



# CTE ON THE FRONTIER:

## CATALYZING LOCAL EFFORTS TO IMPROVE PROGRAM QUALITY

### Introduction

No symbol of the American public education system is more timeless than the rural single-room schoolhouse. Today, rural schools and institutions of higher education are increasingly asked to do more with less to adapt to the expectations of the 21st century economy. In particular, many state and local leaders are working to develop innovative strategies that expand options for rural learners and ensure that meaningful career pathways leading to sustainable, high-wage careers are available to all, regardless of their background or geographic location.

This series focuses specifically on access to high-quality Career Technical Education (CTE) in rural communities, identifying strategies to strengthen the rigor, breadth and quality of rural career pathways at both the K-12 and postsecondary levels. While some states have larger rural populations than others, the National Center for Education Statistics reports that every state serves learners in rural school districts and institutions, making delivering high-quality career pathways in rural communities a shared challenge nationwide.<sup>1</sup> CTE programs are often available in rural communities, but such programs are often limited in breadth, of questionable quality, and not aligned to employer and industry needs.

### The Challenge

Expanding access to high-quality CTE in rural communities is an imperative for all states. Rural learners make up a sizable portion of the student population in the United States. More than half of the nation's school districts are in rural areas, serving approximately 9.1 million K-12 students.<sup>2</sup> Yet, rural communities are home to only about 16 percent of degree-granting two-year postsecondary institutions<sup>3</sup> — which often provide advanced education and training to prepare learners for high-skill careers — necessitating either a long commute or relocation for many learners pursuing high-quality career pathways at the postsecondary level. As a result, only 28 percent of rural adults above age 25 held at least a two-year degree in 2015, compared to 41 percent of urban adults.<sup>4</sup>

In this environment, it is critical that state and local policymakers ensure that all learners can access high-quality career pathways in their own communities and engage with experts in the classroom and workplace. CTE helps learners gain the real-world skills they need to be successful in their chosen careers and is a powerful strategy to boost rural economies by closing critical skills gaps that harm local employers. CTE students are more likely to graduate from high school,<sup>5</sup> have higher achievement in academic subjects,<sup>6</sup> and be prepared for credit-bearing college coursework immediately after graduating.<sup>7</sup> At the postsecondary level, four out of five students who earned a CTE certificate or associate degree were employed within six years of starting their degree, and more than half considered their job to be the start of a career.<sup>8</sup> State policymakers have a critical responsibility to

ensure that all learners — regardless of their geographic location — benefit from high-quality career pathways that prepare them for success in a career of their choice.

Yet there is no question that rural communities face unique challenges when it comes to delivering high-quality CTE programs in multiple Career Clusters®. Quite often, CTE programs have high startup costs, and rural schools have few resources to serve a sparse student population. Additionally, rural communities often have fewer employers, many of whom may run small companies in niche industries. This situation can lead to limited industry partnerships, fewer work-based learning opportunities, and incomplete information about careers in the region. And the physical distance between secondary schools and postsecondary institutions can make ensuring that CTE programs can offer smooth transitions between high schools and two- and four-year institutions challenging. In light of these challenges, rural schools must be innovative with the resources at their disposal to strengthen the quality and variety of CTE programs they provide.

## CTE on the Frontier

To help states unpack the challenges and potential approaches to expanding access to quality CTE programs in rural communities, Advance CTE — in partnership with the Council of Chief State School Officers and the Education Strategy Group, through the New Skills for Youth initiative — is releasing a series of briefs titled *CTE on the Frontier*. The series will explore some of the most pressing challenges facing rural CTE, including program quality, access to the world of work, leveraging partnerships to expand program offerings, and the rural CTE teacher pipeline.

Through interviews with state CTE leaders at both the secondary and postsecondary levels, Advance CTE identified promising practices and strategies to strengthen access to and the quality of career pathways in rural communities. This brief explores how states are supporting efforts to increase the quality of career pathways at both the secondary and postsecondary levels.

## The State Role in Improving Rural Career Pathways

Some of the challenges with high-quality rural CTE delivery include ensuring that all programs are responsive to employer needs and that secondary and postsecondary programs are aligned. Issues of quality are not exclusive to rural settings — ensuring that CTE programs are high quality is critical to the success of a statewide career readiness strategy — but the nature of CTE delivery is different in rural institutions, which may necessitate a more focused strategy.

For example, decentralization, lack of resources and more limited employer relationships in rural communities can result in the preservation of legacy programs over more industry-relevant career pathways. Decisions about what programs to offer can be driven by the availability of equipment or facilities, teacher supply and even tradition. Many state CTE leaders reference outdated programs that are preserved simply because they have always been offered. Without careful planning, decisions can easily be determined by the availability of resources rather than by learner or employer need, resulting in inequitable access to quality programs across the state.

