Since the 2011-2012 school year, participation in college-level technical education courses has more than doubled, as has the number of students earning industry-recognized credentials and the number of college credit hours earned. Why the change? In large part, it is because of SB 155, a bill passed unanimously by the Legislature in 2012. That bill led to a new state-funded program that has greatly expanded high school students’ access to college-level technical-education courses.

Over the past two years, a big change has occurred in high schools across the state of Kansas. More and more students are getting a head start on their future careers and their postsecondary studies — by enrolling in and completing courses in career and technical education, or CTE.

The rates of growth in the state are striking.

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Across the Midwest, new state laws on CTE are being passed, new programs are being launched, and new investments are being made. It is a policy area that enjoys bipartisan support and that touches on many of today’s top legislative priorities — closing skills gaps, expanding economic opportunities and improving student outcomes.

“Workforce development and training programs are critical, but they’re insufficient by themselves,” says Kate Blosveren Kreamer, associate executive director for the National Association of State Directors of Career Technical Education Consortium.

“There is a real efficiency and value in embedding more workforce training into the K-12 system.”

Last year, she says, nearly every U.S. state took actions of some kind on career and technical education. CTE was also a recurring theme in this year’s State of the State addresses by governors in the Midwest.

“I can’t overstate the importance of these programs,” South Dakota Gov. Dennis Daugaard told lawmakers at the start of their legislative session, adding that the high costs of CTE courses often prevent local schools from offering them. His solution: A new grant program to expand the availability of career and technical education across the state — for example, money for high schools to open new CTE programs in machining, welding and science; to offer dual-credit courses in agriculture; or to partner with another to build mobile CTE facilities.

And several laws have been passed by the region’s legislatures in 2014, including measures in Indiana and Michigan that either rework state graduation requirements or pave the way for future changes.

“If you look at Indiana’s diploma system, it’s one-size-fits-all,” Indiana Republican Rep. Wendy McNamara says. “It’s the idea of everybody going to a four-year institution, but statistics show that isn’t where every student needs to be.”

One of her ideas is to create a new option for Indiana high school students: the CTE diploma. Her bill calling for the state to study that option was signed into law earlier this year (HB 1213 [3]).
Michigan’s HB 4465 and 4466 [4], signed into law in July, will allow students to meet certain graduation requirements by completing CTE courses and programs. For example, instead of completing an Algebra II course, a student could complete a program in electronics or welding that has similar mathematics content.

The recently enacted measures also ensure that Michigan students and parents are made aware of the ability to create a “personal curriculum” built in part around CTE courses and programs.

‘Game-changing’ law in Kansas

While attracting more interest than usual in recent years, career and technical education has long been a part of state K-12 and postsecondary systems. CTE is offered by traditional high schools as well as area career centers or academies (school districts often partner with one another to offer CTE). Michigan and Ohio have separate “planning districts” that focus on the delivery of career and technical education for a particular region of the state.

For postsecondary students, a state’s community and technical colleges provide CTE programming.

In addition to using their own dollars, states rely on federal funding, via the Carl D. Perkins Career and Technical Education Act, to pay for local CTE programs (see sidebar article below).

But as Blosveren Kreamer notes, states have recently shown more interest in opening up new funding streams, with Gov. Daugaard’s actions from this year being one notable example.

The recent CTE trends in Kansas, too, would not have been possible without the increased investment made by the state Legislature.

“I think it really is game-changing legislation,” Blake Flanders, the Kansas Board of Regents’ vice president for workforce development, says of SB 155. The reason, he adds, is the incentives that the state-funded program is now providing schools and students.

Community and technical colleges are encouraged to seek out and recruit students because the state pays the tuition. High schools, meanwhile, can receive $1,000 for every student who earns an industry-recognized credential in a “high-need, high-wage” occupation area. School districts also have the costs of transportation picked up by the state.

For students, this has led to greater access to college-level CTE courses.

“In the past, it was perceived that if you went through a vocational program, then you weren’t going to college at all — and perhaps you might be destined for a job that didn’t have fantastic wages,” Flanders says.

“But because this is linked to certification in high-demand areas, there’s been much more discussion about some great career areas.”

Not to mention the link to postsecondary schools.

“In Kansas, we’re going to need more individuals with some postsecondary credential,” he says, “but not necessarily a postbaccalaureate degree.”

Every year, the Kansas Department of Labor is charged with developing a list of “high-need, high-wage occupations” that have some type of certification or license.

That list is based on the department’s analysis of current employment vacancies as well as short- and long-term job projections. Pay for the occupation must also be at least 70 percent of the average annual salary wage in Kansas.

About 20 occupations are on the list for the 2014-15 school year; examples include truck driver, auto mechanic, nurse aide, plumber and machinist. Careers in the health industry have thus far attracted the most student interest.

A critical next step for Kansas policymakers, Flanders says, is to follow the progress of students who have gone through the CTE programs.

