournaments and ultimately advancing to the 2023 FIRST Robotics Championship in Houston where they ended up finishing fifth in the world.

It was amazing all around," said William. "My big goal this year was to go to the world championships and we put in a lot of work and built the best robot we could. We did well throughout the year and kept going until we ended up in the top eight. Houston was so surreal with stands full of people watching us and cheering."

Competitions center around different games and challenges that teams build and program robots for. This year's challenge involved picking up cones and cubes and placing them on poles or shelves on the other side of the field, as well as balancing three robots on a sort of teeter totter device. The teams compete in qualifying matches, win ranking points and ultimately the top eight teams are ranked and get to select their robots and alliances to compete in a double elimination bracket.

"This was my most active year on the team and I did a lot to help out, learned about CAD work, worked on programming, wiring and I was one of the drivers of the robot," said William. "Programming is fun because you can do some really fancy things beyond triggering an action with a button. There are ways to have the motor change speeds based on how far it is from an object or using cameras and vision software to track things."

"People don't always have the best view of robotics, but the amount of creativity and self expression that you can have through a robot is understated," said William. "My advice for kids looking for their passion is to just try stuff! I am fortunate to have found robotics pretty early on and that the Pathways at BHS supported that."

William is already scoping out different class projects and possible clubs to join and plans on volunteering at tournaments or becoming a mentor for a team someday.





SWENSON COLLEGE OF SCIENCE & ENGINEERING

among regional Midwest universities job placement rate

Top Public School US News & World Report 2024 Best Colleges Regional Universities

ENGINEERING PROGRAMS AT UMD

Civil Engineering Electrical Engineering Engineering Physics

Chemical Engineering Industrial Engineering Mechanical Engineering Computer Sciences Accredited by the Commission of ABET, www.abet.org.



Get research experience to apply what you learn.

UMD University of Minnesota Duluth Driven to Discover

Putting Students in the Driver's Seat



Marisa Vette, APR Director of Communications and Community Relations

For the past 10 years, White Bear Lake Area Schools (WBLAS) has offered Career Pathways for its students in grades 8 to 12.

White Bear Lake Area Schools

A leader in the northeast metro, WBLAS Career Pathways has evolved from its inaugural pathway in Manufacturing to encompass nine different pathways in the areas of Business, Communication Technology, struction, Education, Engineering & Manufacturing, Family & Consumer Sciences, Health & Wellness, Information Technology, and Automotive. With federal financial support from Perkins, Career Pathways relies on its strong community partnerships with local businesses to

ensure curriculum, course sequencing and student experiences are in line with industry standards and are available to students for hands-on exploration and mentorship.

White Bear Lake Area Schools' Transportation Career Pathways team has been working hard over the past five years to align local automotive industry, and to best serve the students who elect to enroll in the courses. One of these changes was partnering

with Ford Motor Company to add Ford Automotive Career Exploration (F-ACE) to their program.

"F-ACE has been a huge game changer for the program," said White Bear Lake Area High School (WBLAHS) Automotive Instructor Derek Doescher. "It has allowed me to mimic my curriculum to what my students will experience while attending a postsecondary automo-

tive program, or while working at one of our local industry partners to help students to build their resume."

This school year, two juniors have taken full advantage of the opportunities with F-ACE. WBLAHS students Andrew Klier and Jonny Hendrickson have completed more F-ACE modules than any other high school student in the United States. In December, Klier was recognized for his achievements when representatives

their program to reflect the needs of their from Ford Motor Company surprised him in his Automotive class with a personal congratulations for completing over 200 courses within the F-ACE program. In

> April, representatives from the company stopped back to meet Hendrickson and to

personally congratulate him on his accomplishment of completing over 500 modules. Company representatives shared they were not aware of any other students who had completed this many modules while still in high school, and that both of them are on track to become

certified Ford Technicians following graduation if they choose to do so.

In the fall of 2024, White Bear Lake Area High School students in grades 9–12 will come together in the newly-renovated unified high school. District leaders, instructor Doescher and countless industry partners have been hard at work in planning the new state-of-the-art space, which will feature bigger garage doors, new

Continued on Page 22



BHS Automotive Program Receives National Accreditation



Burnsville-Eagan-Savage School District 191

The automotive training program at Burnsville High School has received ASE Training Program accreditation in Maintenance and Light Repair by the ASE Education Foundation.

To achieve this coveted recognition, the school's automotive training program underwent rigorous evaluation by the ASE Education Foundation. Nationally accepted standards of excellence in areas such as instruction, facilities and equipment were used.

"This is great news for automotiveminded young people and their parents," said Michael Coley, ASE Education Foundation President. "Because this program increases cooperation between local education and industry leaders, it gives added assurance that Burnsville graduates will be employable entry-level technicians. As a result of the quality education provided by Burnsville High School, the motoring public will benefit since better repair technicians will join the work force."