Despite these limitations, leading states like Nebraska and South Dakota have launched initiatives to catalyze local strategic planning efforts and strengthen CTE program quality in all communities. Such states have taken a bottom-up approach to improving CTE quality, equipping district superintendents,

## Rural CTE in Federal Policy

There are a number of explicit avenues to leverage federal policy to support rural CTE. Additionally, state leaders and policymakers often have the flexibility to leverage both federal policy and federal dollars for rural CTE. Some examples include:

### **Carl D. Perkins Career and Technical Education Act of 2006 (Perkins Act): State Reserve Funds**

While states must distribute 85 percent of Perkins funds to local recipients, they can choose to dedicate 10 percent of those funds to a Reserve Fund, which can be used to support CTE in rural areas or areas with high percentages or high numbers of CTE students. Many states choose to focus at least some of their Reserve Funds on supporting rural areas.

### **Perkins Act: Forming Consortia and Pooling Funds**

At the local level, Perkins grant recipients may elect to form consortia (an option for local recipients that qualify for less than \$15,000 in grant funds) and apply for a Perkins grant collaboratively. Local recipients may also pool a portion of their funds with other eligible recipients for certain uses, including activities related to implementing CTE programs of study (e.g. professional development for CTE teachers, administrators and faculty). States can use Perkins state leadership funds to support these efforts through incentive grants.

### **Workforce Innovation and Opportunity Act (WIOA): Governor's Set-Aside**

Under Title I of WIOA, governors may elect to reserve up to 15 percent of their state's allocation "for statewide workforce investment activities."<sup>9</sup> This funding stream is fairly flexible in terms of allowable expenses and includes career pathway development and implementation, job-driven strategies and local-sector partnerships.<sup>10</sup>

### **Every Student Succeeds Act (ESSA): Rural Education Achievement Program (REAP)**

Through REAP, ESSA supplies formula funds for eligible districts in rural areas with low numbers of students. These funds can be used for a number of authorized purposes, including bolstering CTE efforts.<sup>11</sup> REAP also supplies additional funds that state education agencies can distribute to local education agencies via subgrants. Similarly, districts can leverage these dollars for a variety of initiatives to support rural CTE.<sup>12</sup>

postsecondary leaders and local administrators and educators with tools to make strategic decisions about which programs they provide. Additionally, states like Idaho and Mississippi are tackling the challenge of program alignment by adopting policies to connect CTE programs vertically, from high school to college, as well as horizontally.

## How Nebraska's reVISION Initiative Fuels Local Planning Efforts

**Nebraska** has a significant rural population. Even though the state is more than 77,000 square miles, more than half of the student population is located in the districts surrounding Omaha and Lincoln, the only two urbanized areas in Nebraska. About 80 percent of Nebraska's 244 school districts are considered rural.<sup>13</sup> Yet participation in CTE is high across the state, with students taking an average of 5.5 semester-long CTE courses throughout their education careers.

To ensure that all career pathways provided across the state are high quality and responsive to regional labor market needs, state leaders in Nebraska established reVISION — a process that empowers local communities to work

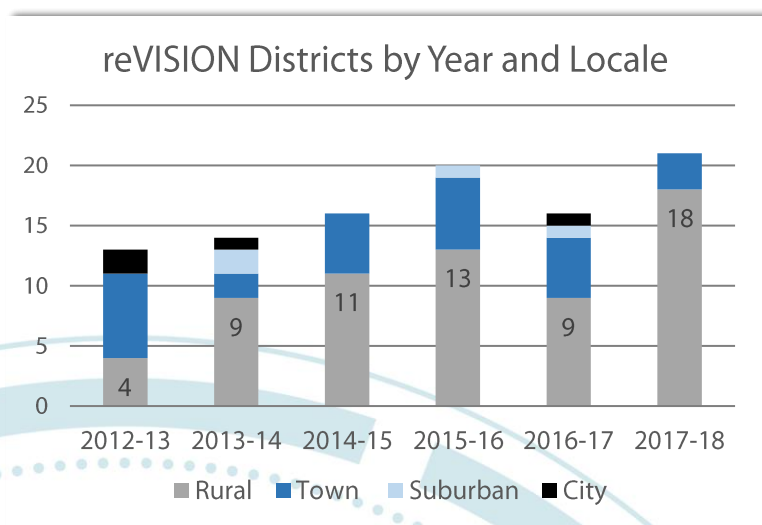
collaboratively and strategically to strengthen and improve their own career pathways. While reVISION is a statewide initiative, Nebraska has taken measures to ensure that the program targets rural schools and districts.

