Jessica Lipa, director of Anoka-Hennepin School District's career and technical education

Should Minnesota act now to reverse the decline of high school career/technical education?

A Civic Caucus Focus on Human Capital Interview

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Present
Tom Abeles, Dave Broden (vice chair), Pat Davies, Paul Gilje (executive director), Randy Johnson, Sallie Kemper (associate director), Jessica Lipa, Dan Loritz (chair), Dana Schroeder (associate director).

Summary
According to the Anoka-Hennepin School District's Jessica Lipa, Minnesota school districts must provide rigorous, relevant, hands-on career and technical education (CTE) to fulfill the needs of the state's workforce and address the skills gap in the state. She notes that manufacturing and technical careers are very prevalent in Anoka County and that the area is very supportive of technical education.

In contrast with the many school districts that have reduced or eliminated CTE courses in their high schools, Anoka-Hennepin has expanded its CTE offerings through its Secondary Technical Education Program (STEP). STEP is a partnership of the school district, Anoka County and the Minnesota State Colleges and Universities (MnSCU) system. STEP, which opened in 2002, is located in a high school for 11th and 12th graders built right onto Anoka Technical College. It offers advanced educational opportunities in career and technical education. Lipa says STEP works closely with business and industry to project out where the careers will be 10 years from now and to determine what kinds of courses and training the program should offer.
She says that a major problem for the program is getting potential STEP instructors, who all come from industry, licensed as teachers in Minnesota. She notes that after the University of Minnesota closes down its CTE teacher preparation program this spring, there will be no college in the state that prepares CTE teachers for licensing certification. She points out that the Minnesota Department of Education or the Legislature could change the licensing requirements.

**Biography**

Jessica Lipa is director of Career and Technical Education (CTE), Secondary Technical Education Program (STEP) and StepAhead Online High School, all in the Anoka-Hennepin School District. She became STEP director and CTE director in 2010 and started the StepAhead Online High School in 2013.

From 2000 to 2006, Lipa worked in the Anoka-Hennepin School District as a Family and Consumer Sciences teacher at Crossroads Alternative High School, where she worked primarily with at-risk teenaged parents. In 2006, she taught at STEP for one year and then became Career Placement Specialist for three years.

She serves on the Anoka County Workforce Council, is president-elect of the Minnesota Association for Career & Technical Administrators, and is secondary fiscal agent for the Oak Land Perkins Consortium. She continues to serve on many local community and service groups. In 2000, she earned a master’s degree in education and a teaching license in Family and Consumer Sciences from the University of Minnesota. She obtained her Administrative Licensure from St. Mary’s University.

**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. The Caucus interviewed Jessica Lipa to learn about career and technical education at the high school level in the Anoka-Hennepin School District.

**Discussion**

School districts must be dedicated to providing relevant education for what the real world needs. Jessica Lipa, director of Career and Technical Education (CTE) for the Anoka-Hennepin School district, said her primary goal is to assure that Anoka-Hennepin and other school districts in Minnesota are providing rigorous and relevant CTE programs to fulfill the needs of the workforce and address the skills gap in the state. "My guiding principle is that it's always about what the workforce needs, not about what we want to teach," she said. "That's a tough concept for educators to grasp. Our passions are not necessarily what we need in the real world."

Manufacturing and technical careers are very prevalent in Anoka County. Anoka Technical College and Anoka Ramsey Community College are in the Anoka-Hennepin area and are the district’s primary partners in CTE, Lipa said. Around 16 or 17 years ago, she noted, the Minnesota State
Colleges and Universities (MnSCU) system chancellor had decided to close Anoka Technical College because of low enrollment. But, she said, "the Anoka area believes very firmly in technical education. The people in our community are very, very proud of their college. They fought to keep it open and they won. It was truly a partnership of the Legislature, the community, Anoka-Hennepin School District and MnSCU that saved the technical college."

Anoka-Hennepin’s Secondary Technical Education Program (STEP) opened in 2002 as a joint partnership of the school district, MnSCU and Anoka County. STEP is located in a high school built right onto Anoka Technical College. Lipa said STEP has the support of the local legislative delegation, business and industry partners, students and parents in the community.

"We provide a transition between high school and college, feed enrollment into the technical college and provide what our local workforce needs," she said. The STEP program is for 11th and 12th graders, who then have concurrent enrollment in a high school and in the technical college. It provides an advanced educational opportunity in career and technical education for 800 students each trimester. "We’re a small tugboat, but our district believes small tugboats move big ships," Lipa said.

**STEP’s goal is to provide rigorous, relevant, hands-on education to meet the needs of the 21st century workforce.** All of STEP’s courses, Lipa said, must be a partnership with Anoka Technical College or some other technical or community colleges around the state. The courses must lead to a degree or credential. STEP also offers industry-based certificates.