How many used the first credential earned in high school as a stepping stone to earning more credentials at the postsecondary level? How many went on to earn an associate’s or bachelor’s degree? How many found immediate success in a related career?

Only after those questions are answered will Kansas legislators know much their new investment in CTE has paid off.

‘Change the mindset’ around CTE
Another benefit of career and technical education is to better engage young people while they are in school — by making the coursework more hands-on and tied to their career interests.

Rep. McNamara, who serves as director of an Early College High School in the southern Indiana town of Evansville, says CTE simply is a better match for certain students.

“Take Algebra II as an example,” she says. “It may not be relevant to students unless they’re going on to calculus in college. Some students might be better served by taking a problem-solving class or a technical math class. It has advanced math, but is also relevant to a career skill.”

McNamara’s interest in state CTE policy doesn’t only come from her background in education. It’s also because of what she hears time and again from business leaders in her district. Indiana, she is told, has a skills gap — open positions can’t be filled by qualified or skilled workers.

Similar concerns are being raised across the country, and McNamara believes an increased emphasis on career and technical education must be part of the policy solution.

“We are never going to get rid of a skills gap until you actually teach the skills that are missing,” she says.

How do states know which skills to emphasize in CTE programs?

In Indiana, the legislature has created 11 separate “Works Councils” to find out the answer for different parts of the state. Made up of local employers and educators, these newly formed councils must identify the workforce needs of a community — and then tailor career and workforce programs accordingly.

McNamara says one of the next steps should be making CTE a more attractive and viable option for students as they work toward a high school diploma and begin thinking about what comes next.

“One of the biggest things is changing our mindsets,” she says. “First, it doesn’t have to be CTE or college. It can be both. Second, we shouldn’t marginalize an associate’s degree or some type of technical certification in favor of a four-year degree.”

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**Recent state actions and innovations in the Midwest on career and technical education (CTE)**

In the **Illinois** town of Pekin, a partnership between the local high school and area businesses exposes students to the skills and careers associated with high-tech manufacturing. Part of the training is done by veteran manufacturing employees — who would have been prohibited from teaching under revisions to the state’s teacher-licensure law. But the legislature intervened in 2013 by passing **HB 1868**, a bill that provides flexibility on who can teach CTE in high school; the move will help keep “a pipeline of skilled employees coming out of our schools into the workplace,” says Rep. Mike Unes, who represents Pekin.

**Under bipartisan legislation signed into law last year (SB 465), Indiana** established new regional “Works Councils” across the state. Each council evaluates employment opportunities and workforce needs in a specific region of the state. It then tailors career and technical education programs so that young people can meet those local opportunities and needs. Eleven Works Councils — made up of local employers and educators — were established. The Indiana General Assembly also created a 15-member Career Council (HB 1002) to coordinate statewide career training and skills development.

Expanding the reach of state-funded apprenticeship programs emerged as a top legislative priority in **Iowa** this year. The result was **passage of HF 2460**. It provides $3 million for a new Apprenticeship Training Program and $3 million for a Job Training Fund. The new state investment will be used by businesses and the state’s community colleges. The goal is to help students “earn while they learn,” Gov. Terry Branstad says, while also providing employers with a greater pool of skilled workers.
Two years ago, Kansas lawmakers passed SB 155, a measure that paved the way for an innovative approach to promoting CTE and expanding its reach. The Excel in Career Technical Education Initiative has since attracted considerable attention from Kansas schools and students alike — while also garnering national interest. Under the program, students get free college tuition for taking postsecondary CTE courses. School districts are reimbursed for transportation costs and also can receive $1,000 for each of their high school students who earn an industry-recognized credential in a “high-demand, high-wage” occupation (as determined by the state Department of Labor). Since the initiative began, the number of high school students earning industry-recognized credentials upon graduation has increased by 159 percent.

High school students in Michigan will soon have more opportunities to explore career pathways and a skills-based curriculum as the result of two bills signed into law this summer (HB 4465 and HB 4466). Under these new measures, certain graduation requirements in math and other subject areas can be met in part by taking CTE courses. For example, instead of completing an Algebra II course, a student could complete a program in electronics that has similar mathematics content. Or a course in agricultural science could be used to fulfill a science graduation requirement. The bills also ensure that students and parents are made aware of the ability to create a “personal curriculum” built in part around CTE courses and programs.

Last year, Minnesota lawmakers eliminated a high-stakes test that students had to pass to graduate from high school. They have instead placed a greater emphasis on new assessments tied to college and career readiness. Part of HF 630, too, requires school districts to assist students, starting in the ninth grade, in developing a plan for postsecondary education or employment. The components of this “personal learning plan” were tweaked in 2014 following recommendations made by a 15-member Career Pathways and Technical Education Advisory Task Force.