Nebraska launched its reVISION effort in 2012 using state Perkins Reserve Funds. Since then, the program has been scaled to serve 87 districts across the state, with an additional 21 beginning the initiative in the 2017-18 school year. The approach requires participating districts to engage regional stakeholders, evaluate the quality of their program offerings, and rethink the way CTE is delivered in their communities. While the districts applying in the initial round of the program were evenly distributed across different geographic regions, state leaders have made an intentional effort to recruit rural districts to ensure that the benefits will affect programs statewide. By the second year of the program, participation by rural districts more than doubled, and by 2017 two-thirds of the districts served through reVISION were rural.

The reVISION initiative is a year-long process that begins with a local inventory of a school's career education programs. Before meeting with the Nebraska Department of Education, participating schools are required to examine the breadth of programs of study offered in their buildings, the degree to which those programs are aligned with postsecondary entrance requirements, and any available extended learning opportunities. Once the school-based inventory has been completed, the school sets up a meeting with representatives from state agencies to unpack the data and collaborate around potential strategies to increase access and quality.

In addition to Department of Education staff, school counselors and administrators, the initial meeting is attended by representatives from the Department of Labor and the Department of Economic Development to ensure that regional and state labor market needs are a consideration from the outset. This meeting is often the most valuable part of the reVISION planning process. During the meeting, representatives from the state pull up data from Nebraska's H3 website, which provides real-time labor market and economic data and identifies what the state refers to as "H3" — or high-wage, high-demand and high-skill — jobs.<sup>14</sup> Structuring the planning conversation around data enables local leaders to identify growing industry sectors and prioritize their work accordingly.

Another key pillar of the reVISION process is community and industry engagement. Once school leaders have met with staff from the Nebraska Department of Education and identified areas of growth for the local school's CTE program, the next step is to reach out to regional employers and community members to gather input on how local CTE programs can better meet their needs. This process is largely driven by regional employers, who can speak to the talent gaps and relevant competencies in their respective industries.



Participating schools report that these meetings have helped build relationships with local employers. One leader reflected that, despite a small business base in the community, the district was able to get great feedback from local employers through reVISION and was responding to this feedback by developing a district-level coordinator role to improve community connections. Another reported that stakeholder engagement through reVISION helped identify desirable traits for employability in high-wage, high-demand industries.

Based on input from these meetings, school staff develop a strategic action plan to address gaps in the school's CTE programs. The action plan describes the school's three- to five-year vision, outlines strategies for addressing the gaps identified in the needs assessment, and provides specific next steps and roles for executing the action plan. Once the action plan has been completed, schools submit their plans to the Nebraska Department of Education, which provides support and technical assistance to help schools and districts deliver on their plans. Additionally, schools and districts that complete the reVISION process are eligible to apply for competitive, one-year action grant funds to support their ongoing work.

Not all schools that apply for the action grant are awarded funds, but many report that the work completed in the action planning stage is enough to get the ball rolling. District leaders report that reVISION helps their schools set long-term goals, align programs with industry needs, and even identify additional private-sector funds from partnerships established through the initiative.

Nebraska's reVISION was launched with a relatively small investment from the state's Perkins Reserve Fund. As more schools and districts adopted the approach, the Nebraska Legislature diverted state funds to support reVISION expansion. Since 2013, the state has awarded nearly \$3 million to more than 40 schools through both the planning and action stages of the initiative.<sup>15</sup>

One of the primary benefits of reVISION's regional approach to strategic planning is that it leverages a small amount of funds to enhance career preparation activities and better meet labor market and community needs. As a result, school leaders and CTE program administrators can hear directly from employers, families and other community members in their service area and use their input to identify and address gaps in quality and access.



Additionally, reVISION puts labor market data in the front seat, empowering local leaders to make data-driven decisions about which programs should be offered. Through the reVISION process, local leaders have identified underperforming or outdated programs and redirected resources to support programs in high-demand career pathways. For example, many districts identified a growing need to strengthen career pathways in Health Science, spurring an intentional shift toward offering more related content and retraining educators in less-demanded career pathways such as Family and Consumer Sciences. In a recent survey of participating school districts, 87 percent reported at least one new CTE course or program that was adopted as a result of the reVISION initiative, and many reported adjusting or discontinuing outdated programs.

