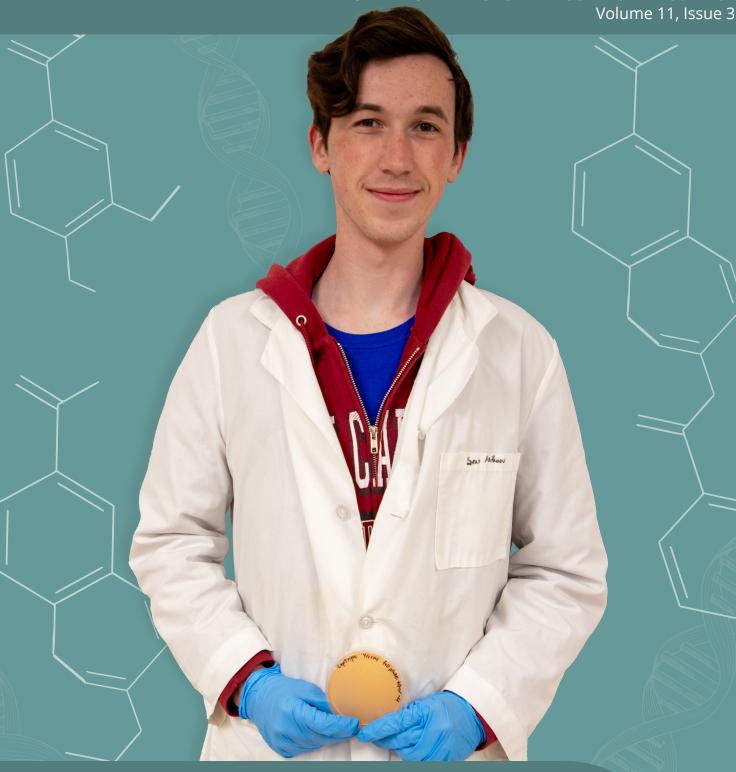
COMMUNITY

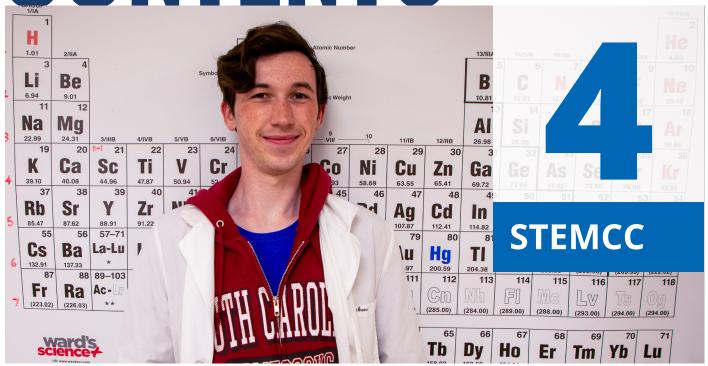
THE MAGAZINE OF METROPOLITAN COMMUNITY COLLEGE



STEMCC:

College's participation in national undergraduate research project leads to discovery of novel virus

CONTENTS













Volume 11, Issue 3

Community is a quarterly publication of Metropolitan Community College. Contact the editor at **531-MCC-2726** or efrazier@mccneb.edu.

Metropolitan Community College affirms a policy of equal education, employment opportunities and nondiscrimination in providing services to the public. We are committed to ensuring our websites and facilities are accessible and usable to everyone. To read our full policy statement, visit mccneb.edu/Nondiscrimination.





Omaha



26 Dual Enrollment

Credits

Lead editor and contributor: Emma Frazier
Assistant editors and contributors: Brian Ayers, Alejandra Cortes
Lead art direction: Emily Bunch, Shayla Muller, Susana Vanourney

A LETTER FROM THE MCC FOUNDATION

I am excited to extend my heartfelt congratulations to the recent graduates of Metropolitan Community College. Your hard work, dedication and perseverance have culminated in this remarkable achievement, and we are incredibly proud of each and every one of you.

I would also like to take this opportunity to express my sincere gratitude to all those who supported our 50th Anniversary Gala. Your generosity and unwavering commitment to the success of our students have played an integral role in ensuring that MCC continues to thrive and make a meaningful difference in the lives of our students.

I am delighted to share that enrollment at MCC is up by an impressive 8% from the last school year. This significant increase is a testament to the outstanding reputation of our institution, as well as the dedication of our faculty and staff in providing exceptional educational opportunities to our students.

As we look ahead to the 2024-25 academic year, we are filled with excitement and anticipation for all that is to come. With your continued support, we are confident that MCC will continue to serve as a beacon of excellence in higher education, empowering students to achieve their fullest potential and make lasting contributions to our community and beyond.

Thank you once again for your ongoing support and commitment to the success of Metropolitan Community College.

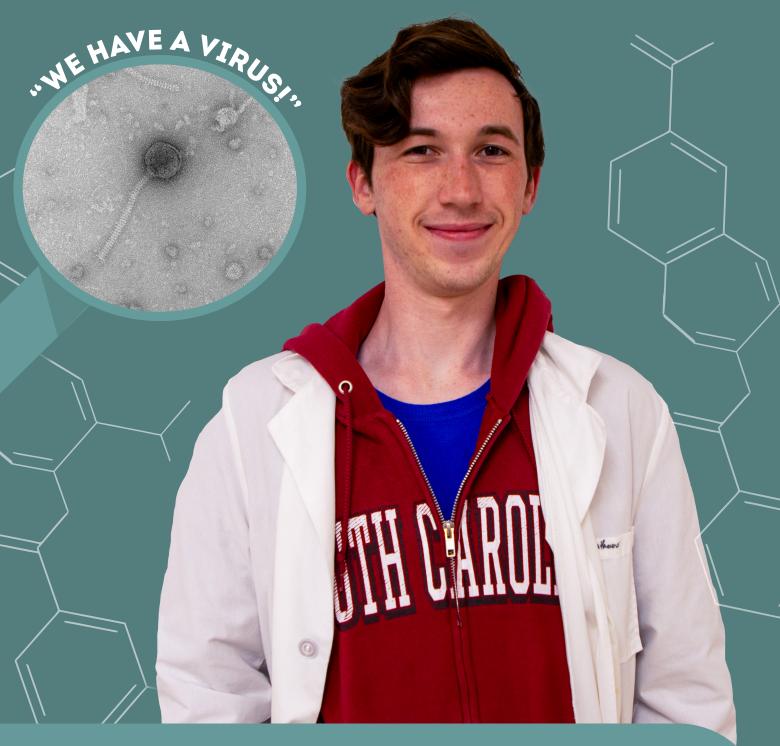
Sincerely,

Amy Recker

Amy Recker
Associate vice president for advancement
Executive director, MCC Foundation



STEMCC:



College's participation in national undergraduate research project leads to discovery of novel virus, readies students for future of work

ean Mathews said his interest in science began in early childhood. He recalls competing with friends in elementary school over who knew the most animal facts. When the Ralston High School senior heard about an opportunity to participate in a microbiology research project at Metropolitan Community College last year, it didn't take much convincing for him to sign up.