Early in 2013, Nebraska revamped its standards for the CTE courses offered in public schools. Developed by a mix of education leaders and members of the private sector, the standards were aligned to courses in the state’s postsecondary schools and crafted so that students could earn college credits while in high school. Nebraska has six areas of CTE study for high school students: 1) agriculture, food and natural resources; 2) business, marketing and management; 3) communication and information systems; 4) health sciences; 5) human sciences and education; and 6) skilled and technical sciences.

Since 2009, North Dakota has funded career and technical education scholarships of up to $6,000 per student. To be eligible, a student must have a GPA of 3.0 or higher and complete a required program of study. But unlike with another state academic scholarship, the student does not necessarily have to score a 24 or higher on the ACT. Instead, a young person qualifies for the CTE scholarship by achieving high scores on the WorkKeys assessment, which measures “real world” skills that employers believe are critical to job success.

Last year, the Ohio Department of Education released new report cards designed to improve accountability among the state’s joint vocational school districts. The “career tech” report cards are thought to be the first in the nation to use A to F letter grades and to exceed federal requirements. Letter grades are given in three areas: four-year and five-year graduation rates (proportion of career-tech students who graduated within four and five years of beginning ninth grade) and post-program placement (the proportion of students who were enrolled in postsecondary education, advanced training or military service or who were employed within six months of leaving high school). The Ohio legislature required the report cards under a bill passed in 2012 (SB 316).

Gov. Dennis Daugaard has made CTE a central part of his focus on improving workforce training, what he calls “WINS” (South Dakota Workforce Initiatives). Earlier this year, he announced the awarding of $8.5 million in new grants to 12 different school districts to either develop CTE programs or strengthen existing ones. The funds will be used to build new regional CTE facilities, create mobile units for use by multiple districts, and to expand course offerings in middle school and high school.
Late in 2013, two bills related to career and technical education were signed into law in Wisconsin. The first, SB 331, is modeled after Kansas' Excel in Career Technical Initiative (see Kansas section). It provides a school district with $1,000 for every high school student who earns an industry-recognized certificate in a high-need occupation prior to his or her graduation. SB 334 creates a new technical education scholarship program; criteria for the scholarship will be established by local school districts.

Sources: National Association of State Directors of Career Technical Education Consortium, Association for Career and Technical Education and CSG Midwest research

Advocates will try again in 2015 to win reauthorization, modernization of key federal law

Eight years have passed since the last congressional reauthorization of a law that drives federal funding and policies for career and technical education. But an update and modernization may be coming soon, which advocacy groups such as Opportunity Nation say are essential to making the most of the more than $1 billion spent every year through the Carl D. Perkins Career and Technical Education Act.

“We’re hopeful that Perkins will be one of the first things that Congress takes up in January,” says Melanie Anderson, director of government affairs for Opportunity Nation, a group that includes more than 300 businesses, educational institutions, nonprofits and civic organizations.

“This is an area where we know there is a lot of bipartisan agreement.”

Earlier this year, the U.S. Congress overwhelmingly approved a new Workforce Innovation and Opportunity Act, which provides close to $3 billion a year to states for job training programs. The goals of that law, in many ways, mirror the objectives of the Perkins Act — developing a skilled workforce and opening pathways of economic opportunity.

Under the Perkins Act, the federal government sends money to the states for career and technical education, or CTE, in high school and postsecondary institutions.

“This is an education law that has been languishing and not getting the attention it deserves,” Anderson says. “It’s critical to addressing the skills gap. It’s critical to getting our country’s disconnected youth back on a track to success.”

“Disconnected youths” are individuals between the ages of 16 and 24 who are not in school and not working. There are an estimated 5.8 million of them in this country — one in seven people in this age group.

A reauthorization of the Perkins Act, Anderson says, should target more funding to communities with high concentrations of disconnected youth. Opportunity Nation also wants new provisions that enhance accountability of CTE programs, encourage more cooperation among secondary and postsecondary education systems, promote innovation, and get local employers more involved in the process. Here are some of its recommendations for improving the Perkins Act:

- Require states to make competitive subgrants under the federal law only to CTE programs that involve partnerships between a local school district and higher-education institutions. The idea here is to ensure that these two levels of education work closely together on a federally funded CTE program of study, which should begin in high school and should end with a student either being able to earn a postsecondary credential or industry certification.
- Require these partnerships to also include involvement by local employers, who can inform the development of CTE programs of study through their knowledge of the region’s workforce needs. These employers, too, would in some way “buy in” to the partnership through a cash or in-kind contribution.
- Develop a new innovation fund in the Perkins Act that rewards evidence-based, promising practices. “We’d like to make it easier for states to move forward with some of these innovative ideas so that they can be scaled up and replicated,” Anderson says.
- Establish a common set of performance measures across states. For CTE programs, measures of performance center on an array of student outcomes — for example, the percentage of participants who graduate from high school, become industry-certified, successfully transition to a postsecondary program or prosper in the labor market. Federal grants could be ended for local programs not meeting the performance measures, while funding priority could be given to initiatives that can demonstrate success.