

Career Technical Education Glossary

Career Technical Education (CTE): CTE is an educational option that provides learners with the knowledge, experiences and skills they need to be prepared for college and careers. CTE gives purpose to learning by emphasizing real-world skills and practical knowledge within a selected career focus. Students in CTE programs and programs of study take specialized sequences of courses that provide rigorous academic and technical knowledge and skills at the secondary and postsecondary/adult levels and align with high-skill, high-wage and in-demand career opportunities.

Alternative Certification: Alternative certification is a process that allows individuals to bypass the time and expense involved in attaining a teacher degree or completing a graduate program. Completion of alternative certification programs typically results in a standard teaching certificate or an alternative or provisional certificate. Providers of alternative certification can be colleges of education, non-profit and for-profit organizations or school districts.

Area Technical Center (ATC): ATCs are sites where CTE is delivered to students from one or more local school districts, which must offer programs in a minimum of three clusters. Some area CTE centers serve only high school students, while others serve both high school students and adults. The centers may be *shared time*, offering primarily technical training and credit, or *full time*, providing students with both academic and technical training and credit. Area CTE centers are often cost effective because they allow schools, districts or regions to pool resources and build economies of scale with qualified instructors and cutting-edge technology. They are also sometimes referred to as *shared-time centers*. There are approximately 1,200 area CTE centers across 41 states.

Capstone: In an established and coherent sequence of courses, a capstone is the final, most advanced course through which students apply their learning from the preceding courses. A capstone can also refer to a multi-faceted assignment that serves as a culminating academic and intellectual experience for students, typically at the end of a CTE program or program of study. Capstone projects may take a wide variety of forms, but most are long-term investigative projects that culminate in a final product, presentation or performance. Capstone projects also tend to encourage students to connect their projects to community issues or problems and to integrate outside-of-school learning experiences, including activities such as interviews, scientific observations or internships.

Career Academy: A career academy is either a stand-alone school or a “school-within-a-school” that provides preparatory curriculum in the context of a career-oriented theme. There are approximately 7,000 career academies serving 1 million students in a range of specializations. About a quarter of all public high schools offer specialized career academies.

Career Advisement/Guidance: Career advisement/guidance is a comprehensive, developmental approach designed to assist individuals in making and implementing informed educational and occupational choices. A career guidance and counseling program develops an individual's

competencies in self-knowledge, educational and occupational exploration and career planning.

Career Cluster: The National Career Clusters[®] Framework was developed to transform vocational education into CTE. The Framework includes 16 Career Clusters and 79 Career Pathways that together represent the entire world of work.

These Career Clusters organize academic and technical knowledge and skills into coherent sequences from secondary to postsecondary education. The Framework's use reaches far and wide, with all states using it in some form to describe and organize their CTE systems, including their reporting of state CTE enrollments to the federal government.

Career Coach: A career coach assists students in preparing for postsecondary education and/or careers by providing career counseling, financial guidance and college and career supports.

Career Development: Career development is a process usually involving school counseling programs to help students understand the connection between school and the world of work and plan for and make a successful transition from school to postsecondary education and/or the world of work as well as successful transitions among careers across the lifespan.

Career Pathway: There are multiple definitions for career pathways. Through the lens of the National Career Cluster Framework, a career pathway is the grouping of knowledge and skills (and CTE programs of study) shared by related professions – a layer down from the 16 Career Clusters. As defined by the Workforce Innovation and Opportunity Act, a career pathway is a combination of rigorous and high-quality education, training, and other services that prepares an individual to be successful in any of a full range of secondary or postsecondary education options.

More generally, many organizations and initiatives, such as New Skills for Youth, use the term career pathway to serve as an umbrella term for all career-focused course sequences, including CTE programs of study and other state- or locally defined programs extending across secondary and postsecondary systems.

Career Technical Student Organization (CTSO): A CTSO is a co-curricular organization that provides experiential learning for CTE students through competitions, leadership opportunities and business partnerships.

Carl D. Perkins Career and Technical Education Act of 2006: Perkins (commonly referred to as Perkins IV) is the federal law that is the primary federal investment to states and discretionary grantees for the improvement of secondary and postsecondary CTE programs across the nation. The purpose of the Act is to develop more fully the academic, career and technical skills of secondary and postsecondary students who elect to enroll in CTE programs. This law is being phased out and replaced by the ***Strengthening Career and Technical Education Act of 2018 (Perkins V)***.

Classification of Instructional Programs (CIP) Code: The CIP Code provides a taxonomic scheme that supports the accurate tracking and reporting of fields of study and program completion activity.

