

Programs of Study: Local Implementation Readiness and Capacity Self-Assessment

A Tool for Local College and Career Readiness

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Background

The *Carl D. Perkins Career and Technical Education Act of 2006 (Perkins IV)* calls for states to offer programs of study (POS), which local educational agencies and postsecondary institutions may adopt as an option for students participating in career and technical education (CTE). Each local recipient of *Perkins IV* funds must offer at least one POS that, at a minimum:

- Incorporates and aligns secondary and postsecondary education elements;
- Includes academic and CTE content in a coordinated, non-duplicative progression of courses;
- Offers the opportunity, where appropriate, for secondary students to acquire postsecondary credits; and
- Leads to an industry-recognized credential or certificate at the postsecondary level, or an associate or baccalaureate degree.

Many states often use some level of local CTE program recognition or approval to determine local educational agency (LEA) eligibility for access and use of the Perkins federal funding for CTE program improvement. State CTE approval processes evolve over time and may have roots in earlier authorizations of the federal Perkins funding that did not include provisions for a defined program of study. The legislatively specified POS elements may not currently be incorporated into existing program approval processes used by states, in part because the elements are broadly defined and open to state and local interpretation. *Perkins IV* also provides states with the flexibility to establish their own criteria for approving CTE programs that qualify for federal Perkins funding support. As a result, programs of study offered within and among states may differ in structure because of a lack of uniform criteria used to establish and implement a program of study.

A program of study is a comprehensive, structured approach for delivering academic and career and technical education to prepare students for postsecondary education and career success.

*U.S. Department of Education
Operational Definition*

Although POS are intended as a singular program construct spanning secondary and postsecondary CTE studies, states typically have created separate approval processes for secondary providers and postsecondary providers. Often these stand alone; separate

approval processes contain few requirements for explicit program alignment and articulation between secondary and postsecondary educational levels.

Some CTE approval processes have focused on sequencing the technical coursework that comprises a POS, with less rigorous attention given to the associated CTE content. Without development and alignment of both academic and technical coursework suggested within a POS, there may be negative ramifications for high school students seeking to continue their training at a postsecondary institution, given the focus on college and career readiness. Students who lack requisite academic proficiency may need to complete remedial coursework prior to beginning their postsecondary CTE studies.

Programs of study extend the program outcomes desired for students to include the earning of an industry-recognized credential, a certificate, or a postsecondary degree. The POS becomes the sum of its parts, with a clear exit outcome and specific elements that are intended to lead toward that outcome.

The intent of this guidance is to clarify and offer suggested criteria for states to consider as they identify and certify whether a local POS provider is ready and has sufficient capacity for full POS implementation. Implementation of the intentional POS structure that incorporates the statutory requirements will be confronted with a need to develop a number of supporting elements. These supporting elements will aid and support POS implementation by addressing the system elements that comprise a fully developed program of study. A self-assessment of these supporting elements makes up the content contained in this POS readiness and capacity review guide. Each of the elements are addressed individually, but work in concert with each other to help support full implementation of a program of study.

Perkins IV POS Requirements

Eligible state agencies may request local recipients to submit documentation to illustrate sufficient size, scope, and quality for a local CTE program to be eligible for Perkins funding support. Stand-alone approval processes for a secondary CTE program or a postsecondary CTE program may not be sufficient to determine if the Perkins requirements for a program of study are present. Current program approval processes may need to be modified or enhanced for state staff to assure local programs of study are sufficiently meeting *Perkins IV* programs of study requirements.

As specified by the Act, there are four statutory requirements that define a program of study. These requirements are:

A. Incorporate and align secondary and postsecondary education elements

There is an expectation that local providers submit the design for a single POS—spanning the secondary and postsecondary levels. This expectation may suggest an approval process that is different from a state’s approval process for a stand-alone secondary or postsecondary CTE program. Stand-alone approval processes may not typically require the documentation of alignment across sectors, or within sectors between academic and technical coursework.

Submission of evidence might be requested to assure the application reflects deliberate planning and alignment between the secondary and postsecondary levels. One such example would be the requirement that a secondary and/or postsecondary provider submit a completed POS template illustrating how the secondary CTE program sequence aligns with the postsecondary credential, certificate, or degree CTE program. Examples of such a template can be viewed at www.careerclusters.org.

B. Include academic and CTE content in a coordinated, non-duplicative progression of courses

Documentation for this element might illustrate how a planned sequence will not result in any duplication of coursework for a student participating in a POS. The academic content within the POS might show how the program will enable a secondary student to meet the state's requirements for high school graduation as well as attain the necessary academic and technical knowledge and skills to demonstrate college and career readiness.

At the postsecondary level, the program of study should illustrate how a student will satisfy the general education requirements for the POS-related credential, certificate, or degree. An example of a coordinated, non-duplicative progress of courses may be illustrated with the same POS template that is used to document evidence of secondary and postsecondary elements. A single POS template could satisfy documentation for both the alignment of the secondary and postsecondary sectors and illustrate the coordinated, non-duplicative progression of courses.