In addition to earning college credits in high school tuition free, the project offered Mathews the possibility of scientific discovery, an opportunity the science-minded student didn't want to pass up.

"[In science,] everyone thinks about discovering animals, but they say there's nothing left to be discovered anymore. I think microbiology is where all the hidden treasures are," Mathews presciently said in November 2023, during the first quarter of the three-quarter research project sponsored by Howard Hughes Medical Institute (HHMI).

That turned out to be a good hypothesis. Mathews, 17, is among the first cohort of nine MCC students participating in the Science Education Alliance — Phage Hunters Advancing Genomics and Evolutionary Science (SEA-PHAGES) project.

Phages are viruses that infect bacteria. Found almost anywhere in the environment, they are among the most abundant biological agents on earth, however, their existence in science has been known for less than 100 years.

In the first stage of the SEA-PHAGES project, students took soil samples to find bacteriophages on the Fort Omaha Campus and around the Omaha metro area. One of Mathews' samples from Hickory Hill Park in Papillion revealed a new virus when it was isolated in a petri dish and studied under a microscope.

In his lab notes, he jotted, "WE HAVE A VIRUS!!!"

That gave him the honor to name his discovery — something he actually thought about when he signed up for the study just in case it happened.

Science has a lot of laws, one being that a new virus can't be named after another one. That nixed Mathews' clever first choice to call his discovery "senioritis." But there are no such rules against naming them after characters from Stephen King novels, so Mathews named the virus "CapTrips," shorthand for the humanity-destroying virus named Captain in "The Stand." The creatively named phage is now an entry in the HHMI bacteriophage database used by schools participating in the SEA-PHAGES project.

Studying phages is important because they

have been shown to offer the same benefits as antibiotics, with the key differentiator being that they can be used to kill pathogenic bacteria without harming beneficial bacteria, said Bhaswati Manish, Ph.D., the MCC biology instructor who coordinated the College's involvement in the project.

"Phages are like heat-seeking missiles that are able to target specific bacteria. It makes them a promising alternative to antibiotics, which can have a number of side effects and can lead to the development of antibiotic resistance," Manish said. "Studying phages helps to understand the biology, structure, function and evolution of bacteria, as well as at the molecular level. This knowledge can be used to develop new strategies for preventing and treating bacterial infections and new biotechnology tools."

MCC, a STEM learning destination

The purpose of the SEA-PHAGES project is to teach students the techniques and processes used in STEM (science, technology, engineering and math) research. Manish said the hands-on research is part of her department's focus to bring innovative STEM learning opportunities to students. Participants who complete the program will receive up to nine credits.

Mike Flesch, MCC dean of math and natural sciences, said the HHMI partnership represents an important undergraduate research opportunity for community college students. MCC is the only community college in Nebraska to offer the SEA-PHAGES program. Fewer than 30 community colleges are participating nationally. More than 200 four-year schools and colleges throughout the country offer the program.

"Promoting STEM education is one of our goals at MCC because we need to be able to offer our students experiences that would be similar to what they may receive at a four-year institution," Flesch said. "They're learning research techniques that a lot of biotech companies are looking for in candidates for immediate employment, and they are also gaining valuable experience and credits for transfer degrees."

There are two parts to the research — phage discovery and phage genomics. During phage discovery completed in the fall of 2023, phages were identified in soil samples, characterized and isolated from their natural environment, then purified and amplified in the laboratory. During the genomic phase of the research in the spring of 2024,

students mapped and annotated the sequenced DNA of the phage and submitted them to the HHMI phage database. They were then submitted to GenBank under the National Center for Biotechnology Information.

Discoveries made in the program will be submitted as scientific reports to peer-reviewed science and biomedical journals for publication. Students will be involved in preparing the manuscripts and editing work as part of their course participation and research training. Two MCC students will participate in the HHMI SEA-Symposium, where they will gain the academic résumé-building opportunity to present their findings.

Mathews is already receiving good recognition for his work. At the Metropolitan Science and Engineering Fair in March, Mathews presented a poster on his phage research at Omaha's Henry Doorly Zoo and Aquarium. His poster won an award that was presented at Lauritzen Gardens later that month. Mathews was also selected as one of the six top candidates in the Senior Division and participated at the Nebraska Junior Academy of Sciences (NJAS) meeting held at the University of Nebraska-Lincoln in April.

Six additional students from the SEA-PHAGES program made a joint presentation on two research posters at the NJAS event. Ye Ye Aye and Josephine McLean each received the Outstanding Research in Biology Award from University of Nebraska Medical

Center for the work they presented at the annual Nebraska Academy of Sciences meeting.

"In addition to the scientific processes they are learning, the phases of the research also help our students work in teams and develop their verbal and written communication skills when they present and explain their work," Flesch said. "Through participation, they expand their knowledge, learn hands-on lab techniques, learn about basic research protocols and expand their horizons on potential careers."

Flesch said special learning opportunities like these are key to growing the College's academic programs and preparing people in its four-county service area for their future, which could be immediate employment or working toward transfer to one of the College's four-year university partners.

"Dr. Manish has been instrumental, along with her colleagues, in bringing this opportunity to our students," Flesch said.

In addition to the biology department's HHMI research project, physics instructor Kendra Sibbernsen helped secure a STEM research opportunity sponsored by NASA that took college students from MCC, UNO and UNL to Roswell, New Mexico, to study an annular eclipse using high-altitude balloons to collect data. The same group traveled to Carbondale, Illinois, in April to do follow-up research on the total solar eclipse while situated in its path of totality.

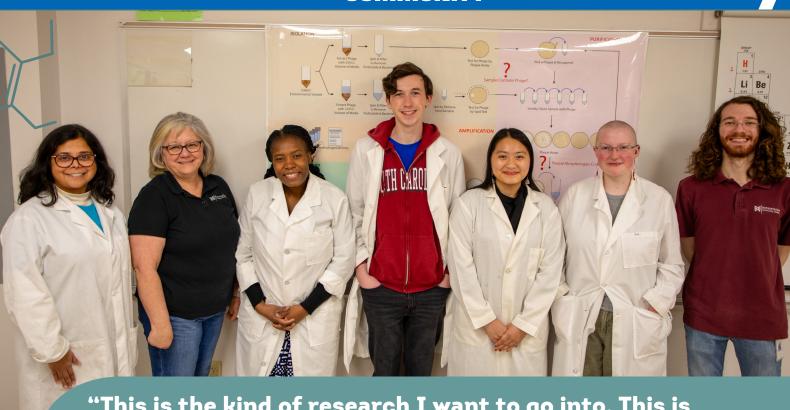
"You've got to have dreamers with the spirit and drive to put these kinds of projects into operation — people who are looking at opportunities to bring undergraduate research opportunities to our students," Flesch said.

Manish and fellow MCC biology instructor, Carla Delucchi, Ph.D., have been leading laboratory-driven learning during the SEA-PHAGES project on the Fort Omaha Campus. The first cohort ranges from current high school students like Mathews to adult learners who are returning to college, with a mix of male and female students from different demographic groups.