Credential: Credentials serve as a signal for what individuals know and can do, making finding the right candidates for the job easier for employers. Credentials come in all shapes and sizes, each differing by field of study, the amount of training and education required and value to employers. To help sort through the vast universe of credentials, the following classification is often used:

- **Badge:** Offered virtually, badges are used to certify more granular skill development, such as the completion of a course, workshop or other short-term training.
- **Certificate:** Certificates are used to designate skills gained through education and training after the completion of an assessment or a performance-based exercise. They are often offered as an interim designation on the way to a two-year or four-year degree.
- **Certification:** Certifications are a non-credit-bearing awards used by employers and industry associations to validate the skills workers need to enter a specific occupation or industry. Recipients must pass a test, and certifications are often preferred, though not required, for entry into the field. Certifications may be articulated into credit by postsecondary institutions.
- **Degree:** Academic degrees are awarded by accredited postsecondary institutions to recognize the completion of a pre-determined amount of coursework. They are often completed in two or four years, though the rigor, length and field of study vary.
- **Industry-Recognized Credential:** Industry-recognized credentials of value are recognized in the labor market and by employers, are portable across state borders and are valid assessments of student skills. They can take many different forms, including educational degrees, certificates, certifications and licenses. The precise definition and use of industry-recognized credentials vary from state to state, but most include a few common elements, in that they are exam based, administered by third parties, and supplemental to a traditional postsecondary award.
- **License:** Licenses protect entry into certain industries, ensuring that only those who are qualified are permitted to practice. They are often administered by a government agency or a trade association.

CTE Advisory Committee: A CTE advisory committee is a group of individuals whose experience and abilities represent a cross-section of a particular occupational area. The primary purpose of an advisory committee is to assist educators in establishing, operating, and validating the quality and relevance of the CTE programs/programs of study and to provide expertise and insight about current/future industry and technological changes.



CTE Concentrator: As defined in Perkins V, a *postsecondary/adult* CTE concentrator is defined as a student who earns 12 credits in a single CTE program or program of study or completes a CTE program if that CTE program encompasses fewer than 12 credits.

As defined in Perkins V, a *secondary* CTE is defined as a student who completes at least two courses in a single CTE program or program of study.

CTE Explorer: A CTE explorer is a student who takes three or more CTE credits in different occupational areas.

CTE Participant: As defined in Perkins V, a CTE participant is defined as an individual at either the secondary or postsecondary level who completes at least one CTE course in a CTE program or program of study.

Early Postsecondary Opportunities: Early postsecondary opportunities are courses and/or exams that give students the chance to obtain postsecondary credit while still in high school. Terms related to early postsecondary learning opportunities include:

- **Articulation Agreement:** Articulation agreements are formal agreements created between public school districts and postsecondary institutions to align high school and postsecondary curricula to create sequences of courses offering skill attainment without unnecessary duplication to support earning of articulated credit by learners.
- **Articulated Credit:** Articulated credit is postsecondary credit provided upon matriculation by an individual college for successful completion of college-level, high school coursework.
- **Concurrent Enrollment/Credit:** Concurrent enrollment is the subset of dual enrollment courses taught by college-approved high school teachers. Through concurrent enrollment, students gain exposure to the academic challenges of college while in their supportive high school environment, earning transcripted college credit when they successfully pass the course.
- **Dual Enrollment/Dual Credit:** Dual credit is the term given to courses in which high school students have the opportunity to earn both high school and college credits simultaneously. Dual credit courses are taught by high school faculty, adjunct college faculty or college faculty either at the high school, at the college or university, or sometimes through online courses or distance education. Dual credit is offered by both state and independent (private, regionally accredited) colleges and universities.
- **Transcripted Credit:** Transcripted credit refers to postsecondary-level credits that students receive on their transcript prior to entering college after completing courses while in high school.

Employability Skills: Employability skills are the knowledge, skills and dispositions that make individuals more likely to gain employment and to be successful in their chosen occupations. Employability skills include interpersonal skills, personal qualities, technology use, systems thinking,

communication skills, information use, resource management, critical thinking skills and applied academic skills. They may also be called *professional, soft or 21st century skills*.

Every Student Succeeds Act (ESSA): ESSA is a federal law that funds K-12 education throughout the nation and emphasizes equitable access to education, high standards and accountability. ESSA both encouraged and allowed states to incorporate CTE into their plans through an emphasis on a “well-rounded education,” which includes CTE programs and activities, and the opportunity to embed CTE and career readiness measures within state accountability systems.

Guided Pathway: Guided pathways is a model that aims to structure postsecondary programs – and their curriculum and courses – in such a way that students are supported along their education path and meet requirements for success in education and careers. The four elements of implementing a guided pathways approach include mapping pathways to student end goals, helping students choose and enter a program pathway, keeping students on path and ensuring that students are learning.

