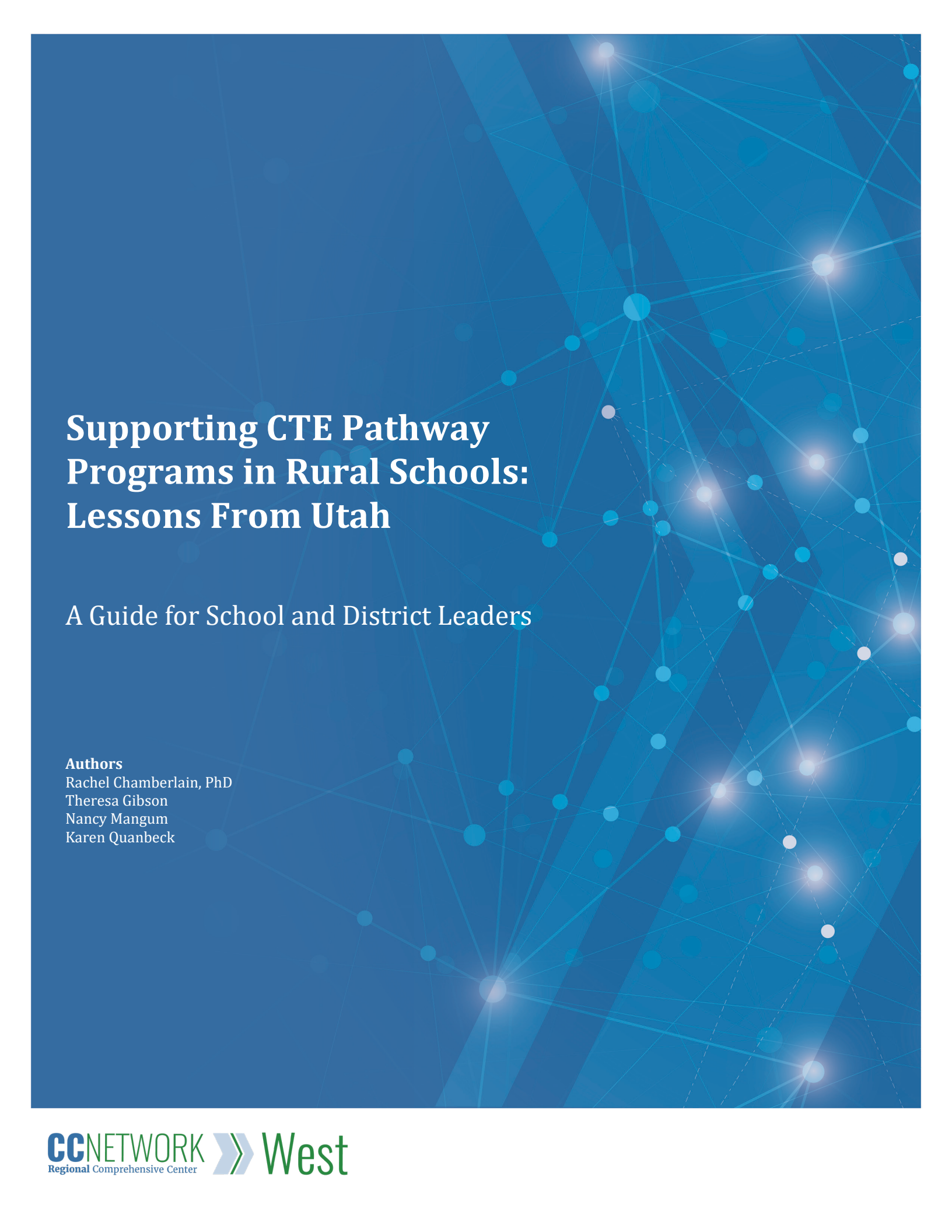




Supporting CTE Pathway Programs in Rural Schools: Lessons From Utah

A Guide for School and District Leaders

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Introduction

An increasing number of school districts across the country are developing relevant Career and Technical Education (CTE) pathways for students to transition into industry careers. It is critical in rural districts to address both the evolving needs of communities and the interests of students. Cross-sector partnerships that are locally grounded can lead to greater cultural and economic vitality in rural communities (Saw & Culbertson, 2025). For rural districts facing population shifts, declining enrollment, or other economic challenges, a strong CTE pathway program can strengthen the local workforce pipeline, encourage young people to remain in or return to their communities, and support long-term community resilience and economic sustainability.