The automotive program at Burnsville High School (BHS) provides real-world learning experiences for students and helps them easily move into desired careers in the automotive field.

Through various grants, like the Minnesota Department of Labor and Industry's Youth Skills Training grant, generous donations and on-going support from business partnerships, students have access to cutting-edge equipment, job shadowing opportunities, paid work experiences, certifications and early college credit opportunities.

Automotive classes are rigorous and relevant, and curriculum aligns with industry standards and expectations. A student who goes through the program, from engine technology to welding & auto repair to advanced vehicle services, will know how to perform a variety of repairs and services by the time they graduate. Some of the skills students learn are balancing and aligning tires, changing front/rear brakes, replacing

struts, welding and diagnostics.

"The automotive program, as well as other trades classes, offers transferable skills," said Russ Tesmer, technology education teacher and automotive instructor. "Not all students in the automotive pathway will end up in the field, but the skills they've learned here will help them in other career fields."

The automotive repair program at Burnsville High School is part of the school's Pathways model, which is designed to help students find their passion and prepare for success after graduation by providing opportunities to earn college credit and industry certifications without having to leave the school campus. Learn more about District 191's PreK-12 Pathways model at pathways. isd191.org.

The ASE Education Foundation is a non-profit, independent organization that evaluates and accredits entry-level technician training programs against standards developed by the automotive industry.

www.isd191.org





Rogers Small Business Owner Brings Wealth of Experience, Service to ISD 728

Written with/by CTE Instructor Tim Hahn Independent School District 728

In the ISD 728 core community of Rogers, one small business owner is making a significant impact on local high schools, and on hands-on learning.

Jack Schalo, owner of a small engines repair service company, has emerged as a dedicated supporter of education in ISD 728. His commitment goes beyond the typical boundaries of entrepreneurship, as he actively engages with high school small engine programs, offering invaluable assistance to teachers and ensuring the smooth running of equipment.

Jack's company has become a cornerstone for small engine programs in the school district. Recognizing the importance of hands-on learning, Jack actively collaborates with high school small engine teachers, providing guidance and expertise to help them navigate challenges in the workshop.

"His involvement extends beyond the typical transactional relationship between a business and its customers," said Mr. Tim Hahn of Elk River High School. "Jack is genuinely invested in the success of these programs."

Jack's commitment to the schools goes beyond providing advice, Hahn added. Understanding the significance of well-maintained equipment for effective learning, he plays a crucial role in ensuring that the engines used in these programs are running smoothly. Whenever a school needs replacement parts or maintenance support, Jack promptly facilitates the process, making it easier for small engine teachers to focus on imparting valuable skills to their students.

What sets Jack Schalo apart is his collaborative approach to community engagement. Rather than just running a business, he actively participates in the local education ecosystem. Jack fosters a sense of community by establishing open lines of communication with teachers, creating an environment where they feel comfortable seeking assistance and advice.

High school small engine teachers in ISD728, including Mr. Udee (RHS), Mr. Hahn (ERHS), Mr. Ostercamp (ZHS) and Mr. Levalle (ZHS), have expressed their gratitude for Jack's involvement.

"His willingness to share knowledge and promptly address our needs has not only enhanced the quality of education but has also fostered a sense of community spirit," Hahn said. "Jack's Small Engines has become a reliable partner for us as educators, contributing to the overall success of small engine programs."

In a world where businesses often focus solely on profits, Jack Schalo's dedication to supporting local high schools in the District

stands out. Through his active involvement with small engine programs, Jack has demonstrated the positive impact that small businesses can have on education and community development and serves as an inspiring example of how a business owner's commitment to collaboration and community can make a lasting difference in the lives of students and educators alike.



On behalf of ISD728, thank you Jack for all your support and generosity. You are making a difference for hundreds of our students.

www.isd728.org





SET YOUR SIGHTS ON A REWARDING CAREER

The Ziegler Diesel Technician Apprenticeship Program offers PAID on-the-job training through hands-on and classroom training led by Ziegler technical instructors over the course of the 12-month program. Tools and toolbox provided. No secondary education expenses.

www.zieglercat.com/careers





EGE DISABILITY/VETS



the full student
life experience in
Wahpeton with residence
halls, athletics, clubs,
events and more!



NORTH DAKOTA STATE COLLEGE OF SCIENCE
WAHPETON | FARGO | ONLINE

THE SMARTER WAY TO COLLEGE

NDSCS.edu

Architectural Modeling & Design Technology

Information based on 2023 NDSCS data

SDSU CIM Student Focus: Anthony "Tony" Valland

Anticipated Graduation Date: Spring 2026



Leaving home to attend a college program where I'd be learning something I had such little prior knowledge of was a challenge. I quickly realized I had to get comfortable with being uncomfortable and soak up as much as I could along the way.

