

http://www.omaha.com/news/metro/omaha-high-school-students-get-a-real-world-project-redesigning/article_b25fa58f-cf8f-5ad4-aabb-eed8693dfcdf.html

Omaha high school students get a real-world project: redesigning Norris Middle School

By Erin Duffy / World-Herald staff writer Feb 6, 2017 Updated 9 hrs ago



BRENDAN SULLIVAN/THE \

The ACE Mentor Program takes students beyond the classroom in architecture, construction and engineering. Here, Omaha students, including junior Rianna Gunter, tour Norris Middle School, which is slated for a \$26.5 million renovation and addition. The high school students will design an addition and present their ideas in May.

MORE INFORMATION



Computer science club at Westside Middle School wins award for app that would make people smile

With hard hats on and notebooks in hand, a group of Or North High students toured a construction site at Norris Middle School.

Inside the gutted shell of the school's former auditorium, took note of ductwork that had been cut off, the trusses holding up the ceiling. They asked questions about build codes and debris disposal, and listened as engineers talk about lights and insulation that have made buildings che and more efficient to run.

Could these students — 77 in total hailing from Westside North, South and Benson High Schools — be the next architects, engineers and construction workers local com are clamoring for?

Industry leaders are banking on it.

Over the course of the spring semester, these students will participate in the new Omaha chapter of the national AC (Architecture, Construction, Engineering) Mentor Program. They will meet weekly with professional mentors from prominent Omaha firms — the 28 participating companies include Alley Poyner Macchietto Architecture, Kiewit Construction, McCarthy Building Cos., DLR Group and Holland Basha Architects — to work on a hands-on project testing their design and collaboration skills.

Their charge is to design an addition for Norris Middle School, the crowded, aging South Omaha school that's slated for \$26.5 million renovation and addition funded by the district's \$421 million bond program. In the process, school officials hope the students will gain valuable exposure and connections to future jobs.

“My goal, by the time we’re done with this, is to have companies begging for them to work there, to do internships,” said John Vinchattle, a curriculum specialist at North.

Companies, in turn, are looking for the chance to develop home-grown talent, and to expand opportunities for high-poverty communities that have historically been shut out of Omaha’s building booms. Many of the students in the ACE and national ACE program — girls, students of color — are underrepresented in those industries.

“Maybe the biggest issue that we face in Omaha is that of economic inclusivity, the need for economic success in all parts of our city,” said Mike McMeekin, the president of Lamp Rynearson & Associates, an Omaha engineering, planning and surveying firm. McMeekin is the chairman of the ACE Mentor Omaha board of directors. “The ACE Mentor Program continues to move toward addressing this issue.”

Omaha Public Schools Superintendent Mark Evans said companies continue to turn to him with concerns about a shortage of skilled workers in Omaha.

“I hear ... the need for workers, the need for highly qualified skilled workers with all these projects around Omaha,” Evans said at an ACE Mentor kickoff event last month. “If you go around, look at how many cranes you see downtown.”

Entities including the City of Omaha and OPS have created economic inclusion programs to spread more contracting work among small and emerging businesses in lower-income areas.

But that’s just one prong of OPS’s economic plan — another goal is to get students more involved in the bond program that’s building up schools in their neighborhoods, said Karlus Cozart, the

district's director of economic inclusion.

"This is a really great collaboration," he said. "Here's a dis here's the students, here's the ACE industry."

Students such as Rianna Gunter, a junior enrolled at Nor High's engineering magnet program, said they're excited into a real-world project and talk to working professionals can give them the skinny on college, internships and their day-to-day work as civil engineers or project designers.

"I'm hoping to learn a lot that the teachers can't teach us, real-world people," Rianna said.

Gabriel Runyon, a junior at North, wants to become an environmental engineer and is looking forward to applying what he has learned in his engineering classes to a real — conceptual — project.

Meridith Davis, a junior at Benson High, isn't totally sold on a career in construction or architecture. She excels at art and digital design, and she has considered becoming an architect, art therapist, art teacher or scenic designer for a theater.

Being involved in the ACE Mentor program will allow her to explore the more technical side of design, she said. And there's an opportunity to earn college scholarships — Omaha companies have donated \$20,000 to fund five annual scholarships — tempting.

"The more connections, the better," Meridith said. "It's going to get your name out there."

Students from the four ACE Mentor schools each toured Norris Middle last week. At one of the tours, on Jan. 31,

students heard firsthand from one of their clients: Norris Principal David Alati.

The school, one of the largest middle schools in the state built in 1959 and hasn't received much in the way of update since. Norris has 17 portable classrooms, window air conditioning units, science classes that aren't held in true and an indistinguishable front entrance.

"We're incredibly excited to finally be at a place where the renovation is happening," Alati told students. "It's something this community, this staff has waited a long time for."

As part of their assignment, ACE students will need to figure out how to attach up to 20 new classrooms to Norris' existing building. They will find spots for additional parking, design new, secure front entry and convert the old auditorium - construction site they toured — into new administrative offices. They will present their designs in May.

Alati fielded thoughtful questions from students: Is there original architecture or design work the school wants save? How much will the school's enrollment increase in the next few years? Did school officials have any plans for extra green space on the school's 30-acre campus?

As they walked inside and outside the school, students snapped photos of the portables, walked by the school's community gardens and noted the residential neighborhood that surrounds the school. Mentors and teachers encouraged them to think about design and function, from the pipes buried under the front walkway to the grading of the front bus drop-off area.

"I tell them, think back to your middle school," said Shan Sedlacek, an engineering teacher at North. "What would

have liked to see? What are wants versus needs?”

Sarah Gordon and Ricardo Camio, two architects at BCI Architects, are working with students at North and South High.

“They’ve been really involved and really excited about it,” Gordon said. “They definitely ask great questions, questions I never would have thought to ask in high school.”

Camio, who is Latino, said the opportunity to serve as a role model for other Latino teens is one of the reasons he signed up to volunteer at South.

“Things weren’t easy for me personally, and for a lot of the other kids it could be a struggle, a stretch,” he said. “I know at the end of the day, me being there could be something to inspire them, to say, ‘I can do it if I want to.’”

When Gordon was in college, there were other women in the architecture program, but they definitely were in the minority.

“It’s always encouraging to see other women in the field, they’re moving up the ladder and growing,” she said. “I would have loved to see that when I was in high school, to have a mentor relationship with another woman in the architecture field.”

erin.duffy@owh.com, 402-444-1210

Erin Duffy

Erin covers education for The World-Herald.