### Lessons Learned in Nebraska:

- Taking the time to examine and re-evaluate CTE program offerings at the school and regional levels provides a critical check to ensure that programs are high quality and meet the needs of learners and employers.
- Labor market data, supported by meaningful employer partnerships, should be a core driver of rural program improvement activities.
- A small but strategic state investment can serve as a powerful catalyst to fuel local efforts to strengthen program quality.

The thoughtful inclusion of staff from the Department of Labor and Department of Economic Development in the early planning process, as well as the examination of labor market data, helps equip school leaders with the information they need to prioritize certain programs. This prioritization has resulted in intentionally redirecting resources away from outdated programs and toward those identified as high wage, high demand and high skill.

## Catalyzing Local Innovation through South Dakota's Workforce Education Grants

Nearly half of **South Dakota's** elementary and secondary students are considered rural,<sup>16</sup> which is why the Rural School and Community Trust named South Dakota one of the top 10 highest priority states in rural education for 2017.<sup>17</sup> Like many rural states, South Dakota's biggest challenges include expanding access to CTE coursework (less than half of secondary students take CTE classes), ensuring that learners have access to a variety of options, and leveraging scarce resources to promote high-quality CTE programs and discontinue those that are outdated.

South Dakota has made progress in recent years on strengthening rural CTE through strategic investments and grants. While funding is always a critical resource, simply funneling additional dollars into local programs is not in itself an effective strategy for ensuring program quality. To be truly effective, state funds must be distributed strategically, aligned with quality outcomes and distributed with an eye for scaling impact.

In 2014, Gov. Dennis Daugaard issued more than \$8.5 million of discretionary funds to 12 South Dakota school districts. These funds were designed to catalyze local partnerships and strengthen secondary CTE programs. While the program objectives were clear, districts were given the flexibility

to design solutions that would best meet their needs — as such, projects were varied, addressing issues related to transportation, resource sharing, industry engagement and more.

For example, the Todd County School District — a rural district in southwest South Dakota serving approximately 2,000 students across grades K-12 — received more than \$103,500 to align CTE curriculum with local business needs. As part of this effort, the district administered a survey of local businesses, allowing program directors to identify the career pathways and competencies that would be most valuable in the local economy. As a result, the district identified a need for stronger programs in science, technology, engineering and mathematics (STEM) and has since developed a new STEM career pathway for middle school students.<sup>18</sup>

Around the same time, the South Dakota Legislature passed Senate Bill 235, which helped codify and sustain the governor’s initiative. The bill authorized a multimillion dollar Workforce Education Fund to support secondary CTE programs and directed the State Board of Education to write criteria for administering grants.<sup>19</sup>

Like Nebraska’s reVISION efforts, South Dakota is leveraging this Workforce Education Fund to catalyze partnerships and prompt local leaders to better align program offerings with regional labor market needs. The grant process affords applicants considerable leeway to design and execute projects to meet their own needs, but applications must be anchored in the nine priority areas identified by the State Board. These priority areas include:

- Evaluating and redesigning local CTE programs;
- Aligning programs with postsecondary and workforce needs;
- Strengthening collaboration between secondary schools;
- Forming postsecondary and industry partnerships;
- Expanding the use of industry standards, updated equipment and student certifications;
- Integrating academic content;
- Developing plans for sustainability;
- Supporting retention of educators and counselors; and
- Increasing access to rural CTE programs.

This last priority was adopted so that funds could be directed to districts most in need and to ensure that rural districts applying for grant funds would not be disadvantaged by a lack of resources, such as a professional grant writer, that are accessible in larger districts.

Under the State Board’s stipulations, Workforce Education Grant recipients are required to match state funds one to one, though in-kind donations can qualify, to ensure that local grant recipients are committed to the project and approach state funds as a catalyst, rather than a primary driver, of the work. The State Department of Education also provides technical assistance and other supports in the form of webinars, coaching and sharing of best practices to help local grant recipients maximize their impact over the 18-month grant period.

When the competition opened in 2016, nine schools were awarded a total of \$800,000 to support 18-month initiatives to enhance secondary CTE.<sup>20</sup> Projects included upgrading programs, expanding work-based learning opportunities, forming a concurrent credit partnership with a local postsecondary partner, and enhancing facilities and purchasing new equipment. After the first year of the initiative, the Legislature voted to expand the grant program with up to \$2.5 million in funds and

update the eligibility criteria so that nonprofit entities offering CTE programming — not just school districts — would be eligible to apply.

In early 2017, a second round of the grant competition was opened, and an additional five recipients — including four school districts and one nonprofit — were collectively awarded more than \$1 million.<sup>21</sup> Projects in the second cohort of grant recipients similarly focused on enhancing and updating programs. In total, six of the 12 grants awarded in the first two grant cycles went to rural districts, and only two went to areas classified as suburban or city.