C. Offer the opportunity, where appropriate, for secondary students to acquire postsecondary credits

Through the alignment of the secondary and postsecondary levels and in an attempt to provide a non-duplicative progression of courses, agreements may be forged between institutions to offer college credit to secondary students through high school courses that meet postsecondary requirements. These concurrent or dual credit opportunities may be illustrated through a coding scheme on the POS template so the opportunity to earn college credit in high school is explicit to the student. The concurrent or dual credit agreements could be further documented by having the applicant submit copies of institutional-level agreements rather than individual course-to-course articulation agreements. The institutional-level agreements may represent a number of individual course articulations, but establish an "umbrella" agreement to cover the policy-level acceptance of the credit articulation agreement by the chief academic officers at both the secondary and postsecondary levels. An example of such an agreement may be found in the appendix of this document.

D. Lead to an industry-recognized credential or certificate at the postsecondary level, or an associate or baccalaureate degree

A POS application may want to include explicit evidence identifying the credential, certificate, and degree opportunities that may exist upon completion of the program of study. Local applicants should be encouraged to illustrate multiple POS exit points, if appropriate. The level of detail required by the state approval agency may vary, but should, at a minimum, list by name the credential, certificate, and/or degree opportunities on a POS template. Credential, certificate, and degree information may also document the level of career guidance information available to students participating in a POS. When the state approval agency is fostering POS alignment with high-skill, high-wage, high-demand career fields, the types of exit awards for the POS may be important information for the student and the employer.

POS Design Framework—*Local Readiness and Capacity Self-Assessment*

To support states in developing POS that address each of the required elements identified in *Perkins IV*, the U.S. Department of Education, Office of Vocational and Adult Education (OVAE), has issued a design framework to clarify and define the four statutory POS requirements in the Act. The POS framework contains 10 supporting elements that are viewed by CTE practitioners as instrumental for creating and implementing a high-quality, comprehensive POS. The design framework can provide a useful quality assurance marker for states seeking to promote local development of consistent POS that comply with Congressional intent and promote program improvement within Perkins-funded programs. This document provides suggested readiness and capacity guidance to which states may wish to refer when providing technical assistance to local POS developers and reviewing state CTE program approval processes.

This POS design framework, issued in early 2010, is the foundation for guidance and a self-assessment of local POS readiness and capacity. The implementation examples offered in the appendix for each of the 10 framework elements are actual state and local approaches to illustrate current practice and are not intended to designate best practices. The element characteristics listed on each of the self-assessment templates may serve as a set of quality indicators to gauge program of study implementation readiness and capacity, both at the state and local levels. Some of the quality indicators as currently constructed may be better suited to either a state application or a local application, but can be adapted for use at either level, if desired.

The use of a self-assessment may be helpful in determining capacity for local POS implementation and readiness for state POS approval. Consideration of each element within the POS framework can foster stakeholder conversation and reflection on the status of local readiness and capacity for full POS implementation. Each of the elements has a pivotal role to play with POS development and implementation. They are not independent of each other nor are they of equal priority. POS developers and implementers may use the capacity and readiness self-assessment for guidance in determining which of the elements are the most pressing for local consideration. The tool is intended for planning and reflection as local CTE providers develop a POS in conjunction with POS partners.

The POS framework supporting elements can be viewed as a scaffold to strengthen the four statutory POS elements. One way to view the supporting elements is to associate them with a particular POS required element. The matrix below attempts to illustrate a relationship between the required elements and the framework supporting elements. An individual supporting element may not be exclusive to a Perkins required element. For example, professional development may be needed, and desired, to support several of the POS required elements. Another example may be the need for policies to support secondary students receiving postsecondary credit.

Perkins POS Required Elements	POS Framework Supporting Elements
Incorporate and align secondary and postsecondary education elements	<ul style="list-style-type: none"> • Legislation and Policies • Partnerships
Include academic and CTE content in a coordinated, non-duplicative progression of courses	<ul style="list-style-type: none"> • Course Sequences • College and Career Readiness Standards • Teaching and Learning Strategies • Guidance Counseling and Academic Advisement
Offer the opportunity, where appropriate, for secondary students to acquire postsecondary credits	<ul style="list-style-type: none"> • Credit Transfer Agreements • Professional Development
Lead to an industry-recognized credential or certificate at the postsecondary level, or an associate or baccalaureate degree	<ul style="list-style-type: none"> • Technical Skill Assessments • Accountability and Evaluation Systems

A full description of the POS framework support elements is contained in the published POS Design Framework and can be downloaded from the Perkins Collaborative Resource Network (PCRN) at: <http://cte.ed.gov/nationalinitiatives/rpos.cfm>. The design framework identifies the POS supporting elements as:

1. LEGISLATION AND POLICIES

Federal, state, and local legislation or administrative policies promote POS development and implementation.

Effective legislation and policies should:

- Provide for state and/or local funding and other resources, such as professional development and dedicated staff time, for POS development.
- Establish formal procedures for the design, implementation, and continuous improvement of POS.
- Ensure opportunities for any secondary student to participate in a POS.

- Require secondary students to develop an individual graduation or career plan.
- Provide resources for long-term sustainability of POS.

2. PARTNERSHIPS

Ongoing relationships among education, business, and other community stakeholders are central to POS design, implementation, and maintenance.