Manish said it can be nerve-wracking to bring a new project into the College's academic offerings, but it is rewarding to create access to this kind of undergraduate research for postsecondary students. Participating in undergraduate research at four-year institutions can be cost-prohibitive. Manish said providing the offering at MCC for \$68 per credit hour — along with scholarships the MCC Foundation has made available for this project — can help reach talented students in underrepresented groups.



COMMUNITY 7



"This is the kind of research I want to go into. This is something that could ultimately save lives and help people thrive in ways that they wouldn't have been able to before."

"HHMI wants this research to be accessible to a diverse group of students and we all agreed that community colleges can be a great way to accomplish that," Manish said.

Manish's research background is in neuroscience and cancer biology topics. She has more than 20 years of experience working in laboratories. She said students participating in the SEA-PHAGES project at MCC can create competitive advantages for themselves, whether their goal is to continue their studies at a four-year university, graduate school or enter the workforce.

Graduate schools are looking for students with bacteriophage research experience. Having this research background can also make students more competitive for jobs in academia or with biotech companies involved in developing new treatments for bacterial infections and other biotechnological applications, Manish said.

Flesch said the project is an example of what he believes MCC does best — meet students where they are now.

"We have students coming in with different needs. Some people need to be able to get a good job in the next 90 days to support their families. And some people are 18 years old and have their whole life in front of them. You need to be able to

onboard and get people into the system wherever they are, and that's what we do really well at MCC. This program fits so well into the development of a STEM workforce and is one of those great opportunities we're incorporating into our curriculum," Flesch said.

Amelia LaDue, a 35-year-old student participating in the study, took a different route to the same laboratory table as Mathews. She was three courses away from completing her nursing degree at a four-year college when her interests shifted to virology and microbiology. Attending MCC to begin a new career path made the most sense financially, she said. The way education is delivered at MCC has also clicked.

"I'm a mother and a wife. I can't afford to spend thousands of dollars on student loans right now. Being able to have this opportunity at a community college has been a godsend to me," LaDue said. "The instructors are amazing. I've learned more in this classroom setting than all of the others combined. They really let you get your hands dirty and let you make mistakes and help you through them. It's a very hands-on approach to learning that you don't see a lot."

8 COMMUNITY

From the slide of a microscope to a big-picture view

Overall, phages are helping create a better understanding of the trillions of microbial cells living in each person and their role in health and disease. Manish said the applications of the research have the potential to address several critical issues in the fields of health care, climate change, food and agriculture and STEM education.

Phage therapy is being used to treat a variety of bacterial infections, including cystic fibrosis, wound infections and urinary tract infections. They are being used to develop new vaccines that protect against bacterial diseases. Phages can aid in engineering bacteria for use in the production of biofuels and pharmaceuticals. New studies are showing promising results for phages to treat diseases found in plants.

Manish said it has been exciting to see the students see the bigger picture as they progress through each phase of the research.

"They are understanding that they are serving a bigger purpose than the experience they are developing for their own careers. These phages could be the reason that we are one day able to cure someone from cystic fibrosis," Manish said.

LaDue said participating in SEA-PHAGES has been



an "amazing opportunity" that is affirming her choice to change career paths.

"This is the kind of research I want to go into. This is something that could ultimately save lives and help people thrive in ways that they wouldn't have been able to before," LaDue said.

Students interested in undergraduate research opportunities in the SEA-PHAGES program may contact Bhaswati Manish (BManish@mccneb.edu). For more information on the College's participation in the Nationwide Eclipse Ballooning Project, email Kendra Sibbernsen (KJSibbernsen@mccneb.edu).



MMUNITY 9



Yates Illuminates anchored by strong educational partnership with MCC

The Gifford Park Neighborhood Association's (GPNA) community-building efforts can be traced back nearly 40 years, when the group started a neighborhood watch program to improve safety. Grassroots initiatives continue today in the midtown Omaha enclave spanning Cuming to Dodge streets, from the interstate to 37th St.

For instance, the 33rd Street market, featuring goods from local producers, will begin on Friday evenings in June and run through September. Activities and events like community garden potlucks, Porchfest, a host of youth sports camps and much more are always happening in Gifford Park, all made possible by the volunteer spirit of its residents.

Now even more is possible in Gifford Park than ever before thanks to the recent completion of a renovation and restoration project to one of Omaha's oldest educational sites — the former home of Henry Yates Public School on 32nd and Davenport streets, a building with a history of providing services, support and resources for new Americans.

Constructed in 1888 as a castle-like residence the Yates family called "Hillside," half of the stone

edifice property was sold to the Omaha school district for \$1 in 1915 to transition to a school. Today, the John McDonald-designed building — the same architect of the Joslyn Castle about six blocks to the west — is the new home to Yates Illuminates.

Yates Illuminates is an umbrella organization to a group of small, culturally focused nonprofits. Each entity has its own mission, but to rent the shared offices at Yates Illuminates, tenants must also buy into the overarching mission of the collective — serving the community by offering social, cultural and educational resources to create an inclusive environment that uplifts every person's potential.

Marie Hélène André, Yates Illuminates' executive director, said she functions like an adhesive between organizations. André is a world citizen. She was born in Rwanda and also lived in Belgium and Brazil before moving to Omaha in 2013, when she and husband Adrian Petrescu, Ph.D., found a home in Gifford Park. A speaker of five languages, André is a former Metropoloitan Community College ESL instructor and corporate trainer.

Gifford Park is also home to the College's latest express center, MCC at Yates Illuminates. Situated in one of the state's most diverse census tracts

(more than 55% of area residents identify as non-white, according to 2020 U.S. Census data), it is a hub for MCC Adult Education programs and a wide variety of Community and Workforce Education camps and workshops, serving children to seniors.

The building has been renovated and upgraded, with its large double-hung windows and hardwood floors restored. Its interior features an auditorium, boardroom and a commercial kitchen, all shared by tenants and available by reservation for activities. In front of its brick exterior facing Davenport Street is the MCC Freight Farm. The high-tech, indoor garden is the centerpiece of a vibrant courtyard with several benches for gathering. Surrounding lush, inviting landscaping funnels passersby into the courtyard's common areas and walkways. A playground sits on the north side of the building.

As the rededicated space neared its April grand opening, leaders of the project said the College's commitment to be the on-site, educational anchor tenant has been a key component to its viability. Having an educational purpose was written into the building's deed more than a century ago.

Many organizations with a unifying educational mission

Yates Illuminates' service-learning model is similar to the University of Nebraska Omaha's Weitz Center for Community Engagement but on a smaller scale.

Katie Weitz, Ph.D., president of Weitz Family Foundation, was engaged with the project after attending a community meeting about the future of the former school and OPS-run community center. OPS designated the structure surplus in October 2019. That's when GPNA started rallying around the idea to build on the location's legacy as a site for community education and a welcoming place for new Americans.

In the beginning stages of GPNA community organizing efforts, a real estate firm commissioned by OPS put the building on the market, drawing a \$630,000 bid from a developer to turn it into an assisted living community. It was the second such GPNA campaign to #SaveYates in four years, the first stemming from the building being considered to be torn down and replaced by a new elementary school on the current site. Public input shifted the location for Gifford Park Elementary School to instead be built at 32nd and Burt streets. André served as a leading organizer of both successful campaigns.

