Julie Critz, school superintendent, and Doug Houska, business leader

Innovative Minnesota approach preparing high school students for careers

A Civic Caucus Focus on Human Capital Interview

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Present

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Summary

Julie Critz, school superintendent, and Doug Houska, business leader, describe a pioneering approach in Alexandria, MN, to give all high school students more knowledge about, and practical experience in, future careers.

Their approach, known as Academies of Alexandria, is patterned after Academies of Nashville, TN.

All Alexandria students in grades 10-12 enroll in one of three academies, (1) engineering, manufacturing, technologies and natural resources (2) business, communications and entrepreneurship, and (3) health sciences and human services. Students in grade 9 enroll in freshman academy and may take classes in each of the other three to help them select the academy they'd like to join in the 10th grade.

Central to the Alexandria approach is intimate cooperation between the school district and the community's employers.

Biographies

Julie Critz is superintendent of the Alexandria, Minn., Public Schools, effective July 1, 2015. Between July 2007 and July 2015, Critz served as assistant superintendent for teaching and learning in
Alexandria. In that position, she provided oversight and development of district curriculum, the student assessment program and staff development opportunities. She has been with the Alexandria schools since 2001.

She was instrumental in leading the district in two successful building bond referendums and has been a catalyst in building business partnerships for the Academies of Alexandria, the school district's new high school small learning communities program. Additionally, she has been a key player in facilitating and implementing the district’s community-based strategic planning initiative.

Critz has worked in K-12 education for 32 years: as a teacher, elementary and secondary principal, and district administrator. She received her bachelor's degree in elementary education from the University of Minnesota-Morris; her master's degree in elementary education from the University of Minnesota-Twin Cities; and a sixth-year certificate in educational administration from St. Cloud State University.

Doug Houska is senior lender at Bremer Bank in Alexandria and was formerly with Bremer in Fergus Falls. He chairs the Alexandria Academy Champion Committee, which is organized to support the Academies of Alexandria at Alexandria Area High School. The committee works to ensure that each Academy reaches the highest possible level. Houska is affiliated with the Business, Communication & Entrepreneurship Academy.

He received his bachelor's degree from the University of North Dakota in Grand Forks.

Background
The Civic Caucus has released two recent statements on human capital: one in September 2014 laying out the human-capital challenges facing the state today and in coming years and a follow-up paper in January 2015 offering recommendations for maintaining a high-quality workforce in Minnesota. Al Sholts of Alexandria Industries and Laura Urban of Alexandria Technical and Community College discussed the new Alexandria Area High School's academy model during their June 19, 2015, interview with the Civic Caucus. The Caucus interviewed Julie Critz and Doug Houska to learn more about the Academies of Alexandria: what they are, how they were created and the difference the new model makes for students, faculty and the community.

Discussion
A new high school approach in Alexandria was envisioned when the community supported the passage of a bond referendum to build a new high school to replace the existing, aging Jefferson High School building.

Julie Critz, superintendent of the Alexandria School District, said discussion around changing our delivery model stemmed from changes in student engagement which make teaching and learning more difficult, especially in a time when students are more digital and need a different level of engagement in the classroom. Additional discussion about ensuring college and career readiness, and workforce development issues supported a new approach as well.
"We talked about the fact that this gives us the perfect opportunity to do things differently," she said. "If we're going to build a new building, let's not just build a new version of Jefferson High School. It certainly served its purpose over the years, but we have a chance to do better."

Critz said the school district met with students, teachers, families and community members. "We started brainstorming about what the high school would look like if we could design it in the perfect way," she said. That started people talking about small learning communities and moving away from the traditional model of high schools, which usually are very departmentalized by subject areas.

The industrial-tech classes were held in the very back of the old high school and carried a certain stereotype with students and parents, she said. The people in manufacturing businesses knew the community needed to break down those stereotypes.