Quite often, the people best positioned to lead transformative work and address the unique challenges and needs of rural CTE programs are the educators, administrators and leaders in those communities. However, state leaders can and should play a critical role in identifying local innovation and providing the technical support and funds to scale promising work. South Dakota's Workforce Education Grant program provides a framework for supporting local efforts by outlining guidelines and promoting essential priorities while preserving local flexibility to design and implement projects.

### Lessons Learned in South Dakota:

- Any statewide initiative should consider limitations — such as lack of grant writing staff — that may disadvantage rural communities and adopt measures to adjust for such disparities.
- State leaders have the power to identify and prioritize certain non-negotiables of high-quality career pathways to guide local program improvement without limiting innovation.
- States can support local efforts in rural communities by providing meaningful and targeted technical assistance, sharing best practices, and convening peers to tackle problems of practice.

## Connecting Rural CTE Programs to Industry Needs and Postsecondary Opportunities

To ensure that learners are prepared for success, it is critical that career pathways are designed with industry needs and postsecondary linkages in mind. Again, this challenge is not unique to rural communities. All programs must be held to high standards of rigor and quality to prepare learners for success. However, aligning learning outcomes among secondary, postsecondary and industry can be particularly difficult in areas with limited numbers of employers — or primarily small businesses — or institutions of higher education. Therefore, it is imperative that state leaders provide supports to ensure that CTE students in rural communities are not disadvantaged by their location. In such environments, states can convene relevant stakeholders, provide targeted supports and set clear policies to ensure that program quality is consistent across the state.

### *Idaho's Program Alignment Initiative*

In many states, credit articulation agreements, which permit secondary students to apply credits earned in high school toward a postsecondary degree or certificate, are often established on a case-by-case basis between local school districts and programs at postsecondary institutions. This practice results in a myriad of bilateral agreements that may unintentionally restrict postsecondary options and lead to credit loss, particularly for rural learners with limited access to postsecondary institutions.



To combat the issue, a number of states have begun to build statewide articulation agreements that support learner transitions and strengthen CTE programs of study.

In **Idaho**, the Division of Career & Technical Education (ICTE) launched a program alignment initiative in 2013 to establish statewide articulation agreements and align secondary and postsecondary learning outcomes, thus ensuring that CTE students will be prepared to continue their education at a college of their choosing. The effort brings together secondary and postsecondary CTE instructors, along with industry partners, to align learning outcomes, create a framework for technical skills assessments, and establish statewide articulation agreements for career pathways. Educators from rural and urban communities alike are represented.

At the beginning of the program alignment process, secondary and postsecondary faculty, along with relevant industry representatives, come together to examine and rewrite secondary instructional standards. Once standards are drafted, they are shared with a wider group of industry representatives who review and rank specific standards as “Nice to Know,” “Need to Know” or “Critical to Know.” This review ensures that the learning outcomes most important to employers in the field are prioritized.

Once this stage of the process has been completed, the resulting learning outcomes are used to form the framework for end-of-program technical skills assessments, which are used to certify a student’s mastery of the content.

Separately, postsecondary faculty from the state’s six technical college regions also convene to examine first-semester learning outcomes and ensure that they are aligned among similar programs across the state. Faculty also identify opportunities to award postsecondary credits to learners who demonstrate competency at the high school level. This approach helps ensure that learners in even the most remote communities receive instruction that is aligned with postsecondary coursework, allows them to accrue postsecondary credit and is relevant to employers in their field.

In the spirit of continuous improvement, ICTE has also built in feedback loops, using student performance data on technical skills assessments to ensure that educators and program administrators get the information they need to strengthen their programs. In 2016, ICTE began using technical skills assessment data to design targeted professional development, delivered by postsecondary faculty, for the state’s annual CTE Summer Conference. By drawing on student performance data, ICTE is able to identify and address specific learning competencies that students are struggling to master. Fifty-five secondary teachers attended these trainings in 2016, and ICTE expects participation to grow to more than four times that number by the 2018-19 school year.

Connecting rural career pathways with postsecondary opportunities is always a challenge. But as ICTE’s program alignment initiative continues to grow, rural learners in Idaho can more easily move along their career pathway to a sustainable and meaningful career.

### ***Mississippi’s Community College Program Approval Process***

Decentralized governance across different regions, particularly those in rural areas, can make consistency and quality a big challenge at the postsecondary level. In **Mississippi**, the Community College Board, which provides coordination and support to the state’s 15 community and junior colleges, has put measures in place to help ensure that all postsecondary CTE programs are high quality and aligned with labor market needs.

