



## Career and Technical Education's Role in

# rural education

# ISSUE SHOOT

August 2015



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Technical, academic and employability knowledge and skills are essential for youth and adults to be lifelong learners, informed citizens and prepared and adaptable members of the workforce. CTE imparts these skills through engaging, relevant hands-on learning, integrated with academics, for all students, including those living in rural settings where education and economic development systems face unique challenges.

One such challenge is serving small populations that are geographically dispersed, making it difficult for school districts and community colleges to offer robust education programs. It may be hard to find teachers qualified to teach a particular course or course sequence, or to offer enough courses to meet the varied career interests of students and help them complete a career pathway, while a lack of technology infrastructure in rural areas can make it challenging to connect students and teachers across distances. It can also be difficult for schools to provide students with a range of career exploration and work-based learning experiences, as many rural areas have only a few employers or industries. Funding challenges underlay all these concerns.

CTE educators and institutions are skilled at flexibly addressing the challenges of the rural ecosystem. Exemplary CTE programs in rural areas provide rigorous and relevant career pathways that engage students in planning for their futures; develop their academic, technical and employability skills; and provide opportunities for work-based learning and mentorship, all delivered flexibly through different school formats as well as online learning. Indeed, rural school districts already see the value of CTE for students: The National Center for Education Statistics (NCES) reports that rural high school students take more credits of CTE than urban, suburban or town-based students.

## CTE Provides Solutions

CTE facilitates rural students' education and career development in a variety of ways. CTE is particularly adept at student engagement, which teachers and administrators rank as the most important driver of student achievement, along with motivation, as reported in Education Week Research Center's *Engaging Students for Success*. Disengagement can be a particular problem for rural youth, who may have trouble envisioning their future, particularly when they lack access to role models who have earned a valuable credential. Young people aged 18 to 24 in rural areas were less likely to enroll in college in 2004 than the national average, according to NCES. However, research has demonstrated that CTE engages students and can help them stay in school by providing relevant, real-world learning opportunities.

In addition, CTE has a long history of delivering education in a variety of models to facilitate student learning and engagement while working with financial, geographic and access challenges. For instance, with the area CTE center model of delivery, CTE courses are offered in a centralized location for students from multiple schools and/or school districts. This format, which may be known by other names, eases the burden on individual schools and districts by locating CTE expertise in one place. The Oklahoma CareerTech system delivers CTE through comprehensive high schools, which offer academic and technical courses, as well as through 29 technology centers with 59 campus sites. A number of these programs are located in rural areas, such as Western Technology Center, which is responding to the local need for health care and dentistry employees by educating youth and adults in these and other fields.



CTE can also provide students with foundational skills in areas key to the local economy in rural districts through career academies. These small schools-within-a-school combine academic and technical education around a career theme, such as Wyoming's Campbell County High School Career Academies in energy and engineering, health science and human services, hospitality and tourism, and transportation.

Rural areas are also strengthening and harnessing their technology infrastructure to ensure students can attain valuable credentials and learn the skills to be successful in the 21st-century workplace. Computer-based simulations and virtual school options can be particularly beneficial to rural students who might not otherwise have access to specialized courses that enhance their career readiness. Online learning also connects students with opportunities to earn college credit, which can be particularly compelling for rural students who may not see the possibilities of postsecondary education. For instance, through the North Carolina Investing in Rural Innovative Schools program, high school students can earn as many as 21 college credits at no cost through local community colleges and online courses. Rural postsecondary and adult students can also benefit from online learning: Minnesota State Colleges and Universities are developing the Rural Information Technology Alliance, which uses on-site, online and hybridized solutions to help students pursue stackable credentials for IT employment.

These flexible models extend outside the classroom or laboratory to incorporate work-based learning. Carrollton High School, located in the foothills of the Appalachian Mountains, has teamed with Georgia manufacturer Southwire Company for a youth apprenticeship program in engineering that is benefiting students and the company. However, work-based learning can be a challenge in rural areas where there are limited numbers of industries and employers. To address this issue, a work-based learning model encouraged in rural Vermont is student entrepreneurship, which includes school-based businesses as well as experiences with local entrepreneurs and supports the small businesses that form the basis of Vermont's economy. In another example, West Virginia is transforming classrooms into student-led businesses called Simulated Workplaces, with the help of industry advisers.

Rural schools also find ways to encourage technical skill development, expose students to careers and provide mentorship through career and technical student organizations

(CTSOs), intra-curricular programs led by CTE teachers as advisers. CTSO advisers, industry representatives who serve as judges in career-based competitions, and other volunteers serve as important sources of career information for students. For instance, the Family, Career and Community Leaders of America (FCCLA) members of Richlands High School in southwestern Virginia, guided by award-winning adviser Beth Goforth and mentored and supported by other adults, have excelled in competitions and held state and national FCCLA leadership positions. These opportunities to travel and interact with education and business leaders provide students with a diverse set of skills.

In addition to creatively helping students prepare for college and career opportunities, CTE programs support regional workforce and local economic development efforts by determining local needs and offering programming to meet those needs. For example, at Lake Area Technical Institute (LATI) in South Dakota, administrators review workforce projections and can develop new programs within a year, providing much-needed training options for local small businesses. At LATI, employers are deeply integrated into programs, providing equipment, scholarships, work-based learning experiences and faculty salaries, according to the Aspen Institute. Chambers of Commerce and workforce investment boards can also be important partners in preparing rural students for college and careers.

## Conclusion

CTE provides rigorous and relevant career pathways that engage students; grow their academic, technical and employability skills; and include opportunities for work-based learning and mentorship. By delivering skills for further education and the workplace through flexible and creative models, CTE holds the key to ensuring rural students can achieve their full potential and developing a prepared workforce that can respond to local and regional economic needs.

