Your Question:

You asked generally about approaches states have taken to expand access and opportunities for career and technical education.

Our Response:

States have taken a range of policy and programmatic actions to increase access and support students in their pursuit of CTE pathways. In general, states have enacted policies and modified practices to expand the breadth of opportunities and access points for students to explore and pursue their academic interests.

Below are some general areas of focus along with state examples and linked resources.

Clarify, Articulate and Support Student Progression to and Through CTE Paths

States have considered ways to help students identify interests, set secondary and postsecondary education goals and identify paths for them to complete their secondary education in a way that supports their transition into future education and careers. States have considered things such as academic planning, dual enrollment and opportunities to earn credentials.

Individual or personal academic plans

- States have sought ways to identify student’s educational and career goals through personalized educational plans. Generally, these plans are intended to support students and parents as they gain information and set goals related to secondary education, postsecondary education plans and careers. Beyond providing a road map for the student’s high school coursework, academic plans provide opportunities to identify interests both academically and within a career context. With this discussion and planning process, information can be shared about career-relevant details such as credentials needed, projected job openings and salary.

- **State example: Wisconsin**
  - In 2013, Wisconsin enacted policy that requires all students in grades 6 through 12 to receive academic and career planning services. In addition to providing resources and technical support, the state department outlines three general methods to get students ready for postsecondary education and careers, including academic readiness, college and career readiness, and social and emotional readiness. Under college and career readiness, the state identifies career and technical education, career-based learning, work-based learning and industry-recognized credentials as potential methods for student readiness. The state provides resources for teachers, and at the district level, some encourage teacher externships with local employers.

Standards to support the development of career awareness, interpersonal and career skills and career exploration across K-12

- An increasing number of states have considered ways to support age-appropriate skill development across K-12 education. From an emphasis on social and emotional learning to supporting the development of interpersonal skills and career awareness and exploration, states have adopted standards that apply to both K-12 instruction and CTE programs.

- **State example: New Jersey**
In 2020, the state board of education adopted revised standards that include 21st Century and Life Skill standards. The vision of the standards is to integrate 21st-century life and career skills across K-12 and career and technical education programs to improve a range of personal and career practices for students beyond their K-12 education. The standard is composed of career-ready practices, personal financial literacy, career awareness, exploration and preparation, and career and technical education.

**Align and eliminate barriers to dual and concurrent enrollment opportunities for CTE concentrators**

- Research demonstrates that dual enrollment in association with CTE leads to higher rates of postsecondary enrollment and postsecondary persistence. Dual enrollment and concurrent enrollment can support and expand opportunities for CTE students to pursue advanced courses, build skills in a setting outside of their high school and earn credits toward degrees and credentials of value. Dual enrollment activities can put students on both academic and career paths that extend beyond high school. States have enacted a range of policies to allow and support CTE-relevant dual and concurrent enrollment. It should be noted that access to dual enrollment is not equitable; however, there are actions states can take such as eliminating financial barriers and expanding eligibility to help support more equitable access to dual enrollment in CTE and a broader context.

- **State example: Nebraska**
  - Nebraska Access College Early (ACE) Scholarship Program provides students with financial support to pursue dual enrollment opportunities. Students must apply for the scholarship, which covers tuition and mandatory fees, and must be taking college courses for credit. Eligibility for the scholarship program includes students (or their families) who qualify and are enrolled in FRPL, SNAP, TANF and WIC.

**Connect Career Exploration and Work-Based Learning Opportunities to CTE Pathways**

As states set work-based learning goals and targets relative to their Perkins accountability metrics, states have sought ways to expand access and the breadth of work-based learning opportunities for students as early as sixth grade. States have considered ways to create opportunities for early exposure to career exploration and CTE in addition to creating a continuum of quality work-based learning experiences.

**Consider opportunities for career exploration experiences and CTE exploration in middle school**

- Research suggests that middle school is a time when students can benefit the most from career exploration. Given where adolescent children are developmentally, there is an opportunity for students to develop employability skills and gain a sense of their interests through career exploration in middle school and early high school. Considering a continuum of career exploration and work-based learning opportunities and early exposure to CTE courses allows students to gain knowledge, develop skills and identify interests that can support engagement in CTE in addition to support their pursuits of additional education and careers.

- **State example: Virginia**
  - Virginia statute requires that each school board require each middle school student to take at least one career investigation course or engage in an alternative activity that allows for career exploration. The course or alternative experience must provide a foundation for the student to develop their academic and career plan. The state board of education is required to develop content standards for the career-investigation course and experiences.

**Consider and support a continuum of quality career exploration and work-based learning experiences**
• There are a range of activities that can be considered part of a quality work-based learning continuum. Creating quality work-based learning experiences requires a range of actions, from supporting entry and advancement in a career track to providing comprehensive student supports throughout their engagement. To overcome challenges and create quality work-based learning experiences, states can consider promoting and supporting partnerships across the education spectrum and creating diverse sets of experiences for students to engage in and connect to their learning in high school. State education agencies can support these activities by providing resources and guidance to districts.

