

Assessing the Alignment between West Virginia’s High School Career and Technical Education Programs and the Labor Market

To help students leave high school on a path toward success in the labor market, education policymakers and practitioners often focus on improving career and technical education (CTE) opportunities in high school. This study quantifies the system-level alignment between West Virginia’s high school CTE programs and the labor market. West Virginia stakeholders can use the findings to better prepare students for a postsecondary career. This study also serves as an example for policymakers and practitioners in other states who are interested in quantifying their CTE system’s alignment.

The study focused on alignment between CTE program offerings in West Virginia regions and the 20 occupations in each region with the largest number of long-term projected employment openings from 2014 to 2024 and with moderate occupational preparation requirements (more than a high school diploma—for example, a license or work-related experience—but less than a bachelor’s degree). Using data for the 2016/17 school year, the study team calculated the percentage of long-term employment openings for high-demand study occupations that have at least one aligned CTE program in the region (“employment openings served”), the percentage of regional CTE programs aligned to at least one high-demand study occupation within the region, and the percentage of regional CTE programs aligned to at least one high-demand study occupation in any West Virginia region.

Key findings

- **Seventy percent of West Virginia’s long-term projected employment openings typically require some occupational preparation beyond a high school diploma but less than a bachelor’s degree.** Preparation includes vocational education, an associate’s degree, or work-related experience.
- **Regional CTE programs served, on average, 93 percent of long-term projected employment openings in high-demand study occupations within their region (see table).** Eleven high-demand study occupations were not served by an aligned CTE program in one or more regions in which they were in high demand.
- **Students in 53 percent of the state’s CTE programs were in a program that aligned to at least one high-demand study occupation in their region.**
- **Students in 61 percent of the state’s CTE programs were in a program that aligned to at least one high-demand study occupation in any West Virginia region.** By region, this statistic ranged from 51 percent to 68 percent, indicating that the degree of alignment was better in some regions than others.

Career and technical education program alignment to high-demand study occupations in West Virginia

Region	Percentage of employment openings served by at least one aligned career and technical education program ^a	Percentage of programs aligned to a high-demand study occupation	
		Within the region	In any West Virginia region
Advantage Valley	99	49	66
Mid-Ohio Valley	87	48	51
North Central	100	58	63
Northern Panhandle	68	53	60
Potomac Highlands and Shenandoah Valley	96	47	59
Southeastern	91	56	61
Southern Mountains	96	58	68
Statewide	93	53	61

a. Referred to in this report as the percentage of employment openings served.