When an education leader is looking to develop a new CTE pathway program, it can be difficult to know where to start. Creating CTE pathways often involves engaging employers, deciding on how these experiences will be scheduled, and creating as much access as possible to a variety of choices in coursework or work-based learning experiences for students. In this guide, the authors have gathered insights from school districts in rural southeastern Utah that successfully built and sustained CTE programs with strong local partnerships, placed staff in strategic roles, and aligned to student and workforce needs. This action guide summarizes what we have learned and what rural leaders in other school districts can take into consideration when building successful CTE pathways.

Using This Guide

This guide is intended for rural school leaders and district leaders who support them. The key lessons shared in this resource can be used as a starting point for districts that are in the beginning stages of planning a CTE pathway program or serve as a reflection for districts that are thinking of new ways to sustain or strengthen an existing program. We encourage leaders to use this guide flexibly based on the roles in your district.

Participating Schools

Four high schools across three school districts participated in listening sessions that included CTE directors, a Utah State University Eastern Perkins Pathway Coordinator (dually employed with a school district), CTE pathway coordinators, principals, and teachers. The conversations included school and supporting district staff from:

- Carbon High School, Price, Utah (Carbon County Schools)
- Emery High School, Castle Dale, Utah (Emery County Schools)
- Monticello High School, Monticello, Utah (San Juan School District)
- Monument Valley High School, Oljato-Monument Valley, Utah (San Juan School District)



The listening sessions explored questions about community partnerships, how the districts built their CTE pathways, implemented them, and scaled for sustainability. Insights and best practices have been summarized and are included in this guide as key lessons for CTE pathway creation and implementation in rural districts.

Key Lessons on Supporting CTE Pathways in Rural Schools

Listening sessions with participating leaders revealed that the most successful CTE pathway programs empower the right staff in the right roles who place community and student interests at the center of their decision making. These programs help students connect education to future careers while responding to local workforce needs through intentional scheduling, career exploration activities, work-based learning opportunities, or incentive systems.

The CTE pathway programs from the Utah school districts represented in this guide are examples of programs operating on modest budgets and lean staffing. Even with these challenges, they leverage strong leadership, intentional planning, and community collaboration to create meaningful career-connected learning experiences that prepare students for both college and career success.

Key Lesson 1: The Right People Matter

Successful CTE pathways depend on more than courses, equipment, or facilities—they also depend on people. Across the districts we visited, we found that strong programs were built around individuals who were passionate about career-connected learning and who were intentionally placed in roles that supported pathway development. In general, staff in rural schools often juggle many responsibilities, making it difficult to sustain extracurricular or enrichment aspects of CTE, such as Career Technical Student Organizations. Master scheduling is therefore a consideration when student numbers and staff are limited. Teachers often need to teach across multiple content areas or roles, making flexible staffing and a willingness to build new competencies essential to ensure that all students have access to CTE in their schedules.

Counselors Matter

School counselors play an essential role in guiding students through pathways by ensuring that teacher and student schedules accommodate the courses. School counselors are often the individuals who connect students to pathway opportunities. They help students explore career interests, work with administration to build schedules that support pathway completion, and support students as they navigate transitions to postsecondary education and employment. We know that counselors can significantly influence student participation in a CTE pathway; for example, a single comment from a counselor can encourage a student to enroll in a pathway or unintentionally steer them away from one. For this reason, it is important that counselors have a deep understanding of available pathways and work with the CTE teachers and CTE director to understand what is available and to be intentional about supporting schedules that allow for student participation.

In the strongest programs, counselors

- periodically discuss career goals with students;
- help students plan multiyear pathway sequences;
- ensure schedules support pathway completion;
- connect students with career exploration activities, internships and other work-based learning opportunities, and dual or concurrent enrollment options; and
- serve as advocates for the benefits of CTE pathways with students and families.