High-Skill, High-Wage, In-Demand: *High-skill, high-wage, in-demand* refers to the careers that learners after completing a high-quality CTE programs or programs of study, as defined by states. *High skill* refers to the technical and employability skills necessary for careers that align with labor market needs. *In demand* refers to careers aligned with labor market needs. *High wage* refers to careers that provide individuals with a living wage that can be used to support themselves and their families.

Higher Education Act (HEA): HEA is a federal law that governs nearly all federal financial aid programs for the nation’s postsecondary students. The vast majority of HEA funding flows through Title IV of the legislation, which oversees the administration of the various student loan and grant programs such as the federal Pell grant.

Individual Learning Plan (ILP): An ILP is a process that consists of aligning a student’s course-taking and postsecondary plans with his or her career goals and documenting the range of college and career readiness skills that the student has developed. They may also be called *individual career and academic plans (ICAPs)* or *individual graduation plans (IGPs)*.

Industry Expert: Industry experts are individuals with substantial industry knowledge and experience, including both technical content knowledge and an understanding of how to navigate professional career growth in a specific industry and of the knowledge, skills and abilities necessary to effectively support students.

Intermediary: An intermediary is an individual or organization that facilitates partnerships between educators and employers for the ultimate benefit of a student’s career explorations. Intermediaries may be responsible for recruiting new employers to participate in the full continuum of work-based learning activities, monitoring student performance during a placement on a work site, and ensuring

that all laws are being followed. Intermediaries interface not only with the community but also with educators to ensure that placements are aligned with and build upon their classroom learning.

Labor Market Information (LMI): Workforce information and LMI consist of the data and information used by businesses, workers, learners, job seekers, education and training providers, workforce development planners, policymakers and others to make informed decisions in areas such as hiring and advancement, career choice, curriculum development and investments in training.

Meta-Major: Meta Majors, sometimes referred to as *academic clusters*, group individual degrees with related courses under larger areas of interest.

Nontraditional Occupations: These are occupations or fields of work for which individuals from one gender comprise less than 25 percent of the individuals employed in each such occupation or field of work. For example, nursing is a nontraditional occupation for males, while engineering is a nontraditional occupation for females.

Office of Career, Technical, and Adult Education (OCTAE): OCTAE within the U.S. Department of Education administers and coordinates programs that are related to adult education and literacy, CTE and community colleges.

Opportunity Youth: Opportunity youth are individuals between the ages of 16 and 24 who are neither in school nor working.

Prior Learning Assessment (PLA): A PLA is an evaluation colleges may use to determine the college-level knowledge and skills an individual has gained outside of the classroom for college credit. This evaluation can also be called *credit for prior learning*.

Program of Study: A program of study is a coordinated, non-duplicative sequence of academic and technical content at the secondary and postsecondary level that:

- Incorporates challenging, state-identified academic standards;
- Addresses academic and technical knowledge, as well as employability skills;
- Is aligned to the needs of industries in the state, region, Tribal community, or local area; progresses in content specificity; has multiple “entry and exit points”; and
- Culminates in the attainment of a recognized postsecondary credential.

All local recipients of Perkins funds are required to offer at least one program of study, and states are required to offer more than one program of study.

Sector Strategies: Sector strategies are partnerships of employers within a critical industry that bring together education, economic development, workforce systems and community organizations to identify and collaboratively meet the workforce needs of that industry within a regional labor market.

Special Populations: Special populations, as defined by Perkins V are:

- Individuals with disabilities;
- Individuals from economically disadvantaged families, including low-income youth and adults;
- Individuals preparing for non-traditional fields;
- Single parents, including single pregnant women;
- Out-of-workforce individuals;
- English learners;
- Homeless individuals;
- Youth who are in, or have aged out of, the foster care system; and
- Youth with parents on active duty in the armed forces.

Standard Occupational Classification (SOC) Code: The SOC Code is a federal statistical standard used by federal agencies to classify workers into occupational categories for the purpose of collecting, calculating or disseminating data.

Strengthening Career and Technical Education for the 21st Century Act of 2018 (Perkins V):

Signed into law in July 2018, this bill reauthorizes the Carl D. Perkins Career and Technical Education Act of 2006 (Perkins) and goes into effect in July 2019. This law is the primary federal investment to states and discretionary grantees for the improvement of secondary and postsecondary CTE programs and programs of study across the nation. The purpose of the Act is to develop more fully the academic knowledge and technical and employability skills of secondary education students and postsecondary education students who elect to enroll in CTE programs and programs of study.

Technical Skills Assessment (TSA): A TSA is used to evaluate CTE students' attainment of technical skills. It is aligned to industry standards where available and appropriate. TSAs are typically given at the end of a CTE course, program or program of study.