I chose SDSU because I knew I would be able to grow there academically as well as socially. Though a bit of a last-minute decision, joining the CIM program, thanks to a little bit of recruiting from another CIM student as well as our program director, Tim Hostettler, was a decision I've been extremely happy with ever since. Now, just halfway through my CIM program, I've become more comfortable with change and better understand what is expected in this large industry and in real-world business

The CIM program has been a great opportunity to pursue my interests in business, construction, marketing, project management, and this degree will make me unique when I graduate. I'm not worried about my long-term income, security, or my happiness. CIM is so niche, and the curriculum is so balanced, it's a great chance to also have as much fun as you can while you're in college. I lucked out, learning about this great industry and the wide variety of career options available. As a CIM graduate, I know I won't go unnoticed because of my unique education, expertise, hands on experience, and executive connections I've been able to establish while in school.

I have been fortunate enough to observe the diverse aspects of the industry including aggregates, plant operation, quality control, and sales. This summer I'll be taking an experiential work role at Knife River in Sioux Falls, focusing on the sales aspects of the industry. During this time, I'll hone-in more on what I want to pursue as a career while doing everything I can to continue to learn what my mentors at Knife River will teach. I'm excited to be able to apply the knowledge I've gained in my classes, labs, and prior real-world industry work experience too.

The SDSU CIM program supporters made up of industry leadership, our North Central Region Patrons Group, not only donate dollars to ensure there are scholarships to help reduce tuition costs, but also make an intentional effort to build relationships with us CIM students. We are fortunate to have the opportunity to interact with these owners and executives at our networking events, conferences, luncheons, and at our annual CIM golf tournament. This is where the real connections are made for summer



work experiences and future career paths. All the CIM students at SDSU are extremely grateful for their investment and belief in us — We know our low-to-no debt 4-year CIM degree is practical and enjoyable largely because of them.

2024 Youth Skills Training Grant Recipients



Seventeen partnerships across Minnesota will receive funding to develop and expand programs to offer meaningful career exposure and paid work experience for students 16 years of age and older.

The grants are part of the Minnesota Department of Labor and Industry's (DLI) Youth Skills Training (YST) program that was signed into law in 2017 with bipartisan support to create and provide employment training for student learners ages 16 and older in high-growth, high-demand occupations

"These Youth Skills Training partnership grants will help high school students throughout Minnesota find pathways to high-growth, high-demand occupations and allow them to participate in safe, meaningful work experiences in their community," said Nicole Blissenbach, DLI commissioner. "Thank you to everyone who has supported this program."

YST grants will be awarded to the following 17 partnerships, which will receive and split \$1.5 million in funding to be used for programs operating from July 1, 2024, to June 30, 2026. The partnerships will offer safe, meaningful work experience in advanced manufacturing, agriculture, automotive, health care and information technology.

Albert Lea Area Schools

https://www.alschools.org

Bemidji Career Academies https://bemidjicareeracademies.com Cambridge-Isanti Public School District

https://www.c-ischools.org

Detroit Lakes Public Schools https://www.dlschools.net

Fergus Falls High School https://www.fergusotters.org

Great River School (St. Paul) https://www.greatriverschool.org

Hennepin West Consortium

Hermantown Community Schools https://www.hermantown.k12.mn.us

Itasca Area Schools Collaborative https://www.iasc.k12.mn.us

Minneapolis Public Schools - Camden

https://www.mpschools.org

Minneapolis Public Schools - Wellstone **International High School**

https://wellstone.mpschools.org

Moorhead Public Schools https://www.isd152.org

New Prague Area Schools https://www.npaschools.org

Parkers Prairie School District https://www.isd547.org

Perham Schools

https://perhamschools.org

ROCORI School District

https://www.rocori.k12.mn.us

Staples-Motley School District https://www.isd2170.org

Grants can be used to create programs, recruit students and employers, provide training, transport students and pay for industry-related student certifications. An eighth round of grant applications will open in winter 2024.

For more information about Youth Skills Training contact Rich Wessels, program manager, at 651-284-5184 or rich.wessels@ state.mn.us; Jo Daggett, program consultant, at 651-284-5354 or jo.daggett@state.mn.us; or Faye Blough, program specialist, at 651-284-5341 or fave.blough@state.mn.us; Learn more online at dli.mn.gov/YST.



SOUTH DAKOTA STATE UNIVERSITY

Concrete Industry Management

The Bachelor of Science in Concrete Industry Management (CIM)

This unique program balances STEM + business curriculum, real-world experience, and concrete technology to prepare experts and innovators for roles that manage operations, HR, marketing, accounting, logistics, environmental, chemical innovation, sales, etc. in the multibillion-dollar, global concrete industry responsible for producing the most used building material in the world.

Business, marketing, communication, and others with generalized majors are competing for jobs, and that competition is driving down wages. Majoring in CIM and minoring in an enjoyable area of study means an affordable, full 4-year college experience and career after graduation.