One of these measures is requiring all community and junior colleges in Mississippi to submit a New Program Application form before launching a new program.<sup>22</sup> In addition to the application, they are required to submit justifications of student demand and industry need. To identify student demand, institutions must administer a local student survey and determine whether there is enough demand to start a new program. To justify labor market demand, they must examine employment projections as well as identify local employers that would be able to hire students graduating from the program. These requirements ensure that learners have a viable career pathway once they complete the program.

The Community College Board's review of the application is not a rubber stamp. The Board scrutinizes each application, corroborating submissions with regional economic and workforce data to confirm that programs are appropriate for the region. Only if the college can demonstrate that student demand is sufficient and that the program is responsive to labor market needs is the program

### **The New Program Application Requires Mississippi Community Colleges to Demonstrate:**

- Name and site of potential employer(s) or trainees;
- Annual employment opportunities;
- Annual employment projections for the specific program;
- Local and state 10-year employment projections;
- Evidence of prospective student interest from surveys; and
- Projected enrollment and program graduates for five years.

*Retrieved from  
<http://www.mccb.edu/pdfs/ct/newprogramapplication.pdf>*

### **Jones County Junior College**

Mississippi's Jones County Junior College — the recipient of Advance CTE's 2017 Excellence in Action award in the Health Science Career Cluster<sup>®</sup> — is an example of a high-quality rural postsecondary CTE program. The Emergency Medical Technology Education (EMTE) program of study was established in 1990 and, despite being located in rural Ellisville, MS, has grown to be one of the strongest programs in the state. The program benefits from strong industry partnerships, many of which enlist students to participate in high-quality clinical internships. In fact, students in the program complete more than 500 hours of work-based learning guided by professionals in their field before graduating.

Furthermore, Jones County Junior College faculty have fostered valuable relationships with nearby high schools and career technical secondary centers, serving as program advisers for health science programs. Staff also frequently partner with elementary schools to raise awareness about careers in health science.

While Mississippi's program approval process is not solely responsible for Jones County Junior College's success, there is little doubt that the state's approach helps ensure that programs are responsive to local needs and that meaningful partnerships are established. The EMTE program demonstrates how institutions of higher education can overcome rural delivery challenges, forge impactful partnerships, and provide high-quality instruction that supports learner success.

*For more, see [https://cte.careertech.org/sites/default/files/2017ExcellenceAction\\_JonesCounty\\_Health\\_FINAL.pdf](https://cte.careertech.org/sites/default/files/2017ExcellenceAction_JonesCounty_Health_FINAL.pdf).*

approved for implementation. Even then, programs that are given the green light are also required to have a regional advisory committee to provide support and guidance. While other states have statewide approval processes for postsecondary programs, Mississippi's process demonstrates how states can set clear guidelines for quality and use their roles as coordinators and approvers to ensure that all programs are responsive to labor market needs and student demand.

Mississippi also employs a statewide curriculum development framework to ensure that program content is informed by business and industry needs and that content is uniform across all 15 community and junior college campuses, particularly those serving rural populations. Curriculum development is led by the Community College Board, which writes learning objectives and develops instructional content for postsecondary career pathways, using nationally recognized standards aligned to credentials of value.<sup>23</sup> Before curricula are deployed, business and industry leaders are invited to review the learning objectives to validate that what is taught in classrooms is what is needed in the workforce. Curricula are updated every four to five years so that course content reflects the latest industry standards.

This approach addresses two primary challenges faced by rural colleges and other institutions of higher education. First, state CTE directors voiced that rural CTE programs often struggle to build strong relationships with business and industry leaders, many of whom are centralized around urban hubs. This distance makes a homegrown curriculum development strategy challenging. Second, aligning program content horizontally across the state in such a way that learners can transfer course credits can be challenging. Using a standard and frequently updated curriculum ensures that rural learners can access quality content that is recognized statewide.

## State Strategies to Support Rural CTE Program Quality

State and local policymakers are often forced to make tough decisions about how to deliver CTE programs in rural communities, pressured in part by limitations such as resource scarcity, small student populations (and therefore, demand) and limited instructional staff. However, as Nebraska's reVISION program and South Dakota's Workforce Education Grants demonstrate, a little bit of funding can go a long way if it is focused and deployed strategically. These states are successfully leveraging relatively small pools of state and federal dollars to foster meaningful local partnerships and promote the re-examination and enhancement of local programs, providing helpful supports and technical assistance along the way. Meanwhile, Idaho and Mississippi have each put meaningful policies and processes in place to ensure that programs are high quality, consistent and responsive to labor market needs.