André said the Weitz Family Foundation's decision to support the vision for Yates Illuminates during the 2020 campaign, and the OPS Board of Education's decision to sell the property at a discount, enabled the building to remain a center for education.

"About 60 people showed up," Weitz said, referring to the 2020 meeting. "It was just so interesting to have young families and older people, small businesses and policymakers, in one space talking and dreaming about what Yates could be if it was community-owned. That was





one of the through lines that was really appealing to the [Weitz Family] Foundation."

After the school board's 6-1 vote to sell the property to GPNA for \$100,000 with Weitz Family Foundation's additional backing of \$900,000 to renovate the property, they #SavedYates.

"Gifford Park is truly a model of what a neighborhood association can be. It's a tremendously civically engaged group of folks that care about economic development, families in need, extracurriculars and keeping it clean," Weitz said. "The project had some scary times, but we had faith that the Omaha Public School Board was going to honor the location's history and see the value of the education."

The MCC 'turning point'

Weitz and André both said MCC committing to the project gave it momentum and tangibility through periods when seeing the finish line was difficult. Most of the concept and planning phases occurred during the pandemic, with supply chain interruptions, inflated construction costs and the timing for having public gatherings again uncertain.

"Metropolitan Community College being an anchor tenant was one of the most important turning points for Yates. It first and foremost demonstrated the commitment to education," Weitz said. "MCC brings the whole spectrum of education, from practical workforce development to becoming educated citizens of the world."



"Metropolitan Community College being an anchor tenant was one of the most important turning points for Yates. It first and foremost demonstrated the commitment to education. MCC brings the whole spectrum of education, from practical workforce development to becoming educated citizens of the world."

The MCC Freight Farm is a source of some of the College's most innovative programming. Within the confines of a converted shipping container, and with the help of solar power, hydroponics and specialized LED lights, it offers community education on horticulture, entrepreneurship and sustainability. It introduces an alternative food production method suitable to urban settings and food deserts, with the capacity to produce multiple tons of produce year-round.

A pilot food security program for students funded by the MCC Foundation launched at Yates. The intercampus, collaborative initiative highlights how MCC uses the sum of its parts, the breadth of its expertise and creativity to offer resources to students colleges aren't necessarily expected to provide.

Salad greens grown in the Freight Farm (through noncredit classes) are put together at the Institute for the Culinary Arts by the culinary, hospitality and horticulture department (credit programs) on the Fort Omaha Campus. MCC Facilities Department staff deliver the finished product to each of the College's main campuses, where students who need them can pick up a free salad every Tuesday. The program continues to evolve.

In addition to the Freight Farm, the College rents three classrooms on the second floor of the building for additional programming.

"There's a wide variety of learning experiences and unique ways we deliver our programming at Yates," said Gary Girard, vice president for MCC Community and Workforce Education. "There's a robust adult education and ESL program here, as well as senior programming."

During winter break, while many working parents have a far shorter break than their children, MCC collaborated with after-school provider Collective for Youth to offer a three-day robotics camp at Yates attended by around 15 elementary school children at no cost. Students built their own robot and learned coding to program it to play music, move, light up, sense walls and more.

"With all our youth programming, our intent is to have a [science, technology, engineering and math] focus," Girard said.

Daphne Cook, MCC director of Community Education, said MCC youth programs at Yates are designed to create connection to the entire lifecycle of things that are often taken for granted. A visit to a Metropolitan Utilities District water treatment plant provided an experiential learning opportunity.

"You turn on the water, but where does it come from, and how does it get cleaned? Having those experiences is impactful because it connects you to your community. Our students get excited when they learn about the interconnectedness of things. These aren't the kinds of experiences [people from my generation] had when they were kids," Cook said.

See what's germinating at Yates Illuminates

Inside Yates Illuminates, a couple paces after passing through the entrance, a sign with "welcome" written in dozens of languages forms the shape of a heart to greet visitors.

During the 2023-24 year, MCC Adult Education, which includes the College's no cost noncredit GED and ESL programs, served more than 1,400 community members through 30 instructional courses, 16 Transitional Learning Community classes and information sessions at Yates.

MCC Community Education has hosted 87 courses at Yates to date, serving an enrollment approaching 500. An additional 58 students have participated in MCC College for Kids and College for Teens programs at the new location. This summer, MCC at Yates Illuminates will offer courses that cover a wide range of interests and age groups, including 3D Pen Art for Seniors, alternative energy and food production, Black American culture, digital photography, entrepreneurship, fashion design boot camps for kids and teens, marketing, meditation, Native American beading and many more learning experiences.

While MCC has an anchoring role at Yates Illuminates, the College's offering is a fraction of the full array of cultural experiences, services, education and community engagement that takes place between Yates' "green walls."

Decorative but 100% alive-and-real moss grows on the walls within Yates' interior corridors.

Seemingly everything at Yates — from the Freight Farm to drywall and dreams — germinates.

People who have lived in the Omaha area their whole lives can find community and multicultural experiences they have never had right at home. Through evolving, community-responsive and nimble programming, people from any community can get to know this one better.

Bluebird Cultural Initiative hosts native dance performances and other free programs. André joined a class to make her own moccasins. An amateur radio program helped students contact people manning airwaves in Toronto and England.

Omaha Chamber Music Society and OPS partnered to offer a free music camp to 35 refugee children. For two weeks, they learned



COMMUNITY

13

to play African drums every afternoon and presented a concert at the conclusion.

"Each child got the opportunity to learn how to drum and then to perform, and each left with a free musical instrument," André said.

André said Yates Illuminates tries to offer free programs whenever possible. Great Plains Theater Commons' performances are free, as are violin classes and a science club for kids.

The people who come to Yates Illuminates get to know one another. The aim is for the kids who attend programs to develop a bond with one another and their neighborhood, André said.

"You keep them away from the street. You get them involved in the neighborhood. They get to know each other and grow together, and they want the neighborhood to stay nice. And when they see one another on the street, they see their friend," André said.

André said with the building now full of nonprofit tenants and the renovation complete, she is excited for the broader community to experience the programming and provide input on what else they would like to see offered.

"Everybody is welcome. They should come see us, ask us questions and give us suggestions. If they have ideas, we can always have a conversation and see what we can do," André said.

André said looking back, it is incredible how far the project has come since the first community meeting, when Yates Illuminates was only a dream.

"I am lucky to have people who believe in this project," André said. "I think MCC wants to be in the community, and this is a special project in a special neighborhood."



Visit mccneb.edu/CE for more information on MCC Community and Workforce Education courses offered at MCC at Yates Illuminates. Check out yatesilluminates.org to learn more about Yates Illuminates.

FACES OF MCCC



Information Technology - Server Administration Career Certificate

I chose MCC because it offered a degree program for Server Administration. I was very interested in working with computers at an enterprise level, and compared to some other degree programs that covered a variety of computer science disciplines, the program at Metropolitan Community College was exactly what I was interested in. Once in the industry, I found that the skills I learned at MCC applied to the day-to-day duties on the job.