Since it's difficult to plan for needs five years out, the new building design needed to be flexible and adaptable. Critz said the community wanted a more collaborative design process and a design that would create places for teachers to work more collaboratively in teams, rather than staying in their own classrooms. "We feel the traditional separate classrooms have allowed siloed education," she said. Under that model, the teacher delivers content and the students then move on to another teacher for the next period.

The personalization of teaching and the concept of teaching the whole child have not historically been big parts of high school. That's been more an elementary concept, Critz said. "But in high school, too, we need every child to be successful and engaged and enjoying what they're doing," she said. Kids tend to be disconnected and question why they have to learn something they feel they'll never use in their lives. "They need to know why they're learning things like higher level math skills and identify what the connections are to real life," she said.

Critz said the community started with the new high school model by recognizing that high school education needed to have more real-life applications and that career and technical education still needed to be a big part of things, but that we could go beyond that.

When the school district and the community designed the academy model, the foundational piece was small learning communities. Critz noted there are four academies at the new high school, which has an enrollment of approximately 1,241 students:

1. Freshman Academy, which includes all ninth graders, roughly 300 students. It's very exploratory and the students have a chance to take classes in each of the other three academies. By the end of their freshman year, the students are ready to choose which of the three upper-grade academies they'd like to join as they start their sophomore year.

2. Engineering, Manufacturing Technologies & Natural Resources Academy.


4. Health Sciences & Human Services Academy.
Critz noted that each of the three upper-grade academies includes about 300 students, with approximately 100 students each from 10th, 11th and 12th grades.

She said a collective group of teachers are the core teachers in each academy: math, science, social studies and English. That group of teachers keeps the students in each academy from 10th grade through 12th grade. Those teachers are collectively responsible for the success of their students, with greater accountability for the 100 seniors in each academy to graduate well prepared for college and career, she said.

**Planning for the new high school started with the concept of small learning communities, which morphed into small learning communities with a career focus.** Critz said the concept evolved through community discussion, workforce development information from the Alexandria Area Economic Development Commission and a visit to the Academies of Nashville, a career-academy model in the Metro Nashville Public School District.

Doug Houska, senior lender at Bremer Bank of Alexandria, was one of six Alexandria community leaders who visited the Nashville Academies. "It was really eye-opening," Houska said. "The engagement of the students was just incredible." Students gave the visitors a tour of three schools, he said, in which they saw kids in a business class putting together a product to sell in the school, a health care classroom that looked like a miniature hospital and a student-run restaurant in the lunchroom.

"From a business perspective," Houska said, "we walked away saying, 'This is exactly what our kids need.'"

"We saw business engagement in Nashville that we'd never seen before," Critz said. "Their business people were all in. The Nashville Schools had a different catalyst for starting the new academy model than we did. Their schools were failing and business people recognized that if the district's education didn't improve, their businesses would fail." The businesses were very involved in the planning for the Nashville Academies.

**Alexandria's economic vitality depends on its businesses, which thrive when there is a quality workforce.** Critz said the situation in Alexandria was different from Nashville. The Alexandria schools weren't failing, she said, but business and education leaders recognized the importance of working together to ensure a quality workforce.

"It has to be a partnership," she said. "We have to work together. Our business folks are key leaders. They came forward with money we didn't ask for to send the Chamber of Commerce director and other key decision-makers in the community to Nashville. What we have in terms of the support from the community here is absolutely incredible, like nothing I've ever seen before."

Houska agreed. "When we came back from Nashville, everybody was all in," he said.
As an example, he said, when the academy advisory group thought the school district needed $12,000 or $13,000 to pay for summer externships for teachers, the business leaders instead decided to raise $30,000, which happened in two to three days. "The community and the business partners are definitely involved in Alexandria," he said.

Several other Minnesota school districts have at least one academy in their schools. Critz said Mahtomedi has an academy model in manufacturing. St. Peter and some other school districts are dabbling in the academy model, she said, but Alexandria is the first to have wall-to-wall academies, where all students are in an academy. Since it opened, the high school has given 50 to 60 tours to other school boards, school staff and technical colleges.

In response to a question, Critz said the Alexandria district did not have to get permission from the Minnesota Department of Education to move ahead with the academy model because they are continuing to meet all requirements for curriculum, academic standards and assessment.