Pulling in the Right Voices

Emery School District has a career pathway coordinator who also serves as the Utah State University East Pathway Coordinator. This individual, along with the CTE director at Emery School District, have the connections and capacity to involve multiple stakeholders in the district's decision-making process for their CTE pathways. The district also worked to ensure that the current skills of their teachers and the input of their major industry partners were incorporated in pathway planning. Pulling in the right voices, including students, teachers, building leaders, and industry partners, was essential to the district's decision-making process.

Beyond the Counselor: Building a Support Team

The rural districts in Utah that we visited also established leadership structures that coordinated pathway development across schools. Having a CTE director and, if possible, a pathway coordinator (either full- or part-time) to guide and support the implementation is essential. This lessens the burden on counselors to manage CTE pathway programs along with their other responsibilities.

Another key element to having the support structures needed is a school administrator who champions CTE initiatives. Administrators make personnel decisions and often hold the authority to schedule and influence funding decisions. It is important that an administrator is on board, understands the opportunities for students, and is part of conversations that shape pathways.

Rural districts often rely on teachers who must split their responsibilities between CTE and other content areas. While this model increases course offerings, these teachers can sometimes feel disconnected from the broader CTE program. Schools that intentionally include these teachers in planning meetings, professional learning communities, and pathway discussions create stronger, more cohesive programs.

What Leaders Can Do

- Invest in counselor awareness and training around CTE pathways.
- Ensure someone is responsible for coordinating pathway development, partnerships, and work-based learning opportunities.
- Include all pathway instructors, such as part-time teachers or teachers without subject-area colleagues, in CTE planning and professional learning.
- Create regular opportunities for counselors, administrators, and CTE teachers to review student pathway participation and completion data.
- Build master schedules around student interests and pathway progression whenever possible.
- Ensure consistent communication among all stakeholders (e.g., teachers, counselors, administrators, college partners). Consider designating a coordinator or director who has the authority and time to convene meetings and adjust schedules or offerings to fill gaps in demand.
- Designate a staff member to track data on student interest and community needs.

Key Lesson 2: Build Partnerships that Expand Opportunities

Rural schools rarely have enough staff, facilities, equipment, or student enrollment to offer every CTE pathway on their own. The most successful districts recognize this reality and intentionally build partnerships that expand opportunities for students. Rather than viewing their limitations as barriers, districts can instead collaborate with local employers and other community partners as a strategy for growth.

Across the three districts that participated in listening sessions, partnerships served three critical purposes:

- Providing work-based learning opportunities for students
- Expanding access to specialized courses, facilities, and instructors
- Sharing resources and expertise that individual districts could not provide independently

Partnering With Local Employers

Strong relationships with local businesses create opportunities that schools cannot replicate in a classroom. Employers can provide internships, job shadows, equipment donations, guest speakers, and real-world learning experiences. The strongest partnerships go beyond simply hosting students. Employers become active partners in pathway development by helping schools identify workforce needs, shape programs, and align student experiences with industry expectations. Even in communities with a limited employer base, districts found ways to connect pathways to local economic opportunities, including healthcare, agriculture, manufacturing, energy, and tourism. By aligning programs with regional workforce needs, schools increase the likelihood that students can find meaningful employment close to home.

Keeping a Pulse on Industry

Carbon County Schools' CTE director has a business management degree and worked in private industry for 20 years before entering education. Carbon's program now focuses on engaging directly with industries to provide work-based learning experiences for students in the district. This includes summer programming and CTE courses that engage students directly in work-based learning. The director fosters relationships with a variety of industry partners to provide personalized work-based learning experiences. This relationship among partners has not only led to unique opportunities, including access to surplus materials from Intermountain Electric for teachers to use in their courses, but also real-time information for the district about expected future staffing shortages that will become high priority for the local industries.

Many of the education leaders emphasized that employer partnerships often begin with small, manageable opportunities. Career fairs, classroom speakers, advisory committees, workplace visits, and job shadows frequently served as entry points for deeper collaboration. In many cases, employers were eager to participate once they were invited.

Leveraging Postsecondary Partnerships

Partnerships with community colleges and technical colleges emerged as one of the most effective strategies for expanding pathway opportunities. These partnerships allowed students to begin college-level career preparation while still in high school, reducing both the time and cost required to earn credentials after graduation. They also provided access to specialized facilities, equipment, and instructors that many rural schools cannot support independently.