STEP offers courses in the following areas: automotive; welding; manufacturing; Project Lead The Way engineering; fashion and cosmetology; music and media; art technology; and medical careers including nursing assistant, EMT, First Responder, pharmacy technician, and medical anatomy and terminology. In a number of these areas, students can earn industry-based credentials.

One hundred of STEP’s 800 students attend the program full-time, while the rest are part-time. They come from five district high schools, three alternative high schools, and transition programs in the school district, as well as from high schools in neighboring school districts. Anoka-Hennepin School District provides transportation for the students to and from the home high schools in the morning, the middle of the day and at the end of the day.

Any negative attitudes about students participating in STEP come from a misunderstanding of the value and opportunities offered by technical education and careers. Lipa said STEP staff members tell kids about the opportunities they’ll have and the possibility that they’ll make more money than kids who go to four-year colleges. "For example," she said, "our welding program is packed right now, because kids are starting to learn that they can make some pretty good money in that field."

STEP also works to get parents and high school teachers and counselors to understand that the program offers very high-skilled career opportunities.

About 60 percent of STEP students go on to Anoka Technical College for further education in the area in which they took classes at STEP. Lipa said 75 percent of the welding students, 50 percent of the manufacturing students and 40 to 50 percent of the automotive students go directly to Anoka Technical College immediately after high school. "They already share a space, they know the facility, and they work with the college faculty, so it just makes a great fit for them when choosing a postsecondary institution," she said.
STEP treats students like adults in a college atmosphere. "It's a much different environment than a traditional high school," Lipa said. "Because the college and STEP are attached, the kids really think they're in college. They automatically behave like they're in college."

In discussing STEP's relationship with alternative schools in the district, she said the program has had some success with kids who are not engaged in their home high school and who might try STEP, rather than be sent to an alternative school. "We're not for everybody, but we're for a lot of kids," she said. "In many cases, we keep kids more engaged. Some students finally find that perfect 'fit' they didn't necessarily have in a traditional setting. Others students are engaged no matter what they do. Our focus is the kids in the middle who didn't think they could go to college, but find out they can. What makes us unique is that kids come from five high schools into this environment that's real-world, that's taught by business and industry professionals who have real experiences outside of what the students know."

STEP's unique partnership with Anoka Technical College has helped enroll some STEP students who might not otherwise qualify for concurrent high school and college enrollment. Generally, Minnesota students seeking such concurrent enrollment must meet PSEO standards: they must be in the top half (for juniors) or top third (for seniors) of their home high school class. But, Lipa said, if a prospective student does not meet those requirements, Anoka Technical College might ask for an instructor's recommendation or ask the student to participate in an interview, which could result in the requirements being waived. As a result, all STEP students are qualifying for concurrent enrollment and getting dual credit at the college. "These are kids who never would have gotten it because of a test score," she said. "The college is pioneering this in the state."

STEP is responsible for delivering all of the course content for its students. Because of this and because STEP students are concurrently enrolled in the school district and the technical college, Lipa said, the money allotted to the school district for each student stays with the district. That's different from Postsecondary Enrollment Options (PSEO), where the school district loses per-student funding to the postsecondary institution where the student is taking classes.

STEP works with business and industry to project where the careers will be 10 years from now. Lipa sits on the Anoka Workforce Council, whose latest projections go out to 2022. She said all of the CTE programs in the district high schools and at STEP are required to meet twice a year with a business and industry advisory board. "We take it very seriously," she said. "We tell them what we're teaching and ask the board what we should be doing in the future. We use that data to project how to develop our programs. In education, teachers often get comfortable with what they're teaching year after year. Because of the culture of our building and the nature of what we do, our teachers have never gotten comfortable with that idea. They know that every year they must change their curriculum to meet the needs of the workforce."

STEP teachers are employed by the school district, but must meet the qualifications of the technical college. Lipa noted, though, that STEP teachers do not teach in the college. STEP does use some of the technical college's classrooms and equipment in its classes. She said it can be difficult to attract instructors from industry in certain fields, such as welding and nursing, because teaching salaries are lower than those industry salaries.
There will soon be no college in the state that prepares career and technical education teachers for licensing certification. The University of Minnesota has the last program in the state that is certifying CTE Teachers and is closing the program at the end of the school year. Lipa said CTE teachers can only get licensed using variances or limited licenses from the state Department of Education. Also, teachers who are licensed in another state are not automatically licensed in Minnesota.

She said STEP needs teachers for medical careers, manufacturing, construction and transportation, yet the potential instructors can’t get teaching licenses. She pointed out that the Minnesota Department of Education or the Legislature could change the licensing requirements.