One of my proudest accomplishments after graduating was designing an orchestrated solution that supplied new server systems. This design also applied security controls that would have otherwise been missed, not done consistently or had to be done by hand. This automated tasks for my team and expanded upon our existing processes to ensure a consistent baseline. My education paved the way for this because MCC taught me a deeper understanding of how the various systems we used worked. I was able to apply my knowledge to the bigger picture and design something that worked.

My degree gave me a solid foundation of skills that I have built upon in my career. I was attracted to the degree because it was very specific to what I wanted to do. Once I gained the skills I needed to succeed in this role, it enabled me to build on them to take me to where I wanted to go next.

My favorite instructor was without a doubt Gary Sparks. He was extremely knowledgeable and was a tough but fair instructor. I learned a lot from him. He also inspired me to further develop cybersecurity skill sets. I ended up taking a variety of security classes with him and loved each one.

I started my career at the IT Help Desk at a local government institution. The Help Desk was not where I initially wanted to be, but the skills I learned at MCC applied a lot to that role. Keeping an open mind to learning, I then was promoted to my dream job as a server administrator. I enjoyed that role for a while, but over time I developed an interest in going into cybersecurity. I eventually decided to pursue other opportunities at different firms in that field, which has led me to to a senior security role with a public utility.

ABBEY KLEIN-SCHMEITS

Associate of Applied Science in Nursing

I chose to attend Metropolitan Community College because I knew small class sizes were a better fit for me as a student. I had completed two years of undergraduate courses at the University of Nebraska-Lincoln and was ready to complete nursing school. I had been in courses held in huge lecture halls, and I felt like I wasn't getting the help I needed in those large class settings. I knew that tuition at MCC was affordable, which was a big factor in completing my undergraduate training. I also knew that the College's nursing program had a very competitive admissions process and was excellent.

Every patient interaction I've had in my profession has been influenced by the education I received at MCC. Every "good catch" I've had in clinical practice is a direct result of the high-quality education I was given by the incredible instructors in the nursing program at MCC. One of my proudest professional accomplishments is completing my Ph.D. in Nursing Science. MCC gave me my start in nursing and undoubtedly played a role in my success. I'm also proud to be a recipient of the Presidential Graduate Fellowship at UNMC. I'm the first nursing student in the UNMC College of Nursing to receive this award.

One of the things I appreciated the most about the nursing program at MCC was how faculty encouraged students to complete their Bachelor of Science in Nursing degree. From the start of the program, the faculty



and instructors encouraged us to continue our education and gave us the resources and guidance we needed to do just that.

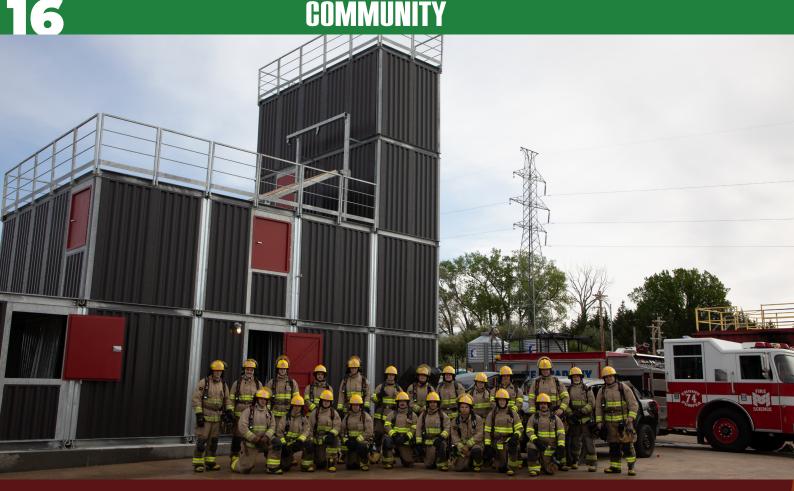
Of all the special moments I had at MCC, my favorite memories were the lunch breaks we shared during clinical rotations. During lunch, our instructors gave us a chance to talk about our experiences during the first part of the day and learn more about each other. It was a chance to connect with our peers and our faculty. That opportunity is not something that many nursing students have. Our instructors cared about us deeply and wanted us to succeed.

After completing my associate degree, I sat for my RN boards and began working as a staff nurse at Madonna Rehabilitation Hospital in Omaha. I then completed my Bachelor of Science in Nursing and enrolled in the Doctor of Nursing Practice program at UNMC. When I began that program, I was working as a graduate research assistant for UNMC College of Nursing faculty and discovered my love of research. I ended up transferring to the Ph.D. in Nursing Science program. I recently defended my dissertation and graduated from this program.

My career path was not linear. While it was difficult and quite lengthy, I tried to let my experiences and intuition guide my next steps. I'm so glad I did!



"I FOUND THAT THE SKILLS I LEARNED AT MCC APPLIED TO THE DAY-TO-DAY DUTIES ON THE JOB."



SUNDERLAND FOUNDATION, MCC INVEST IN FIRE SCIENCE TECHNOLOGY PROGRAM WITH ADDITION OF FOUR-STORY TRAINING TOWER

Through a grant funded by the Sunderland Foundation and Metropolitan Community College, a four-story fire science technology training tower has been added to the MCC Applied Technology Center location. Implemented for the 2024 spring quarter, the customizable, modular structure is expected to serve students and regional fire departments for the next two decades.

The corrugated, galvanized steel, stackable training tower has an open floor plan and provides a flexible, safe space for advanced fire-rescue training activities. In addition to elevating the College's Fire Science Technology program — the only educational institution in Nebraska to offer such a program — the infrastructure investment also aids resource-constrained regional fire departments.

Many fire departments in the MCC four-county service area are volunteer agencies that stand to benefit from more accessible training opportunities offered by the new training tower.

"Every student, whether they're in a high school academy or an adult learner in a working fire department, will benefit from the use of the tower because of its ability to create realistic situations firefighters would experience in the field, but in a

safe, controlled environment," said Jeffrey Strawn, MCC Fire Science Technology program director.

The fire science training tower is a burn-free facility, which prevents exposure to carcinogens present during live firefighting. A smoke machine simulates the low visibility conditions firefighters experience in actual emergency response. From one location, the tower enables the following technical training exercises (and more) to be incorporated into the academic program, as well as the College's advanced training workshops available to area departments:

- Advanced rappelling
- Basic search and rescue
- Confined space rescue
- Forcible entry
- Hazardous materials
- High- and low-angle rescue operations
- Hose management
- Incident command
- Ladder drills
- Roof venting
- Rope rescue
- Technical rescue
- Window entry



Strawn said students were previously able to access some of these training exercises at off-campus, community-based partner sites, which continue to serve the program. Having the full scope of training operations now available at the Applied Technology Center maximizes resources and the student's time by providing them from a single site.

"This building gives us the ability to do things on site that we had to either teach in theory before or leave campus to do. This helps us use the students' time even more wisely," Strawn said.

On a recent tour of the new structure, Terry Barney, an MCC Fire Science Technology adjunct instructor and retired member of the Omaha Fire Department, demonstrated the flexibility of the space. With movable walls on the inside, floor plans can be changed, challenging students to rely on technique over memory.