Several districts relied on postsecondary partners to provide opportunities in fields such as welding, automotive technology, healthcare, cosmetology, plumbing, and HVAC. Rather than duplicating expensive programs, districts leveraged existing college resources to broaden student options.

Collaborating Beyond District Boundaries

Regional collaboration among neighboring districts proved especially valuable for smaller rural systems.

Leaders described these partnerships as more than a funding mechanism. By working together, districts were able to

- pool resources,
- share staff expertise,
- coordinate pathway development,
- exchange promising practices, and
- strengthen grant applications and reporting efforts.



Incorporating Navajo Culture

CTE implementation in Indigenous contexts can provide opportunities to align hands-on CTE approaches and community cultural strengths. Monument Valley High School adapted CTE programming to support Navajo traditions. For example, CTE in the district is seen as a pathway to build on existing Navajo cultural knowledge (e.g., agriculture, trades) when offering workforce skills in local industry. Educators emphasized relationship building and cultural understanding as essential to engaging students and sustaining programs.

For many districts, these collaborative networks accelerated pathway growth and solved challenges that would have been difficult to address independently. For example, San Juan School District's participation in a regional CTE consortium helped it secure additional Perkins funding to create a dedicated CTE coordinator position, which the district had not previously been able to afford.

What Leaders Can Do

- Identify local employers who can serve as pathway advisors, internship hosts, guest speakers, or curriculum partners.
- Create multiple opportunities each year for employers to interact with students through career fairs, workplace visits, and classroom presentations.
- Develop formal advisory committees that provide regular industry feedback on pathway programs.
- Explore partnerships with community colleges, technical colleges, and apprenticeship programs to expand student options.
- Consider which high-cost programs may be more effectively delivered through postsecondary partners.
- Participate in regional collaborations that allow districts to share resources, expertise, and funding opportunities.
- Collaborate with local businesses and college partnerships to fill gaps in teacher expertise and available facilities.
- Provide opportunities for teachers to become actively connected with partnerships to better understand industry needs and curriculum alignment.

Key Lesson 3: Start Early to Sustain Student Engagement

Strong CTE pathways do not begin in high school. Across all three Utah districts that we visited, leaders emphasized the importance of helping students explore careers and understand pathway options before they make any high school course selections. Successful districts recognize that pathway participation is not automatic. Students must understand available opportunities, see how those opportunities connect to their interests, and receive ongoing encouragement to persist through pathway completion. Districts must also navigate the requirements and frequent changes to CTE rules that can create confusion.

Begin Career Exploration Early

Middle school is often the starting point for career awareness. While Utah's College and Career Awareness course provides an important foundation, educators noted that students benefit from continued exposure and reinforcement as they transition into high school.

Successful districts intentionally create repeated opportunities for students to reconnect with career planning throughout their secondary experience. Early exposure helps students make more informed course selections and allows schools to build intentional pathway sequences beginning in ninth grade.

To help with this exposure, some schools have implemented dedicated freshman career readiness courses that help students

- explore career interests and strengths,
- learn about available pathways,
- visit local employers and industry partners,
- understand graduation requirements and postsecondary options, and
- develop long-term academic and career plans.

Make Career Exploration Visible

Students are more likely to participate in CTE pathways when they experience career-connected learning in engaging and memorable ways. Schools use hands-on strategies to spark interest and build awareness before and during high school, including the following:

- Career fairs and pathway expos
- Classroom demonstrations and career awareness activities
- Industry guest speakers
- Workplace visits and field trips
- Student showcases and pathway demonstrations

These experiences help students understand what careers look like in practice and build enthusiasm for pathway participation.

Student Interest at the Center

San Juan School District has dedicated staff in their CTE pathway program who work together to deploy annual student interest surveys across the district. They use a platform to assess aptitudes and student interest. Being in a rural district, leaders are keenly aware that priorities must be set and coordination across the district is essential to providing choice to students who are geographically separated. San Juan has developed a process that begins with student interest and works through prioritizing pathways in the master schedule that is informed by this data. They offer remote course opportunities on campus in which a "broadcast teacher" on one campus offers a virtual course to students in multiple schools who attend in a specially designed classroom in their base school. This model offers a creative solution for students in a geographically isolated region to have expanded access to faculty, courses, and pathway opportunities by designing a master schedule with aligned bell times districtwide.