CIM Professionals <u>Know More</u> & <u>Owe Less</u> After Graduation!



Scholarship Packages & In-state Tuition: WI, MN, ND, NE, IA, IL, CO, WY, MT, KS & MO.

- ✓ Low-to-no debt degree as CIM patron and industry sponsors offer generous scholarships to significantly offset the cost of tuition.
- ✓ CIM student life includes all expense paid travel, special events, and connections to work opportunities before and after graduation.
- ✓ SDSU is home to one of only five CIM programs in the United States.
- ✓ Graduates enjoy nearly 100% job placement with most receiving multiple job offers.
- ✓ Prepares CIM graduates to hire into available management roles and start at higher salaries than most engineering graduates.

*Statistic from Middle Tennessee State University

uture You Can

Build On

Create your career path into a multibillion-dollar, global industry — Enroll in CIM today!



Contact: Jennifer Manatt
CIM Assistant Program Director
Concrete Industry Management Program
Brookings, SD
(319) 721.3931
Jennifer.Manatt@sdstate.edu | www.sdstate.edu



RAHS Auto Shop Provides Career Experience and Affordable Services



Roseville Area Schools

RAHS auto shop, running now for three years, provides services on cars of Roseville's students and community members, for reduced prices— by having trained students work on them.

Teacher Kenneth Sopcinski teaches students about cars in many different classes at RAHS, some open to only upperclassmen but others open to all grades. He said, "[the RAHS auto mechanics course] is a studentrun program, open to juniors and seniors, no experience required, but sophomores need to take small engines to take the auto mechanic class. We need a level of maturity in the classroom, and that's the entire reason I have the auto mechanic classes open to juniors and seniors, but Roseville [Area High School] has one of the best auto shops in the country, which is great for the students."

To learn about cars, RAHS students can take Know Your Car, Small Engines, and Auto Mechanic, which can go up to Auto Mechanics Five.

There is a process for training students before they start working on customer's cars. Sopeinski said, "My auto mechanics one class is primarily training for the trimester, and [student mechanics] aren't going to go into the shop until the last few weeks of the trimester." After students train, they can jump back into working on cars after a review of safety procedures.

The RAHS Auto Shop offers light to medium maintenance and repairs on automobiles. These services, as Sopcinski said include: oil changes, brakes and suspensions, coolant changes, and tire services, or any light that pops on the dashboard.

Although these services are relatively cheap, Sopcinski acknowledged a potential downside is the time it takes to repair the car. He said, "Our motto is we are cheap, but we are slow. It is expensive to fix a car regardless, but for example our front brake job, a pretty standard service, comes out to be \$240-280, but you bring it to a professional, it's going to come out to \$480, but we will need the car for two days. Like I said, we are cheap but slow, but it is ½ cheaper as a whole."

Business for the auto shop ranges, as Sopcinski sees how many cars his students can handle. He said, "I try and get just enough, I mean if Channel 4 news wanted to do a story here, that would be great but I know my phone would be ringing off the hook, and we can't service that many cars, so I keep it to community members, and people in the ISD 623 area."

The benefits of taking these classes range from being educated in car knowledge to finding a career in this area. Sopcinski said, "It depends on what their goals are. I have had students who take this and realize they really didn't know what they wanted to do in life, and they did this and they loved it and wanted to do it."

Sopcinski finds it hard promoting his classes to female-identifying students. He



said, "We really like to get more girls in our classes, but we are trying to do what they do in woodshop classes and try to run a girls' only class, if girls sign up. If you look at my roster, it will be all boys and maybe one or two girls, and I don't blame them."

RAHS auto shop has a Facebook, called Raider Auto Shop, where they post updates and pictures, check them out here: https://www.facebook.com/raiderauto

This article was written by Naima Sheikh-Mohamed, Editor-in-Chief for The Ville (Roseville High School Student Newspaper)

www.isd623.org



Putting Students in the Driver's Seat

Continued from Page 17

and updated hoists, WinAlign Hunter Alignment machine, a Pro-Cut X15 on-car brake lathe, a Hunter tire changer, a Hunter Smartweight balancer and many other new pieces of equipment. These new pieces of equipment will allow the automotive curriculum that is offered to students to be expanded and allow for increased student agency, as students will be able to focus

on areas of the vehicle that interest them the most. The cutting-edge technology and lab design will offer an even more real-world industry feel, mimicking the inner-workings of an automotive shop.

"This is a really exciting time for our automotive students. They will have access to top of the line equipment that will help them leave this program prepared for a career in our local automotive industry," said Doescher. "Thank you to all of the indi-



viduals that helped throughout this process. Because of everyone's support, we are truly growing the technicians of tomorrow!"

www.isd624.org





everything in between.