Performing a window rescue at the actual height it would take place on a ladder rather than simulating the technique on a shipping container at ground level is a closer representation of what a student will experience in the field. Barney said access to the tower will make MCC students more "street ready" because of the realistic training exposure it provides them.

"Whether throwing a 24- to 35-foot extension ladder or simulating the rescue of someone trapped on the second or third floor of an apartment building, being able to put students in several different training scenarios will make them better and smarter firefighters when they complete the program and go out to serve the community," Barney said.

MCC offers training and support to more than 20 regional fire departments, including the Omaha, Ralston, Fremont, Blair, Bennington and Gretna fire departments. The program plays a significant role in developing the first-responder workforce. Strawn said about a third of the 34-member November 2023 Omaha Fire Department recruiting class qualified by way of an MCC fire science program.

"The training tower is a huge benefit to the firefighting community because it supports the training needs of local jurisdictions well into the future. For departments serving areas like Springfield and Waterloo, putting a training tower on site would be a huge financial burden," Strawn said.

High school students participating in the MCC Fire Science Career Academy will also use the new tower in their training exercises. Strawn said the program is grateful to have the support of the Sunderland Foundation and the MCC Board of Governors.

"Our students are getting exposure they wouldn't have received before that will help them get closer to a career in fire service and will strengthen the firefighter and first responder workforce," Strawn said.

The MCC Fire Science Technology program is recognized by the U.S. Fire Administration's National Fire Academy. Visit mccneb.edu/FIST for more information about the program.

"Our students are getting exposure they wouldn't have received before that will help them get closer to a career in the fire service office and will strengthen the firefighter and first responder workforce."



Holland Foundation makes historic investment in first-generation MCC students

\$3 million endowed scholarship is largest in College's history

Metropolitan Community College received its largest-ever endowed scholarship from the Holland Foundation. The Dick and Mary Holland Scholarship, a \$3 million scholarship program, will create pathways to postsecondary education in MCC skilled trades, health professions and technical science programs for students residing in the College's four-county service area. Scholarships will be awarded beginning in the 2024-25 academic year.

Amy Recker, executive director of the Metropolitan Community College Foundation, said the Dick and Mary Holland Scholarship is anticipated to provide a minimum of 24 scholarships annually and prioritizes first-generation students in their postsecondary education at MCC, from high school dual credit through completion of eligible credit programs.

Deb Love, president of the Holland Foundation, said the historic gift reflects the importance the Holland family places on supporting public education at all levels.

Dick and Mary Holland

"Dick and Mary felt a great sense of duty to make an impact in the lives of students through philanthropy and saw scholarships as a great way to fulfill that mission," Love said. "The skilled trades, health professions and technical sciences are

so important and in need of qualified workers. These programs offer students an opportunity to further their education, leading them into high-skill and high-wage jobs in the workforce."

In addition to tuition, the endowed scholarship can provide funding for fees, books and required certifications, as well as associated tools, equipment and/or supplies. Financial need will be considered but is not required. Applicants with a cumulative 2.0 grade-point average at the time of application will be prioritized for aid.

"The Dick and Mary Holland Scholarship is a truly transformational gift to MCC and students in Douglas, Sarpy, Dodge and Washington counties," Recker said. "MCC is extremely grateful to the Holland Foundation for entrusting the College with this unprecedented investment in our students, programs and communities."

The Dick and Mary Holland Scholarship is part of a series of gifts the Holland Foundation has recently made to area educational institutions. Love said in addition to enabling the education and training students need to land quality jobs, the endowment provides a lasting way for future generations to take inspiration from Dick and Mary Holland's example of addressing the needs of the community's most vulnerable through the arts, education and children's causes.

"The endowed scholarship continues Dick and Mary's legacy of giving. They were such observant, giving and caring people who always had a willingness in their hearts to help others," Love said.

Visit mccneb.edu/Scholarships for more information or call 531-MCC-2400.



SCHOLARSHIPS FOR ALL

- Apply for all available scholarships with one easy application.
- Over 150 scholarships and millions of dollars available.

Visit mccneb.edu/Scholarships to apply or call 531-MCC-0024 for more information.



Raising quality and access to early childhood education in Nebraska



Fears of a pending recession that had worried American economists during the past few years have mostly eased in recent months. Many industries and businesses negatively impacted during the pandemic have bounced back.

And then there's the childcare industry.

In Nebraska, 230 licensed childcare providers closed their doors during the pandemic. Many have not reopened. Of Nebraska's 93 counties, 12 do not have a single licensed childcare provider operating within their boundaries.

"During the pandemic, we learned that consistent childcare equals a consistent workforce," said Robert Patterson, chief executive officer for Kids Can Community Center, a licensed nonprofit provider of early childhood care based in South Omaha.

Metropolitan Community College and its early childhood education partners like Kids Can are engaged in a practical solution to elevate the profession and improve access to licensure in the field. With the creation of a bilingual, online Childhood Development Associate program made possible through the Holland Foundation and a Nebraska Department of Education ReVision grant, MCC aims to make credentialing more accessible.

According to Jane Franklin, MCC dean of social sciences, the focused pathway removes barriers to completion by putting the program online, offering a bilingual track and having an MCC staff member solely dedicated to student success. More than

90 students have enrolled in the online program since it launched. After earning a noncredit Child Development Associate credential, students have the option to further their education in the field by working on an accredited Early Childhood Educator associate degree at MCC.

Franklin credits early childhood education instructor Deanna Peterson with envisioning an online program aligned with the lifestyles of many of the people currently employed in the field but not credentialed. The College's program embeds the 120 educational training hours required to earn the credential into the program. Previously, students had to schedule those hours independently, applying their skills at their workplace.

The program also links students to work-study programs for paid internships/apprenticeships in early childhood, preschool and childcare centers.

"Deanna Peterson saw early childhood educators having to drive all over the city to take all these classes and complete their training hours. She saw a lot of value in developing an online program," Franklin said. "Having a bilingual offering added to our preschool program is a huge success story. We already have graduates, and it's a big help to the workforce."

Franklin said credentialing elevates the perception of the field and positively impacts the quality of services provided to young children during their most impressionable period of development. Early learning builds the foundation for skills needed in school, work and life, with 90% of brain development occurring before a child reaches age 5.

Franklin said Diana Molina, a bilingual early childhood development pathway coordinator who guides candidates to completion, has been crucial to student success. Molina was also instrumental in the development of the Spanish language version of the Preschool CDA program, collaborating with instructional designers and improving the existing program by implementing a more interactive learning framework, Franklin said.

Removing barriers and forging new pathways for access, enrollment and completion

Molina, who earned her associate in early childhood education at MCC, has worked in the childcare field for more than 10 years. Franklin said Molina's proactive approach to her work and knowledge of the challenges facing workers in the field has been invaluable to MCC and students enrolled in the online program.

Molina meets with students where it works for them. She started offering in-person workshops every week, providing an opportunity for students to have one-on-one time and get their questions answered. Students also have access to MCC career coaches who work in early childhood education centers.