Use Student Interests to Guide Pathway Development

Successful CTE pathways are built around both student interests and workforce needs. Across the three districts, leaders emphasized that participation increases when students see a clear connection between their interests and available opportunities. In several of the four schools, student interest is tracked informally through course enrollment patterns. Students effectively “vote with their feet” by choosing which pathways to enter and complete. Leaders use this data to determine which programs to maintain, expand, or phase out.

Other schools take a more intentional approach by collecting student interest data through career assessments, surveys, and structured planning activities. These data help leaders align pathway offerings, staffing, and scheduling decisions with student demand. This approach is especially important in rural schools, because limited staffing and resources require careful decisions about which pathways can realistically be offered.

When combined with local workforce needs, student interest data help district leaders make more strategic decisions about program development and resource allocation. In San Juan School District, staff used student interest surveys, aptitude data, and local workforce needs to guide program development. This approach led to the creation of an electromechanical pathway after leaders identified both strong student interest and demand from a local industry partner for skilled workers.

Adapt Programs Based on Student Demand

Strong pathway systems remain flexible over time. Rather than maintaining programs with limited enrollment, successful districts regularly review

- enrollment trends,
- pathway completion rates,
- student interest data, and
- workforce demand signals.

These reviews inform ongoing adjustments that include expanding high-demand pathways; developing new programs aligned with emerging interests or workforce needs; adjusting course



sequences to improve access and participation; and phasing out low-enrollment programs. Leaders described pathway development as an ongoing cycle of refinement rather than a one-time design process.

Celebrate Pathway Success

Recognition is a powerful motivator for students. Leaders reported that students respond strongly to visible recognition and are often more motivated to complete pathways when their achievements are formally acknowledged. Several districts use graduation cords, certificates, pathway awards, and public recognition events to celebrate students who complete pathway sequences or earn industry credentials. While simple to implement, these practices elevate the visibility of CTE pathways and reinforce the importance of career readiness as a valued outcome of high school.

What Leaders Can Do

- Begin career exploration before students enter high school and revisit their career interests and plans regularly from Grades 9 through 12.
- Consider implementing a freshman career readiness course focused on pathway awareness, local workforce opportunities, and academic planning.
- Create engaging recruitment experiences that allow students to explore careers and pathway options.
- Partner with employers to provide deeply engaging learning experiences such as workplace visits, guest speakers, and hands-on exposure to careers.
- Collect and use student interest data when planning pathways and scheduling.
- Regularly review enrollment and completion data to adjust and improve programs.
- Develop recognition systems that celebrate pathway completion and industry credential attainment.
- Ensure students and families understand how pathway participation connects to college, careers, and local employment opportunities.
- Share the story of your program's success and demonstrate its impact.

Next Steps

Building and sustaining effective CTE pathways in rural schools requires a coordinated, intentional approach that aligns people, partnerships, and student engagement strategies. School districts must focus on developing a coherent system of support that connects students to meaningful career opportunities while responding to local workforce needs. This work underscores that student success is a shared responsibility that requires active collaboration among educators, families, employers, and postsecondary partners.

To implement these recommendations, leaders can begin by strengthening internal coordination to ensure that counselors, administrators, and educators are aligned in supporting pathway development and student participation. At the same time, taking deliberate steps to expand external partnerships with employers, colleges, and regional collaborators is critical to broadening access and overcoming resource limitations. Finally, schools should invest in sustained student engagement by introducing career exploration early, using student interest data to guide decisions, and continuously refining programs based on participation and outcomes.

The lessons outlined in this guide provide a foundation for rural schools seeking to expand or strengthen their CTE pathways. As district leaders consider how to move this work forward, it is important to thoughtfully assess current systems, resources, and partnerships. Schools and districts should prioritize the strategies that best align with their local context, including available staffing, community assets, and student interests. By focusing on what is feasible and building incrementally, even small systems can create high-impact opportunities for students.

Reference

Saw, G. K., & Culbertson, R. (2025). Place-sustaining partnerships for rural education and workforce development. *The Rural Educator*, 46(3), 1–5.

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