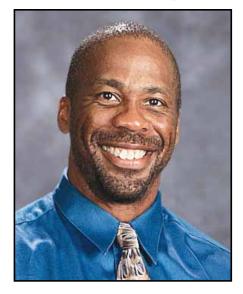
www.letsrockminnesota.com

Leadership



Congratulations!

Minneapolis Educator Tracy Byrd is 2024 Minnesota Teacher of the Year



Tracy Byrd, a ninth-grade English language arts teacher at Washburn High School in the Minneapolis school district, is the 2024 Minnesota Teacher of the Year.

Byrd is the 60th recipient of the prestigious award, and the third from the Minneapolis district to be named Minnesota Teacher of the Year. An independent selection committee representing Min-



nesota leaders in education, business and government chooses the Teacher of the Year from individuals who are nominated and who then choose to become a candidate

Byrd, a graduate of Washburn, came to a career in education later in life. In 2008, he left a career in the financial field to work in the Wayzata school district, first as a hall supervisor and a coach in football and track and field. During that time, he decided to pursue a teaching degree. He enrolled in a

teacher licensure program and took a position as an achievement specialist to prepare him for full-time teaching.

Upon receiving his teaching credentials from Metropolitan State University in 2017, Byrd chose to return to his alma mater to teach.

Providing fair access to education for all students, something Byrd found lacking in his own experience, is his teaching goal. "True access to education can change the trajectory of a student," he said. "It could be the spark that ignites the flame for a young student into a field they didn't know existed. To me, that is the purpose of education: Not to give them something they already know, but to show them something new and authentic so they can learn and grow."

"Tracy Byrd is the epitome of excellence and integrity in public education," said Katie Murphy-Olsen, an English as an additional language teacher at Minneapolis Edison High School, in her nomination letter for Byrd. "His dedication to the students at Washburn through educating, coaching, advocating and leading is palpable in his work. He exudes a dynamic energy, a kindness to all, and he is incredibly supportive to fellow educators and the Minneapolis community."

washburn.mpschools.org



CONGRATULATIONS

TRACY BYRD

Metro State graduate and Minnesota Teacher of the Year



METRO STATE UNIVERSITY

A member of Minnesota State

Lead with passion and purpose.

Bachelor's and master's programs in teaching: metrostate.edu/urbanteacherprogram



Highwood Hills Elementary Principal Dr. Fatima Lawson Named Minnesota

2024 NAESP National Distinguished Principal

notable achievements, Dr. Lawson spearheaded a remarkable turnaround at Highwood Hill Polytechnic Elementary School, leading the school out of corrective action and achieving notable success in student achievement. She did this by having intentional conversations with the three major groups of families that represented about 90% of the student population. The Somali families, representing about 40% of the student body, wanted

The Minnesota Elementary School Principals Association (MESPA) proudly announces the recognition of Dr. Fatima Lawson, Principal of Highwood Hill Polytechnic Elementary School, St. Paul Public Schools, as the recipient of the prestigious 2024 National Distinguished Principals' Award. This award is presented by the National Association for Elementary School Principals (NAESP) and MESPA. Dr. Lawson's outstanding leadership, innovative initiatives, and unwavering commitment to educational excellence have earned her this esteemed accolade.

Dr. Lawson's remarkable journey as a principal is characterized by transformative accomplishments that have significantly impacted the educational landscape and the lives of countless students, educators, and community members. Among her most

their students to become doctors, lawyers or engineers. The Karen families, representing about 30% of the student body, wanted their students to learn the science of agriculture and animal husbandry. The Latinx families, representing about 20% of the student body, wanted their students to learn something more handson, hoping their students would go into the trades and eventually take over family businesses. After this input, Dr. Lawson and her leadership team came up with a three-track program, called, "The Polytechnic Program." The tracks include technology, engineering and agriculture.

"This award means a lot to not only me, but to the entire generation of African immigrants, and those who believe that earning such a recognition is far-fetched, regardless of one's hard work and dedication," reflected Dr. Lawson. "Coming from a very humble background educationally, who would have thought that I would one day be named among America's top educational leaders? I am certainly humbled and do not take this recognition for granted, as this validates the hard

work and dedication that many people have put into making this day happen. Together, we are shaping tomorrow's leaders, innovators, and changemakers. This award is certainly for all of us. I am only the guardian of the trophy."

Duane Dutrieuille, principal of Hazel Park Elementary School, and the person who nominated Dr. Lawson, commented, "Dr. Lawson's advocacy and proactive measures to address issues of diversity, equity and inclusion have resulted in tangible and positive changes," said Dutrieuille. "She has worked tirelessly to ensure that every student, regardless of their background, has access to a high-quality education. Her work in this area is not only commendable but serves as a model for other educational leaders to follow."