"It's self-paced, but I've found that providing some regularly occurring meetings for the candidates helps them move through the program. I think having the relationship with the coach who works at the center is also super important. It makes the candidate feel like they aren't doing this alone," Molina said.

Franklin said removing barriers for people already working in the field to participate in the College's program can be a source of self-discovery, bring the potential for higher pay, as well as options for further education in related fields also in need of workers.

"So many people in early childhood education don't know how smart they are, how articulate and skilled they are. Then they take the CDA exam and suddenly realize, 'Oh, I can do all the college work. And I want to take the next step and earn my associate degree," Franklin said.

MCC offers two credentials in its Early Childhood Education program covering two age groups — Infant/Toddler (19.5 credits) or Preschool (16.5 credits) Childhood Development Associate.

Students can begin the College's program through a dual credit High School Career Academy and then earn their chosen CDA at MCC.

From there, they may either go into the workforce with a credential that is recognized throughout the United States, or with around 20% of their total credits needed for an Early Childhood Educator associate degree already attained through their CDA certification, continue on with their education at MCC.Students may transfer to a university to earn their bachelor's degree, which could lead to a job in education.

It's a big help to the workforce to add highly skilled and trained people in this field," Franklin said.



A calling to teach

Arlene Garcia, 19, enrolled in the MCC Certified Nursing Assistant High School Academy while attending Bellevue West. While enrolled in the academy, through an internship opportunity with Educare of Omaha, Inc., a provider of early education to children ages 0 to 5, she realized she wanted to work more directly and hands-on with children than she would be able to in nursing.

"I've always loved volunteering at my church, helping out with my siblings and building relationships with the kids at Educare. One day, I realized I was already becoming a teacher," Garcia said. "So much of teaching is wanting to be there, and when kids see that you love your job, it makes a big difference in their learning."

Garcia, who is bilingual and is now working on her bachelor's degree at University of Nebraska Omaha to become an ESL instructor, said the online component of the MCC program made earning her Infant/Toddler CDA much more manageable.

"I probably would have gotten burned out if I couldn't do it online because I was still going to high school, had to work after school and the transportation would have been difficult. I think I would have gotten overwhelmed from the schoolwork I needed to keep up with. Being able to do it at home when I knew I could make time for it was really helpful," Garcia said.

Being a teaching aide for Educare, which serves a large Hispanic population, helped her see the difference she was making with bilingual families.

"I realized that when you integrate both languages into a classroom, that makes such a big impact for the kids who are learning English but are also still able to keep their culture and language," Garcia said. "The kids light up when I speak to them in Spanish, and when their parents see that I am able to understand and help their kids, I think it makes them feel like it's a safer place for their child to be and makes them feel more welcome."

Raising quality, boosting workforce

In addition to creating better access to early childhood education careers through an online, bilingual offering, the more people working in the field who earn their certification raises the quality of care across the entire provider ecosystem and increases the availability of skilled workers.

Patterson said families having access to quality services is critical. Children who receive quality early childhood education are more likely to show improved reading and math skills, graduate high school, attend college, have a job and earn high wages. He also noted that the state's entire workforce hinges on the reliability of childcare. For every one childcare center that closes, dozens of families and their respective employers are impacted.

Kids Can participates in Nebraska's Step Up to Quality program, which provides a statewide rating system for families to identify early childhood providers that demonstrate a commitment to quality care. Kids Can is one of a handful of providers to attain the highest rating (Step 5) in an outlined path to quality improvement.

T.E.A.C.H. Early Childhood® NEBRASKA provides scholarships to help early care and education professionals complete coursework. The organization covers 90% of tuition for required college credit classes and also provides financial incentives for students who reach checkpoints along the way to licensure. Patterson said Kids Can elects to fund its employees' participation in the MCC Early Childhood Education program because he sees the value.

"The level of education a provider's childhood development associates has is a big identifier of quality in the Step Up to Quality program. With the horrible effect the pandemic had on the industry, there's a lot of work ahead of us, so this is my priority. It's my dream that each of our staff members has a CDA certification," Patterson said.

The MCC Early Childhood Education program has transfer agreements in place with Creighton, Midland University, Peru State College, University of Nebraska at Kearney and University of Nebraska Omaha. Visit mccneb.edu/Early-Childhood-Education for more information.



MCC, iFixOmaha launch device recycling and refurbishment program

DeviceConnect Omaha puts technology into hands of people who need them for free.

new program at Metropolitan Community College will provide the public with free, refurbished, internet-enabled devices like laptops, tablets and smartphones. DeviceConnect Omaha, developed in partnership with MCC Digital Express and iFixOmaha aims to increase digital equity in the community. Individuals can submit a request for a device and receive refurbished equipment.

When consumers upgrade their digital devices, many leave the device they are replacing sitting idle in their homes. Through DeviceConnect Omaha, devices no longer in use can be dropped off at MCC Digital Express, located in Building 10 on the Fort Omaha Campus, where certified professionals with iFixOmaha will wipe the data, refurbish the technology, divert it from the landfill and put it in the hands of someone in the community who can put it to good use.

According to estimates from the 2021 American Community Survey, nearly 1 in every 10 Nebraskans lacks internet access, and in some pockets, more than 14% of households lack connectivity. Additionally, in three areas in which MCC has campuses — North Omaha, South Omaha and Dodge County — more than 15% of the population only has a smartphone for all of their computing needs.

Jason DeWater founded iFixOmaha, which also offers at-cost device repair service to the community at Digital Express' Reboot Central service desk. DeWater said expanding the partnership with MCC to offer a device, refurbishment and recycling program is something he is passionate about. He knows there is a great need for it and views technology as an "equalizer." During the start of the pandemic, he provided the service for free at iFixOmaha locations and saw strong community response.





"People need these devices. We know from doing this in the past that if our community knows there is a need, people will line up to donate their laptops and tablets," DeWater said.

DeWater said in addition to partnering with MCC to offer the first mobile device repair academy in the nation, a goal was to have a presence on the Fort Omaha Campus. Nearly 9 out of every 10 customers that come to the Digital Express location have never been served by iFixOmaha in the past.

"It's a really unique partnership, and it makes me so proud and happy to do anything we can to help support the vision for Digital Express and get these devices to as many people in the community as possible," DeWater said.

To request a device, visit donate.ifixomaha.com and fill out the form to submit a request for a laptop, tablet or smartphone; iFixOmaha will work to find a repurposed device that meets the needs of the end user. A form is also available to register to repurpose device(s), which provides instructions on the intake process.

When receiving used devices, tech professionals with iFixOmaha will safely wipe all data. The company has a AAA certification from the National Association of Information Destruction, a process that ensures data destruction companies are in compliance with industry standards and government regulations around information security.

Businesses are also eligible to repurpose devices. Technology no longer supported with software updates is also accepted. Any usable parts will be harvested, and unusable parts will be recycled. Devices will be screened for quality before being issued.

Devices are provided to recipients in the order in which requests are submitted. Visit donate.ifixomaha.com for more information.