Students in Alexandria can change their minds during their sophomore year and switch to a different academy at the end of the year. "When students are making their decision about which academy to choose, they almost always know what they don't want," Critz said. She said very few students chose to change academies at the end of this first year. She pointed out that students can take electives from academies other than the one in which they are enrolled.

Also, she said, courses to meet state graduation standards are placed in all the academies, so students can switch to another academy without falling behind on meeting those standards. The standards might be applied differently in courses in the engineering academy than in the health sciences academy, but all the courses meet state graduation standards.

She noted that in eighth grade students take the EXPLORE test, an interest inventory. The test is intended to help students plan their high school courses, prepare for the ACT test or choose a career direction. Research has shown that results of that test have a very high correlation to what kids do when they leave high school, she said.

Critz said there are no academies in the district's middle school, but a focus area for the coming school years is to offer more career classes in middle school to help kids start thinking about the academy model.

The academies are preparing students for both two-year and four-year postsecondary programs. Critz said there are two-year and four-year career pathways in each of the academies. She noted that Alexandria graduates would have the skills to work in an industry while they work on their postsecondary degrees.

In addition to the Alexandria Academy Champion Committee, there are business partnerships and opportunities for teacher business externships in each of the academies. Houska said there is a business partnership leader for each academy and business people work with the high school's teachers. In addition, he said, there are summer externships for teachers where they go into
businesses and learn how they can include in the curriculum real-life situations from what businesses in the community are actually doing. There are externships in manufacturing and at the hospital and the nursing homes.

According to Critz, 12 staff members participated in externships in summer 2014 and five participated this summer. The school's business partners have raised the funds to pay teachers an hourly stipend for their time during the externships.

"The businesses and the teachers get along really well," Houska said.

Critz added that through a program known as the Freshman Advisory Network (FAN), each ninth-grade student has a mentorship with someone in the business community, with about four students working with one mentor. "The goal is for all students to have someone in the community they know cares about them, whom they can call on for advice or for a recommendation," she said.

**There are not enough workers to fill business needs in the Alexandria area.**

Critz noted that in Douglas County, where Alexandria is located, the current unemployment rate is approximately three percent, resulting in a workforce shortage. She said some businesses in the area are running only two shifts, instead of three, and others are turning away contracts, because there are not enough workers to fill their vacant positions. So the business community wants Alexandria graduates to stay in the area.

She said it's the school district's obligation to prepare students for jobs wherever they might go: Alexandria, the larger United States or global positions in another country. But she said the district is measuring success in some ways by looking over time at the number of Alexandria grads who take positions in Alexandria businesses. "Our business leaders are paying attention to those numbers," she said. They'll be comparing the numbers from the past with the numbers for students graduating from the academy model.

"For many kids, it's good for them to go away for awhile," Critz said. "But we want them to come back and raise their families in the Alexandria area." She said the district tries to keep track of its graduates. "We believe the academies will have a positive impact on the workforce in the Alexandria area," she said.

**We know that not all high school graduates that go onto postsecondary education complete their program.** Critz said another measure of the success of the academy model is whether a greater number of graduates complete their postsecondary education. "We want them to be successful, whether they choose a career or postsecondary education right out of high school," she said.

Houska asserted that postsecondary students will find the path to what they want to do more quickly if they've gone through the academies. Critz commented that if students don't discover what they want to do by going through the academies, they might discover what they don't want to do, so they don't do that in college.

**Changing an educational institution can be a slow-going process, but Alexandria's move to the academy model went more quickly than anyone anticipated.** An interviewer commented that he was "in awe" of how quickly Alexandria was able to move to the academy model. Critz said moving to
a new educational model can be slow because it involves training issues for the staff, writing new curriculum, and changing the mindset of parents and the business community about what high school should look like.

"But getting buy-in from the beginning was very important for us," Critz said. "Where we landed with our academy model was far better than what I expected. To move to where we are right now in such a short time was not anything I could have predicted. It was like turning the aircraft carrier a whole lot faster than we would have predicted."