Bret Domstrand, principal of Lake Marion Elementary, NAESP state representative and chair of the National Distinguished Principal selection committee maintained, "I am immensely proud of the caliber of leadership demonstrated by all three finalists. Each candidate presented exemplary qualifications and a profound commitment to educational excellence. Ultimately, Dr. Fatima Lawson's exceptional achievements, innovative initiatives, and unwavering dedication set her apart, earning her the well-deserved honor of the 2024 NAESP National Distinguished Principals' Award."

Dr. Fatima Lawson's commitment extends beyond her exemplary leadership in her building; she has also been an invaluable member of the Minnesota Elementary School Principals Association (MESPA) for 23 years. Throughout her long-standing membership, Dr. Lawson has been a steadfast advocate for the advancement of education and the empowerment of educational leaders across the state. For the past 3 years, she has served as the Legislative Chair, leveraging her expertise and passion to shape legislative priorities and advocate for policies that support the needs of students, educators, and schools. Dr. Lawson's unwavering commitment to MESPA's mission has been instrumental in driving positive change within the educational landscape, embodying the spirit of leadership and service that defines the association's members.

Michelle Krell, MESPA's executive director affirmed, "Dr. Fatima Lawson exemplifies transformative leadership, demonstrating unwavering dedication to fostering meaningful connections, fostering innovation, and championing the future of every student and family under her care. Fatima has been an active and supportive member of MESPA (Minnesota Elementary School Principals' Association) and has gained high respect from her colleagues. This acknowledgment signifies Fatima's exceptional leadership qualities and notable achievements as a principal. We take great pride in her representation of MESPA as our National Distinguished Principal."

Dr. Lawson extends her gratitude, "From my staff colleagues at Highwood Hills, to the families, students, and community members

Continued on Page 25



MHS Career Academy's Heigaard Earns Statewide Teaching Award

Moorhead Area Public Schools

The Minnesota Association for Career and Technical Education has named Johanna Heigaard, a Family and Consumer Services teacher at the Moorhead High School Career Academy, the 2023-24 New Teacher of the Year for the State of Minnesota. Awarded to teachers with less than five years' experience in career and technical education (CTE), the honor recognizes teachers who have made significant contributions toward innovative and unique CTE programs.

'Being honored as the MnACTE New Teacher of the year is incredibly humbling and I'm so grateful," said Heigaard. "Having the chance to share my culinary passion with my students while empowering them through education is surreal. I'm very thankful to the Moorhead school district and community for seeing the positive benefits of the Career Academy model and their continued support of CTE.

Heigaard is in her second year as a FACS teacher with Moorhead Area Public Schools after spending three years as a paraprofes-

MHS Career Academy sional with the West Fargo School District. She leads the Career Academy's culinary program, which she helped start during the

Johanna Heigaard

"Johanna has been a very bright light in the FACS department who has been willing to take on anything that's been thrown at her,"

2022-23 school year.

said Career Academy assistant principal Holly Strand-Rysgaard. "That includes launching the culinary program, working to get it ProStart certified and expanding the program coming into its second year."

ProStart is a national two-year, industry-backed culinary arts and restaurant management program for high school students.

Not only has Heigaard grown the program in terms of numbers, with 33 students enrolled this year and 90 already registered for 2024-25, but she has also worked to improve the learning experience for her students. She has developed industry connections in the region, engaging local businesses to provide realworld learning opportunities and internships.

In addition to her work with the culinary program, Heigaard also teaches classes such as International Foods and Food Basics.

As the winner of this year's MACTE award for Minnesota, she is the state's nominee for the regional New Teacher of the Year award. Minnesota is in Region III, which also includes Indiana, Illinois, Iowa, Missouri and Wisconsin. Regional winners become finalists for the national award, which will be announced in December.

www.isd152.org



Leadership

Finalists for 2024 Minnesota Teacher of the Year

On Teacher Appreciation Day, our incredible 2024 finalists talked about why they teach.



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

Visual Arts, 8-12

"I teach because I know it takes one subject in school to make a difference in a child's life. I teach because regardless of our adversities or circumstances that every child deserves to find their voice to create to explore by the path of resilience through education. I teach to heal not just myself but also the world around me."



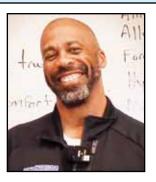
Rebecca Buck

Gideon Pond Elementary Burnsville-Eagan-Savage School District Music, K-5

"I teach to inspire my students to learn and practice empathy and learning about other cultures through the doorway of music education. I teach to model how learning can be so much fun. I teach to encourage group work, social skills, and community building. I teach to see that joy and spark that they get in their eyes when they finally understand a concept or singing game or an instrument part. I feel most alive when I'm working with my students and that is why I teach."

The 2024 Minnesota Teacher of the Year was chosen from a group of 11 teachers who were named finalists in the program. An independent selection panel of 17 leaders in the areas of education, business, government and nonprofits selected the finalists from a group of 27 semifinalists. There were 159 candidates for this program year.

