

High Quality Career and Technical Education Programs of Study

The Carl D. Perkins Strengthening Career and Technical Education Act (Perkins V) envisions that all students will be prepared for high-skill, highwage, or in-demand occupations in current or emerging professions in the 21st century. Perkins V requires states to offer "career and technical programs of study" that include academic, career, and technical content that prepare students to make successful transitions to postsecondary education and the workplace. Perkins V requires that all eligible providers offer at least one program of study.

To this end, a Program of Study is defined as a coordinated, nonduplicative sequence of academic and technical content at the secondary and postsecondary level that—

- incorporates challenging State academic standards;
- addresses both academic and technical knowledge and skills, including employability skills;
- aligns with the needs of industries in the economy of the State, region, or local area;
- progresses in specificity;
- has multiple entry and exit points that incorporate credentialing; and
- culminates in the attainment of a recognized postsecondary credential.

The 17 Michigan career clusters are occupational categories with industryvalidated knowledge and skills that define what students need to know and be able to do to realize success in a chosen occupational field. Within several of the career clusters pathways, a program of study has been developed, which outline sequences of academic, career, and technical courses and training. The programs begin as early as ninth grade and lead to progressively higher levels of education and higher-skilled positions in specific industries or occupations.









The Michigan Department of Education – Office of Career and Technical Education and the Workforce Development Agency convened a statewide committee to develop a framework for high quality CTE programs of study in Michigan.

In Perkins V, The State must measure and report the following:

- 1. The percentage of CTE concentrators who graduate (high school or college).
- 2. CTE concentrator proficiency in the State academic standards including: ELA, Math, and Science.
- 3. "The percentage of CTE concentrators who, in the second quarter after exiting are in postsecondary education or advanced training, military service, a service program, the Peace Corp or are employed."
- A measure of "CTE program quality". CTE Concentrators graduating high school having attained a recognized postsecondary credential. (Industry recognized credential)
- 5. The percentage of CTE concentrators in CTE programs that lead to nontraditional fields.

Michigan assesses the *size, scope and quality* of career and technical education programs using the Local Annual Grant approval process. Effective technical assistance provided by staff increases the number of programs meeting the established standards. A component of the approval process reviews services for special populations.

Program Size

Career and Technical Education (CTE) Programs of Study (POS) must be of comparable size, based upon enrollment, as compared to enrollment in non-CTE programs and total college enrollment.

Scope

The scope of a Program of Study is defined through curriculum guidelines allowing students to gain a strong experience in and comprehensive understanding of all aspects of the industry, which prepare students to enter, including:

- occupations and careers that comprise an industry, from basic to advanced
- principles of technology, labor and community issues, health and safety and environmental issues related to the industry.
- knowledge of the planning, management, finances, technical and production skills for the industry related to the program.
- developing problem-solving skills and includes applied academics in the context of the student's career pathway selection.

Quality

Recipients must offer students the opportunity to participate in High Quality Programs of Study that lead to two of the following three components:

- high-skill, high-wage, in-demand occupations
 - **high-skill** occupations require an industry-recognized certificate, credential, postsecondary training, apprenticeship, or degree
 - high-wage career as one with an average hourly rate equal to or greater than the average hourly rate of all occupations
 - *in-demand* industry is defined as an occupation in which state, local, or regional labor market data show that demand exceeds projected employment supply