These and other examples are instructional to help state leaders enhance program quality and maximize impact in rural communities. State leads should consider the following approaches to effectively catalyze local innovation and promote high-quality career pathways in rural communities.

- **Leverage federal and state funds to fuel local innovation, using state criteria as guidelines for quality:** The Perkins Act allows states to set aside up to 10 percent of local grants in a Reserve Fund, which can be used in part to support rural CTE programs. Likewise, other state and federal funds can be leveraged and braided to support rural education. State leaders should first map their assets and identify any funds that can be used to support rural CTE. Competitive grant programs, while exclusionary and limited in scope, can promote innovation and provide enough kindling to fuel impactful local strategies that can be replicated elsewhere. Once a proof of

concept has been demonstrated, other districts and communities can learn by example.

When designing new grant initiatives, state leaders should consider which essential program elements should serve as guidelines for local efforts and drive quality programs. Should the project prioritize partnerships among secondary, postsecondary and industry? Should labor market alignment be incentivized? Such guidelines can preserve quality without limiting local innovation.

- **Provide meaningful technical assistance and other supports to help local program administrators identify solutions:** While local program administrators are often best positioned to identify and address the needs in their own communities, state leaders have the expertise, resources and convening power to help local leaders overcome challenging barriers. To maximize impact, technical assistance should be responsive to rural needs, drawing on program performance data, labor market information and community input to ensure that supports are targeted and specific.

An emerging strategy in **Wyoming** called WyoSIMPL allows local educators and program administrators to examine workforce data and determine their own priority focus areas. The state then provides technical assistance based on locally determined needs. Additionally, state leaders can emulate Nebraska's approach through reVISION by using their convening power to get the right people around the table. Getting the right people around the table requires bringing together CTE educators and administrators, as well as business and industry representatives, to strategize their approaches to rural CTE delivery and ensure that programs are high quality.

- **Take a regional approach to designing or upgrading programs to ensure that they are responsive to local needs:** Finally, considering regional context is paramount to ensure that programs are relevant and meet community needs. Mississippi's program approval process, for example, ensures that all new CTE programs offered through the community and junior college system are not only responsive to labor market needs but also informed by student interest. Such an approach helps ensure that programs are high quality and that, when tough decisions are required, local leaders are empowered to support CTE programs that lead to meaningful career opportunities over those that are easier or cheaper to implement.

In short, millions of students across the United States attend high schools and colleges in rural areas, and many of them have access to and are enrolled in CTE programs. Yet CTE program quality varies from state to state and region to region. To ensure that learners have access to the full promise that CTE offers, it is imperative that states use the tools available to them to catalyze local efforts and strengthen rural program quality.

## **Acknowledgments**

Advance CTE would like to give special thanks to Guy Jackson, Wyoming state CTE director, Wyoming Department of Education; Dwight Johnson, CTE state administrator, Idaho Division of Career & Technical Education; Rich Katt, state CTE director, Nebraska Department of Education; Amy Lorenzo, director of policy and organizational planning, Idaho Division of Career & Technical Education; Tiffany Sanderson, director of career and technical education, South Dakota Department of Education; and Valeria Williams, director of career and technical education, Mississippi Community College Board for their input and thoughtful feedback throughout the development of this brief.

This brief was developed through the New Skills for Youth initiative, a partnership of the Council of Chief State School Officers, Advance CTE and the Education Strategy Group, generously funded by JPMorgan Chase & Co.