The selection panel met to conduct individual interviews with each of the 11 finalists and to cast votes for the 2024 Minnesota Teacher of the Year. For a look at how the selection process works, go to https://educationminnesota.org/news/awards-and-honors/teacher-of-the-year



Tracy Byrd 2024 MN Teacher of the Year Washburn High School Minneapolis Public School English Language Arts, 9.

"The best way to create a good Community is to roll up your sleeves and get messy and do the hard work. Growing up I never had a teacher who looked like me and I want to make sure that other students don't have that same problem. I teach because at some schools, lunch is really good. (hahaha) I teach because the kids and give me all kinds of energy. Every single day I learned things from them. They teach me as much as I teach them. This is why I teach."

Continued on Page 26

Dr. Fatima Lawson Continued from Page 24

that make this award possible; to our district leadership, Dr. Joe Gothard, our outgoing superintendent; to Dr. Adam Kunz, Assistant Superintendent and my supervisor, whose leadership has been instrumental in encouraging and supporting me to dream big things for Highwood Hills; to my principal colleagues at SPPS and across the state that supported me and actually showed great examples of leadership to emulate; to the MESPA Leadership; and last but certainly not least, to my beloved family: Roger Lawson, my dear husband, friend, cheerleader; my four daughters, my sons-in-laws, and my six granddaughters. To all of you, I say a very big thank you! I could

not have come this far without your love, understanding, collegiality, guidance, mentoring and support!"

Dr. Lawson's exemplary leadership serves as an inspiration to educational leaders across the nation, exemplifying the transformative power of collaborative leadership, innovative thinking, and a steadfast commitment to student success.



District Indian Education Teacher Wins Outstanding Elementary Teacher of the Year Award



ISD 279 - Osseo Area Schools

Jillian Stately, an Indian Education teacher for nine of the district's elementary schools, was recently recognized with an Outstanding Elementary Teacher of the Year award at the April 18 Minnesota Indian Education Association (MIEA) conference.

Stately serves 140 district students who are Native American at nine schools, plans curriculum for all elementary sites and meets regularly with groups of students for lessons on cultural knowledge, especially with the region's dominant Dakota and Ojibwe tribes. While she has worked with students at all building levels throughout her six years with the district, she now works exclusively with elementary-aged students.

"Strengthening their cultural identity is

really important for these kids," Stately said. "I just love the elementary age."

Some of the topics Stately's students have engaged in this year include learning about native storytelling and how it relates to constellations and animals, traditions of jewelry making

Crest View Elementary School's Laura Wagenman nominated Stately for the award.

"Jillian is dedicated to ensuring our students in Indian Education feel connection, belonging and see their cultural gifts," Wagenman said. "She is a creative educator who facilitates handson learning experiences that cultivate joy and rich cultural ties."

The MIEA conference, where she received her award, had over 500 attendees including Indian Education teachers, coordinators, directors, parents of Indian Education students, community members and non-Native educators.

"It was an overwhelming feeling of happiness to be acknowledged as the teacher of the year in a room full of educators that are also doing amazing work in their Indian Education programs across the state," Stately said. "I am grateful and very appreciative for being awarded for doing this work in our elementary schools."

Continued from Page 1 Foundation on behalf of the White House Teachers who are selected as PAEMST

Minnesota Finalists for PAEMST Award

Office of Science and Technology Policy.

The finalists represent the most outstanding teachers Minnesota has to offer, and they serve as both a model and an inspiration to fellow teachers. 2024 Minnesota finalists will be recognized informally during STEM day at the Minnesota State Fair, and formally during the Minnesota Council of Teachers of Mathematics conference and the Minnesota Science Teachers Association conference.

awardees receive a trip to Washington, D.C., where they attend a series of recognition events and professional development opportunities. They also receive a \$10,000 award from NSF, a Presidential certificate and join an elite cohort of award-winning teachers who can influence STEM teaching in Minnesota and

For more information about PAEMST,

visit https://paemst.nsf.gov.



Finalists for 2024 Minnesota Teacher of the Year Continued from Page 25



Susanne Collins

Edgerton Elementary School Roseville Area Schools Grade 6

"Like many other teachers, I was inspired by a teacher. For me it was my high school speech teacher. From him I learned the importance of positive teachers and their powerful influence on the students' lives. My students participate in many community building activities where they are encouraged to work outside of their comfort zone. I get to help them feel valued, appreciated, seen, and heard. I have the privilege to celebrate their accomplishments and identities every day."



Sarah Dallum

Valley View Elementary School Bloomington Public Schools Grade 5

"I love to help my students belong to themselves. It's really important to me that they have a deep belief in themselves. Watching them develop that is one of my favorite things. My students bring me hope and joy for the future. They are going to be the change. It allows me to talk to my students about social justice issues, especially revolutionary leaders of the past and present. My students also teach me about the world. They love to talk about their cultures and their religions and their perspectives and I love to soak that up with them. I love teaching and if I didn't I wouldn't do this job."