She said the school board was willing to take a risk on the academy model, once the planning group assured members that the curriculum would stay rigorous and relevant and the core content and state standards would stay in place. "We guaranteed that nothing would be lost," she said.

"I think it was the perfect storm," Critz said. The community had the opportunity to build a new high school and also provided private donations for the public high school. Business leaders approached other business people and community members to ask for donations. All totaled, the amount raised through a capital campaign, donations, miscellaneous grants and other revenue equaled $5.15 million, which helped to reduce the cost of the $73 million project.

**Changing to the academy model pushed the school's teachers harder than they'd been pushed in 30 years.** "The school is a highly technology-rich environment," Critz said, "which is another component of change for the staff. Every student has a digital device and it's a challenge for teachers to use that much technology."

"Some of our best veteran teachers said at the end of the year that they felt like first-year teachers," she continued. "They were running like crazy to keep up with the amount of change. But I don't think there's any one of them who would say they aren't thrilled with the change. You have to dig in and get the work done and they've done it and been very positive about it. The community's been positive. All of those things came together and allowed us to make a really, really transformative change that would normally have taken much longer to make."

**The academy approach requires more teachers, which created a financial challenge that the District needed to work through**

Critz said the new high school has a four-period day, rather than the traditional six-period day at the old school. The school made the move to four periods to allow students to have enough time to apply their learning to real-world situations and to allow them to participate in project-based learning. But, she said, having a four-period day requires more teachers than a six-period day.

**The new high school design allows for the new kind of learning in the academy model.** Critz said there are learning labs in every area: a business lab, a digital art studio, a TV studio, the school store, a manufacturing lab with virtual welders and highly technical, state-of-the-art equipment, and a culinary arts lab that looks like a food prep area in a restaurant. "While kids are in the school environment, they have a chance to see what real life will be like if they work in various industries," she said. Those were some of the things that made the community buy into the model and helped teachers move forward, as well.
The Area Learning Center (ALC) is available for kids who’ve lost credits. Critz said some students attending the ALC came back to the high school when they saw that a different learning environment was available.

Alexandria students can take college courses through the state's Postsecondary Enrollment Options (PSEO) program. Critz said the number of students leaving the high school to take college classes on a postsecondary campus has remained fairly stable.

Alexandria Technical and Community College is a close partner of the high school, she said. Representatives of the college serve on the school's advisory board and a college faculty member will come to the high school starting this fall to team-teach the Certified Nursing Assistant (CNA) class with a high school teacher. Students in the class get college credit. The school district received a grant to pay the salary of the college teacher and the district pays the salary of the district teacher.

The school district has a number of concurrent enrollment classes, Critz said, as well as advanced placement classes, so there are many opportunities for students to earn college credit. She said the goal is for all students to have a certificate or college credit before they leave high school. CNA will be the first certificate and the school will be adding others in each of the academies.

There are more opportunities and greater participation in extra-curricular activities under the academy model. In the new school, Houska said the robotics team has much better facilities and traditional clubs, like math and debate, are continuing. The number of students involved in DECA, a business-oriented club, has tripled over the past year, supported by the business academy. He said the new school has a nicer gym than many colleges. "We wanted all students to feel a sense of belonging," Critz added. "If there are five kids interested in anything, they can form a club and we'll find a teacher to work with them."

Because the students in Alexandria are 96 percent white, the district does not have a racial achievement gap. But there is a gap, Critz said, around special education and around low-income students who qualify for free and reduced lunch.

Alexandria has had an increase in open enrollment since the new high school opened. Critz said there have been five new open enrollees from other districts. And seven students who had been open enrolled in other districts re-enrolled in Alexandria. Some home-school students and some students who've been attending alternative schools are enrolling in the new high school. She said some people who work in other communities are choosing to move their families to Alexandria because of the schools. And employers have said that some new hires have accepted job offers in the community rather than somewhere else so they can move to Alexandria and enroll their children in the schools there.