Work-Based Learning: Work-based learning experiences offer learners opportunities to reinforce and deepen their classroom learning, explore future career fields, and demonstrate their skills in an authentic setting. It can take on many forms, depending on the design of the experience and the population being served. Work-based learning is often described as a continuum — starting with career awareness activities in early grades and extending to career preparation. Perkins V, however, defines work-based learning as sustained interactions with industry in real workplace or simulated environments that foster in-depth, first-hand engagement with tasks required in a given career and aligned with CTE curriculum and instruction. Types of work-based learning include:

- **Apprenticeship:** An apprenticeship combines paid on-the-job training under the supervision of experienced journey workers with related classroom instruction. A **Registered Apprenticeship** is an apprenticeship program that is registered with the U.S. Department of Labor and meets all federal and state standards. Upon completion of a Registered

Apprenticeship program, participants receive an industry-issued, nationally recognized credential that certifies occupational proficiency, is portable, and can provide a pathway to the middle class.

An apprenticeship consists of five components (1) employer involvement; (2) on-the-job training; (3) related technical instruction; (4) paid work experience; and (5) award of a nationally recognized industry credential.

- **Cooperative Work Experience Program (CO-OP):** A CO-OP is a partnership that links school, community and business/industry to provide a real-world environment in which students are given the opportunity to apply, and thereby enhance, the knowledge and skills obtained in the classroom. CO-OPs have the common objective of providing opportunities for students to develop and demonstrate job skills at a supervised work site supported by training plans developed cooperatively by the employer, certified work-based learning coordinator, instructor and student. The work experience component of a CO-OP (paid or unpaid) is related to the student's CTE program of study, with the primary goal of developing career relevancy and competence.
- **Internship:** An internship is a form of experiential learning that integrates knowledge and theory learned in the classroom with practical application and skills development in a professional setting. Internships give students the opportunity to gain valuable applied experience and make connections in professional fields they are considering for career paths, and they give employers the opportunity to guide and evaluate talent.
- **Job Shadowing:** Job shadowing is a form of career exploration in which a student learns about a particular job by following a worker throughout the day. Job shadowing is on the lower end of the continuum of "work-based learning" and does not meet federal or most state requirements for student participation.
- **Mentorship:** A mentorship is a one-on-one, personal or professional relationship with a volunteer from the business/industrial community who helps students become aware of career opportunities and work ethics, outside of the formal obligations of a teaching or supervisory role. Mentorship is on the lower end of the continuum of "work-based learning" and does not meet federal or most state requirements for student participation.
- **Practicum:** A practicum is an advanced-level course, often in a specialized field of study, in which a student has an opportunity to apply the knowledge and skills he or she is learning in class to a work experience (and vice versa).
- **Pre-Apprenticeship:** A pre-apprenticeship is a program or set of strategies designed to prepare individuals for entry into an apprenticeship program. Instruction may vary in length and scope and may include basic skills training, academic skills remediation, or an introduction to the industry. Completers may be accorded preferential consideration for entry into an apprenticeship program and/or applied time served or credits earned toward fulfilling program requirements.

- **School-Based Enterprise (SBE):** SBEs serve as learning laboratories and provide students with opportunities to apply their entrepreneurial, business and marketing skills in addition to other skills related to their CTE programs. From catering companies and salons to credit unions and auto shops, SBEs can take on many forms across Career Clusters.
- **Simulated Workplaces:** Through simulated workplaces, students transform their classrooms into businesses to create an authentic workplace environment, supported and validated by industry partners.
- **Youth Apprenticeship (YA):** YA is an on-the-job learning option, designed for high school students, that includes a combination of classroom instruction and paid on-the-job training that culminates in a portable credential of value.

Workforce Innovation and Opportunity Act (WIOA): WIOA is a federal law that supports workforce development activities and funds job training programs for displaced adult and youth workers. WIOA emphasizes greater coordination between workforce development and CTE through aligned definitions, the requirement that postsecondary CTE be a local infrastructure partner, the option to do a combined state plan that meets the planning requirements for WIOA's core programs and at least one other federal program, and other provisions.

Common CTE Abbreviations/Acronyms

ATC: Area Technical Center

CIP Code: Classification of Instructional Programs Code

CO-OP: Cooperative Work Experience Program

CTE: Career Technical Education

CTSO: Career Technical Student Organization

ESSA: Every Student Succeeds Act

HEA: Higher Education Act

ICAP: Individual Career and Academic Plan

IGP: Individual Graduation Plan

ILP: Individual Learning Plan

LMI: Labor Market Information

OCTAE: Office of Career, Technical, and Adult Education

Perkins: Carl D. Perkins Career and Technical Education Act of 2006

Perkins V: Strengthening Career and Technical Education for the 21st Century Act

PLA: Prior Learning Assessment

SBE: School-Based Enterprise

SOC Code: Standard Occupational Classification Code

TSA: Technical Skills Assessment

WIOA: Workforce Innovation and Opportunity Act

YA: Youth Apprenticeship