- <sup>1</sup> U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD). (2014). Local education agency universe survey (table A.1.a.-1). Retrieved from <https://nces.ed.gov/surveys/ruraled/tables/A.1.a.-1.asp?refer=>
- <sup>2</sup> U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD). (2014). Public elementary/secondary school universe survey (table A.1.a.-3). Retrieved from [https://nces.ed.gov/surveys/ruraled/tables/A.1.a.-3\\_2.asp?refer=](https://nces.ed.gov/surveys/ruraled/tables/A.1.a.-3_2.asp?refer=)
- <sup>3</sup> Based on Advance CTE's analysis of 2015 Institutional Characteristics Survey data. Reported statistic includes two-year colleges in rural locales that are classified as postsecondary, degree-granting and active. Retrieved from <https://nces.ed.gov/ipeds/datacenter/DataFiles.aspx>
- <sup>4</sup> U.S. Department of Agriculture. (2017). Rural education at a glance, 2017 edition. Retrieved from <https://drive.google.com/file/d/0B5BdbPm9jppqOOi0teFJyMnNCY0U/view>
- <sup>5</sup> The graduation rate for CTE concentrators is approximately 10 percentage points higher than the national average, based on 2015 data from the Perkins Collaborative Resource Network. Retrieved from <https://perkins.ed.gov/pims/DataExplorer/Performance>
- <sup>6</sup> National Research Center for CTE. (2013). Mature programs of study: Examining policy implementation at the local level. Retrieved from [http://www.nrccte.org/sites/default/files/publication-files/nrccte\\_mature\\_pos\\_final.pdf](http://www.nrccte.org/sites/default/files/publication-files/nrccte_mature_pos_final.pdf)
- <sup>7</sup> Fleck Education. (2015). Indiana career readiness report. Retrieved from <http://www.doe.in.gov/sites/default/files/cte/2015-cte-data-analysis-report-final-6.23.2015.pdf>
- <sup>8</sup> U.S. Department of Education, Office of Planning, Evaluation and Policy Development. (2014). National assessment of career and technical education: Final report to Congress. Retrieved from [http://s3.amazonaws.com/PCRN/docs/NACTE\\_FinalReport2014.pdf](http://s3.amazonaws.com/PCRN/docs/NACTE_FinalReport2014.pdf)
- <sup>9</sup> Workforce Innovation and Opportunity Act. (2014). Retrieved from <https://www.congress.gov/113/bills/hr803/BILLS-113hr803enr.pdf>
- <sup>10</sup> Wilson, B., and DeRenzi, B. (2015). Realizing innovation and opportunity in WIOA: A playbook for creating effective state plans. Retrieved from <http://www.nationalskillscoalition.org/resources/publications/file/2015-09-WIOA-playbook-for-creating-effective-state-plans.pdf>
- <sup>11</sup> U.S. Department of Education. Small, rural school achievement program. Updated Feb. 2017. Retrieved from <https://www2.ed.gov/programs/reapsrsa/index.html>
- <sup>12</sup> U.S. Department of Education. Rural and low-income school program. Updated April 2017. Retrieved from <https://www2.ed.gov/programs/reaprlisp/index.html>
- <sup>13</sup> U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD). (2014). Local education agency universe survey (table A.1.a.-1). Retrieved from [https://nces.ed.gov/surveys/ruraled/tables/A.1.a.-1\\_2.asp?refer=](https://nces.ed.gov/surveys/ruraled/tables/A.1.a.-1_2.asp?refer=)
- <sup>14</sup> Nebraska's H3 website can be accessed at <http://h3.ne.gov/H3/>
- <sup>15</sup> Nebraska Department of Education. (2016). reVISION participants. Retrieved from <https://www.education.ne.gov/nce/documents/reVISION/2016/reVISION%20One%20Page%201617.pdf>
- <sup>16</sup> U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD). (2014). Public elementary/secondary school universe survey (table A.1.a.-3). Retrieved from <https://nces.ed.gov/surveys/ruraled/tables/A.1.a.-3.asp?refer=>
- <sup>17</sup> Showalter, D., Klein, R., Johnson, J., and Hartman, P. (2017). Why rural matters 2015-2016: Understanding the changing landscape. Rural School and Community Trust, Washington, DC. Retrieved from [http://www.ruraledu.org/user\\_uploads/file/WRM-2015-16.pdf](http://www.ruraledu.org/user_uploads/file/WRM-2015-16.pdf)
- <sup>18</sup> South Dakota Department of Education. (2014). 2014 governor's grants for career & technical education project summary. Retrieved from <http://doe.sd.gov/octe/documents/14CTEGran.pdf>
- <sup>19</sup> South Dakota Senate Bill 235. (2013). See [http://sdlegislature.gov/Legislative\\_Session/Bills/Bill.aspx?Bill=235&Session=2013](http://sdlegislature.gov/Legislative_Session/Bills/Bill.aspx?Bill=235&Session=2013)
- <sup>20</sup> South Dakota Wins. (2016). South Dakota workforce initiatives annual report: 2015-2016. Retrieved from [http://www.southdakotawins.com/images/data/files/sdwins\\_annual\\_report\\_2016.pdf](http://www.southdakotawins.com/images/data/files/sdwins_annual_report_2016.pdf)
- <sup>21</sup> South Dakota Department of Education. (2017). 2017 SD workforce education grant recipients announced. Retrieved from <http://doe.sd.gov/pressroom/documents/2017/0511-WEG.pdf>
- <sup>22</sup> Mississippi Community College Board. New program application. Retrieved from <http://www.mccb.edu/pdfs/ct/newprogramapplication.pdf>
- <sup>23</sup> Mississippi Community College Board, Office of Curriculum & Instruction. Curriculum download. Retrieved from <http://www.mccb.edu/OCI/currdownload.aspx>