School districts across the state face barriers to offering or expanding CTE. "Schools across the state are dealing with requirements in math and English taking precedence over electives," Lipa said. "That leaves little chance for students to take CTE classes." And small schools struggle to find enough students to employ a full-time teacher. "It's really hard to hire someone for one or two sections of welding," she said. Funding for CTE is also an issue, she maintains, as is availability of industry-standardized equipment and technology.

Lipa believes a higher-level funding stream is needed to spread CTE to the rest of the state. She explained that school districts can authorize a local career and technical levy. The funds raised through that levy may be used only for approved career and technical education programs and only for those special expenses that would not be considered part of the general education program of the district. Those districts with a state-approved CTE program and a local levy for CTE are eligible for state Career & Technical Revenue funds, which amount to 35 percent of approved CTE expenditures. This funding can be used to support salaries, industry equipment, or other innovations in CTE programs.

For example, Lipa noted that Anoka-Hennepin spends $3.5 million to $4 million on CTE each year. The district receives $1.5 million back in state Career & Technical Revenue funds, which it uses for further support of CTE. CTE programs also get federal Perkins grants (money for career and technical education at the high school and postsecondary level) but the grants are small, she said.

If we want high school students to choose relevant career paths that will exist by the time they graduate, offering CTE to 11th and 12th graders should be one of our highest priorities. "The world has changed dramatically," Lipa said. "Today you can't just get a four-year degree in anything and assume you'll get a great-paying job."

Fifty-seven percent of our careers in the future will need technical skills. "The best-trained person will have technical skills and maybe go on to get a four-year college degree," she said. "You need a combination of both if you want to succeed."

Anoka-Hennepin now has school counselors in all six of its middle schools. Lipa said sixth graders are now starting career awareness and career exploration. STEP goes into the middle schools and puts on hands-on career activities. It also offers career camps.

Lipa noted that the Legislature passed a personal learning plan requirement last year. She said sixth grade is not too early to start kids thinking about careers. By the time they get to ninth grade, they
have to start taking classes that interest them. And by 11\textsuperscript{th} grade, kids are ready for college credit. "They want the depth," she said.

**School districts can use consortia and career academies to get to a critical mass of students for offering CTE.** "Not everybody will be able to do everything Anoka-Hennepin does," Lipa said. There are consortia models in the state for Perkins grants, she pointed out. One district's career academy could specialize in two or three areas, while another district in the consortium could specialize in two or three different areas. Students could go back and forth between districts or schools, if necessary.

"You have to get creative," she said. CTE teachers are able to give physics or chemistry credit, so students could do dual credit in certain areas. Lipa believes smaller career academies would be the best way for smaller districts to offer CTE. "You can't be afraid to let go of the old and really embrace some of the new," she said.

**STEP looks beyond just the Anoka area's workforce needs.** Lipa said she also tracks statewide workforce needs. The Minnesota Department of Employment and Economic Development (DEED) will be meeting with STEP's teachers about statewide, metro and national needs.

**Anoka-Hennepin has six counselors who are career placement specialists.** One of those counselors is at STEP. They do career tours and set up internships and mentorships. "They're aware & involved," Lipa said.

**Strong leadership has led to Anoka-Hennepin's focus on CTE.** Lipa said the leadership comes from a combination of local legislators and community members who love technical education and believe in their community, strong superintendents and strong CTE directors. "We have a long history of support from our district leadership," she said. "All these leaders have made sure that we've been innovators in career education."

**STEP is constantly educating parents, just as much as it's educating students.** Lipa said she meets with parents all the time and shows them the job opportunities kids can prepare for at STEP. "And we have a superintendent who is very supportive of CTE and understands its critical importance for our community and our state," she said. "It also helps us talk to parents when business and industry say publicly, 'This is what we need.'"

**The demographic of kids in the STEP program mirrors that of the school district as a whole.** "Our student population at STEP is as diverse as our district population," Lipa said. "I'd love to have more diversity, especially in instructors."

**Three examples of other school districts running good CTE programs include Rochester, St. Paul and Northeast Metro Intermediate School District (ISD) 916.** Lipa said Rochester is getting a program called CTECH, modeled on Anoka-Hennepin's STEP program; Northeast Metro ISD 916 runs a great program with Century College in White Bear Lake; and St. Paul ISD 625 is running a good program with St. Paul College.

**There should be more collaboration between MnSCU and the state Department of Education.** "If, at the high school level, we're not preparing students for real careers we're not doing kids any
good," Lipa said. "If postsecondary institutions and our school districts can't figure out ways to collaborate for our kids, we won't get anywhere."