• State example: Tennessee
  o Tennessee developed a Work-Based Learning Implementation Guide and a Work-Based Learning Toolbox designed to help districts build strong, effective work-based learning programs. Topics within these resources include, but are not limited to, advisory board recruitment, guidelines for working with interns, employer-satisfaction surveys and student-reflection questions. Tennessee provides both funding and capacity-building to support regional stakeholders in implementing high-quality work-based learning. Through competitive Perkins Reserve Grants, the Tennessee Department of Education funds work-based learning embedded in career pathways.

Develop and Foster Collaboration Across Education, Workforce Development, Employers and Community Stakeholders

Partnerships and data play a key role for states understanding the educational needs of their students, communities and economies. Perspectives from employers and community stakeholders provide important context for what students may need beyond their K-12 education. This information in addition to labor market information can provide valuable insight into how programs can be improved and aligned to broader needs. By engaging employers and community stakeholders in addition to considering a wide range of data sources, there is an opportunity to understand what employers are looking for in a skilled workforce and to tailor education and training to provide a pipeline to meet skill demands in the labor market.

Foster and support state, regional and local partnerships that are reflective of diverse needs of students and local economies

• While this is a general consideration, supporting and helping to foster relationships at the local and regional level can help inform CTE programs and develop valuable paths for students to pursue education and training relevant to their interests and possible careers in their communities and regions. Employers, local and regional workforce systems, and community stakeholders can provide insights into the skills and training students will need in the workforce. They can also support and help build work-based learning and other hands-on experiences for students.

• State example: Washington
  o Washington’s Career Connected Learning initiative was launched in 2017 by Gov. Jay Inslee to connect 100,000 Washington youth over five years with career-connected learning opportunities that prepare them for high-demand jobs. The initiative helps students gain awareness about jobs and careers, hands-on experiences in a particular field, and connections to meaningful (and often paid) work experiences aligned with classroom instruction. The state also has a Career Connect Washington Intermediary Grant program that supports intermediaries in their work by bridging connections between industry and education and helping to scale effective programs.

Labor market information

• States have considered data sources beyond K-12, CTE, postsecondary and workforce data to inform and understand education and training needs in their state. Information on credentials needed for high-demand occupations, current and future job opening projections and salary information for specific occupations can
help inform and create alignment between career and technical education and high-demand occupations in a state. By understanding the skills, credentials and education needed to enter certain occupations, states can structure educational programs to support students in paths to relevant future education and careers.

- **State example: Kentucky**
  - The Kentucky Center for Statistics collects and links data to evaluate education and workforce efforts in the Commonwealth. This includes developing reports, responding to research requests and providing statistical data about these efforts so policymakers, practitioners and the general public can make better informed decisions. In 2020, the center released a report that examines trends in Kentucky and its association with employment and postsecondary outcomes later in life.

**Data and collaboration as tools to increase access to CTE and work-based learning in rural communities**

- As states seek to expand access to CTE and work-based learning in rural communities, they have encountered a series of similar issues such as ensuring that programs are high-quality, that learners experience authentic educational and exploration experiences, and that work-based learning opportunities are available across multiple fields. A 2018 strategy guide from Advance CTE outlines five strategies for addressing these issues and expanding access in rural areas:
  1. Secure buy-in and commitment for new or ongoing reforms.
  2. Use data strategically to understand access gaps and assess programmatic and policy impact.
  3. Leverage regional, cross-sector partnerships.
  4. Use technology to expand access and reach.
  5. Invest resources to spark innovation.

- **State example: Nebraska**
  - Through a multi-step process, Nebraska engaged local school leaders, employers, community members, students and educators to examine state and regional labor market information to develop a reVISION action plan. The plan identifies the key leverage points and strategies to align program offerings with postsecondary entrance requirements and regional labor market needs. While reVISION was originally launched using reserve funds through the Carl D. Perkins Career and Technical Education Act of 2006, the state Legislature has since put forth additional funds to scale and sustain the program. From 2014 to 2018, Nebraska has awarded over $3 million in action grants to 87 districts to help execute reVISION action plans. As a result, 87% of participating sites reported adopting at least one new CTE course or program through reVISION.

**Additional Education Commission of the States Resources**

- [50-State Comparison: Secondary Career and Technical Education](#)
- [Work-Based Learning Policy Outline](#)
- [Expanding High-Quality Work-Based Learning Policy Brief](#)
- [Prioritizing Equity in Dual Enrollment Policy Brief](#)
- [Career and Technical Education Policy Snapshot](#)
- [Equitable Transitions During Pandemic Disruptions](#)

**Ed Note Blog Posts:**

- [Work-Based Learning Series](#)
- [The State of CTE: Work-Based Learning in Perkins V State Plans](#)
• **States Putting Early Career Exploration to Work for Students**
• **Five Steps to Expand Access to High-Quality CTE in Rural Schools**
• **Data You Can Use: Keeping Pace With Labor Market Change**
• **Workforce Development: Who Has a Seat at the Table?**