Other learning opportunities at Digital Express

Digital Express offers free programming to the general public for people of all ages. An AARP-sponsored class from its Senior Planet series is available for anyone age 60 and up to attend. Titled "Introduction to Digital Culture," the class teaches attendees how to use the internet to connect with others, avoid scams, identify online health resources and more.

Introduction to Digital Culture meets twice a week for each five-week session. Space is limited. The class is offered on a first-come, first-served basis. Register for the next available session by calling 531-MCC-2000.

Saturday Fundays

Put a standing date for fun on your calendar and visit Digital Express. Saturday Fundays are open to the public from noon to 3 p.m. on designated Saturdays each month. Board games are available, so bring your family for a fun afternoon.

Visitors can also access a Nintendo SWITCH for afternoon gaming. Play Mario Kart 8, Super Smash Bros. Ultimate, Mario Party All Stars and more.

All ages are welcome. Minors must be accompanied by a parent or guardian. Visit mccneb.edu/DigitalExpress or call 531-MCC-2000 for more information on designated Saturdays. Like or follow "MCC Digital Express" on Facebook to stay up to date on programming and events.



Yarborough family finds dependable homeschool educational partners, opportunities at MCC

In a typical academic year, Metropolitan Community College serves more than 150 homeschooled students. Less typical is the concentration of Yarboroughs who have been in this group for the past four years.

As the 2024-25 academic year begins, Blake Yarborough, 17, is on track to be the third student in his family to earn an associate degree from MCC before reaching his 18th birthday. His sister Claire, 18, earned her associate before getting her driver's license. As is sometimes the case for the younger children, the road through adolescence can be easier because of the trail blazed by older sister Caroline, 19.

The trio jumpstarted their college education at MCC during high school, and at a discount through CollegeNOW! one of the College's four dual enrollment programs. CollegeNOW! provides the opportunity for Nebraska high school students to enroll and earn college credits in classes taught by MCC faculty. CollegeNOW! courses are offered at MCC campuses and are also available online.

Since the 2022-23 academic year, all MCC dual enrollment programs are available to Nebraska high school students tuition free through the 2024-25 academic year, including homeschooled students like the Yarboroughs.

Caroline completed her liberal arts academic transfer degree (LATAA) in 2021-22 at half-price tuition. Claire's tuition for her LATAA degree was half-price for her first 54 credits; her last 40.5 credits were tuition free. So long as Blake finishes his LATAA degree before the conclusion of the 2024-25 term — and he is ahead of pace with 48 college credits earned and 13.5 in progress at press time — the entirety of his college classes at MCC will come at no cost for tuition.

"For pretty much everything in life, we've always joked that [Caroline and Claire] have been the guinea pigs. It's always been like that for me, and that has definitely been true at MCC," Blake Yarborough said.

Their mother, Whitney Yarborough, said the family started homeschooling when they lived in South Carolina before moving to Nebraska in 2011.

"The public education here is much higher quality than it was in South Carolina, but homeschooling was working well for us, so we decided to stick with it. We took it year by year and kid by kid," Whitney Yarborough said.

By connecting with Jack Donnelly, director of the Homeschool Learning Community in Omaha, Whitney Yarborough said she discovered MCC is a resource to local homeschool families.

"He was a great resource because he was a homeschool parent, a veteran public school teacher and MCC instructor," Yarborough said. "He encouraged us to begin with the end in mind and explained that there was no rubric we had to fit high school in as a homeschool family. That gave me the freedom to think about their education outside of the box."

Whitney said some homeschool families choose courses offered by educational institutions that would be harder to facilitate or be cost-prohibitive in a home environment, such as a science lab. She was looking for something more structured and found a good partner to work with at MCC in Trish Johnson — then a success navigator, now an academic advisor.

Whitney said Johnson had familiarity working with homeschool families on their educational plans and is a known resource in the community.

"[Johnson has] kind of been the go-to person for homeschool families," Whitney said. "I said if we're going to do this, I don't want it to be haphazard. I want it to be more organized. When I reached out to Trish, I said, 'If we do this, can we get a degree at the end of this?' That's when she told me about the liberal arts transfer degree."

Johnson said she enjoys working with homeschool families. Her priority in working with any high-school-aged student signing up for college classes is to get a baseline of academic skills to determine appropriate placement.

"MCC has a lot of classes that are a good place to start. I always explain that we don't want to throw them into a college-level psychology class or a history class if the reading or writing level isn't there yet, and then guide them to start with those core classes first," Johnson said.

Caroline and Claire each finished their LATAA degrees with above 3.0 grade point averages. After finishing high school, Caroline went to Disney University, a training program for employees of the Parks and Experiences division of the Walt Disney Company. She has also been accepted to Liberty University.

COMMUNITY

"Caroline was interested in working at Disney, so she took a couple of animation classes. There were a few electives she could specialize in at MCC that I don't think would have been available at the high school level," Whitney said.

With her associate degree complete, Claire is in the middle of a gap year between high school and college, focusing on her passion for dance. She aspires to dance in professional ballet or point, hoping to be accepted to Oklahoma School of Dance after she sends in her audition video. If those plans don't work out, she has been accepted at the University of Nebraska-Lincoln, Kansas University and the University of Oklahoma.

"I would not have been able to consider [a professional dance career] if I had gone to a normal high school because I wouldn't have had time, but I was able to fit dancing in with MCC classes while also getting college done," Claire said.

Blake is still figuring out where his interests lie but recognizes his growth as a student through learning to manage his time taking college courses at MCC. He admits it was an adjustment from his homeschool learning environment, but he would recommend any high school student weigh the long-term benefits of starting college early.

"I had to come to terms with the fact that these are college classes, but I also knew that I would save thousands of dollars down the road. It will benefit you so much in the long run for the short amount of time you are taking college classes," Blake said.

Whitney said sending all of her children to MCC was a "no-brainer" for her family, especially for general education credits. She said that decision was validated when they learned the instructor for Caroline's atmospheric science class was also a professor at a highly rated private university. The difference in cost per credit hour for the same instructor teaching at a private university is more than \$1,000.

"It's one thing to pay the exorbitant cost for specialized classes in her major, but to have to pay that price for gen eds — I think you should get them done [at MCC]," Whitney said.

Johnson said she appreciates the preparedness of homeschool families when they come to MCC and enjoys being involved in their academic planning.

"They're great students. They come in organized and prepared for their appointment. My joke with their parents is, 'You're hired as an advisor' because they come in and they've planned out the next few quarters," Johnson said. "They also get a taste of what MCC has to offer, and a lot of times, students will end up in one of our programs."

MCC Community Education also offers ongoing noncredit homeschool courses that are available this summer. They are designed for parents considering homeschooling or for those with students currently participating. To register or for more information, visit mccneb.edu/CE and view Home and Family course offerings. Visit mccneb.edu/SecondaryPartnerships for more information on the College's dual enrollment programs.



Metropolitan Community College P.O. Box 3777 Omaha, NE 68103-0777

NON PROFIT ORG U.S. POSTAGE PAID OMAHA, NE PERMIT 526



Stay informed. Connect with your community. issuu.com/mccneb @mccneb

Keep us updated on your personal and career achievements at fans@mccneb.edu.