Marie Hansen

Burnsville High School Burnsville-Eagan-Savage School District AVID/English, 10–11

"I teach for my colleagues. Teachers are the best of us the funniest smartest leaders who will do anything to help each other out. I teach for myself. I teach because I love kids and I love books so here we are, but mostly I teach for my students. I teach because my students are brilliant, kind, thoughtful, and funny and helping them grow into adults. The next generation is going to change the world, is the greatest privilege. I teach because the world is a scary place but working with the next generation, a generation that believes in the power of love and the power of change, banishes that fear to the margins instead of the center."



Laura Jensen

Hopkins North Middle School Hopkins Public Schools Language & Literature, 7

"I teach because it is still one of the most meaningful professions there is. I get to spend my day with 11- to 13-year-olds, who approach life with fresh eyes and an amazing amount of spunk and quirkiness. I teach because I'll be laughing 1 minute and utterly awestruck the next. I teach because I hear stories from kids that give me hope and that belief in humanity and stories that also sometimes break my heart. I teach because I get to come alongside kids and be part of their journey."



Jason Jirsa

Washburn High School Minneapolis Public Schools Social Studies, 9–12.

"I teach because my students need me, we all need them and teaching and learning can be a lot of fun. Before they leave my class I want them to be better researchers, better writers, better collaborators, better communicators, and those are all skills that I hope to give them. Now, that's not easy and part of my job that I love is the challenge that brings me back every day. I cannot wait to see what they do after high school. In the simulation today we were talking about climate change, a problem our generation has not done well with, and yet when you listen to these students and their ideas and their enthusiasm you have hope for the future. I can't imagine a job where I can have a greater impact on the world."



Jamie Williams

Capitol Hill Gifted and Talented Magnet School Saint Paul Public Schools U.S. History, 7.

"I teach because I love it. Everyday is brand new and there is never a dull moment, especially at the middle school level and I enjoy most every minute. There are challenges of course but every challenge is worth it. When I see the light bulb go off in students when they understand, when they make connections, when they take what they've learned and apply it. I love teaching because it gives me the fulfillment of seeing the next group of students, the next generation of students become something great and know that I saw them when they were in their beginning. I love teaching because I was made to do it."



Michelle Morse-Wendt

Turtle Lake Elementary School Mounds View Public Schools, Grade 4.

"I teach because it's just who I am and I can't turn it off. There is this drive within me to learn from others and to share what I have learned from others. I teach because I want every person to know that their unique cells matter and to teach them to live into that person, to find that spark that only they have, and to bring that to the world. Kids are hilarious and this job is so entertaining. Today a student during a math lesson said out loud, mostly to herself, 'Toothbrushes can't swim.' Only in this job."



Ellen Wu

Alice Smith Elementary Hopkins Public Schools Kindergarten.

"I teach because I want to make a difference and impact in the lives of our young scholars. Every year I get 20 to 25 new best friends. I get to help create memorable experiences for the very first time and I get to help set the foundation of their educational journey. I love that I am able to see my students grow and learn and play and become active members in society. Five and six year olds are extremely excited and energetic and I love that I'm able to celebrate all those little things that they get excited about."

Courtesy of Education Minnesota



The region's leader in teacher preparation and educator development

At Hamline, you'll grow from an educator into a practitioner, researcher, and leader-advocate. We guide you on your professional journey, whether you're earning a first or additional teaching license, a certificate, a master's degree, or a doctorate.

PROGRAMS:

- Doctorate in Education
- Educational Specialist: administrative licensure or leadership for equitable innovation and transformation
- Administrative Licensure: principal, superintendent, director of special education
- Master's degrees: education, environmental education, literacy education, teaching, and TESOL
- Additional and Initial licensure programs in 13 areas including K–12 reading, K–12 ESL, and special education (ABE, ASD)
- Certificates in 10 areas including: ABE, ASD, climate literacy, and nature-based early learning

Join the Hamline educators community today.

Hamline.edu/EducationLeaders

Hamline School of Education and Leadership graduates are consistently on the list of nominees for the MN Teacher of the Year Award and have won four out of the past nine years.







as a teacher, administrator, counselor, researcher or community leader!

Whether you hope to advance your career or alter the direction of your career path, UWM's Graduate degree programs will empower you with the professional knowledge and skill needed to pursue your passion and prepare for new opportunities.

EXPLORE OUR GRADUATE PROGRAMS:

- Curriculum & Instruction
- Educational Psychology
- Administrative Leadership
- Cultural Foundations of Education
- Exceptional Education



Talk with an advisor today! soeinfo@uwm.edu 414-229-4721

UWM.EDU/EDUCATION