Collaborative partnerships should:

- Create written memoranda of understanding that elaborate the roles and responsibilities of partnership members.
- Conduct ongoing analyses of economic and workforce trends to identify statewide (or regional) POS to be created, expanded, or discontinued.
- Link into existing initiatives that promote workforce and economic development, such as sector strategies and other activities supported by the Workforce Investment Act.
- Identify, validate, and keep current the technical and workforce readiness skills that should be taught within a POS.

3. PROFESSIONAL DEVELOPMENT

Sustained, intensive, and focused opportunities for administrators, teachers, and faculty foster POS design, implementation, and maintenance.

Effective professional development should:

- Support the alignment of curriculum from grade to grade (9–12) and from secondary to postsecondary education (vertical curriculum alignment).
- Support the development of integrated academic and career and technical curriculum and instruction (horizontal curriculum alignment).
- Ensure that teachers and faculty have the content knowledge to align and integrate curriculum and instruction.
- Foster innovative teaching and learning strategies.

4. ACCOUNTABILITY AND EVALUATION SYSTEMS

Systems and strategies to gather quantitative and qualitative data on both POS components and student outcomes are crucial for ongoing efforts to development and implement POS.

Well-designed accountability and evaluation systems should:

- Include the “10 Essential Elements of a State Longitudinal Data System” identified by the Data Quality Campaign.¹
- Provide for administrative record matching of student education and employment data (e.g., Unemployment Insurance (UI) wage records).
- Yield valid and reliable data on key student outcomes (indicators) referenced in Perkins and other relevant federal and state legislation.
- Provide timely data to evaluate and improve the effectiveness of POS.

5. COLLEGE AND CAREER READINESS STANDARDS

Content standards that define what students are expected to know and be able to do in order to enter and advance in college and/or their careers comprise the foundation of a POS.

Rigorous college and career readiness standards should:

- Be developed and continually validated in collaboration with secondary, postsecondary, and industry partners.
- Incorporate essential knowledge and skills (e.g., academic, communication, and problem-solving skills), which students must master regardless of their chosen career area or POS.
- Provide the same rigorous knowledge and skills in English and mathematics that employers and colleges expect of high school graduates.
- Incorporate industry-recognized technical standards that are valued in the workplace.
- To the extent practicable, be internationally benchmarked so that all students are prepared to succeed in a global economy.

6. COURSE SEQUENCES

Non-duplicative sequences of secondary and postsecondary courses within a POS ensure that students transition to postsecondary education without duplicating classes or requiring remedial coursework.

Well-developed course sequences should:

- Map out the recommended academic and career and technical courses in each POS.
- Begin with introductory courses at the secondary level that teach broad foundational knowledge and skills that are common across all POS.
- Progress to more occupationally-specific courses at the postsecondary level that provide knowledge and skills required for entry into and advancement in a chosen POS.
- Offer opportunities for students to earn postsecondary credit for coursework taken during high school.

7. CREDIT TRANSFER AGREEMENTS

Credit transfer agreements provide opportunities for secondary students to be awarded transcribed postsecondary credit at the time the credit is earned and are supported by formal agreements between secondary and postsecondary education systems.

Well-developed credit transfer agreements:

- Provide a systematic, seamless process for students to earn college credit for postsecondary courses taken in high school, transfer high school credit to any two- or four-year institution in the state that offers the POS, and transfer credit earned at a two-year college to any other two- or four-year institution in the state that offers the POS.
- Transcript the college credit at the time the secondary student earns the credit so the students can transfer seamlessly into the postsecondary portion of a POS without the need for additional paperwork or petitioning for credit.
- Describe the expectations and requirements for, at a minimum, teacher and faculty qualifications, course prerequisites, postsecondary entry requirements, location of courses, tuition reimbursement, and credit transfer process.

8. GUIDANCE COUNSELING AND ACADEMIC ADVISEMENT

Guidance counseling and academic advisement help students to make informed decisions about which POS to pursue.

Comprehensive guidance counseling and academic advisement systems:

- Are based on state and/or local guidance and counseling standards, such as the National Career Development Guidelines.²
- Ensure that guidance, counseling, and advisement professionals have access to up-to-date information about POS offerings to aid students in their decision making.
- Offer information and tools to help students learn about postsecondary education and career options, including prerequisites for particular POS.
- Offer resources for students to identify their career interests and aptitudes and to select appropriate POS.
- Provide information and resources for parents to help their children prepare for college and careers, including workshops on college and financial aid applications.
- Offer web-based resources and tools for obtaining student financial assistance.

9. TEACHING AND LEARNING STRATEGIES

Innovative and creative instructional approaches enable teachers to integrate academic and technical instruction and students to apply academic and technical learning in their POS coursework.

Effective teaching and learning strategies should:

- Be jointly led by interdisciplinary teaching teams of academic and career and technical teachers or faculty.
- Employ contextualized work-based, project-based, and problem-based learning approaches.
- Incorporate team-building, critical thinking, problem-solving, and communication skills, (e.g., activities organized by the career and technical student organization (CTSO)).

10. TECHNICAL SKILLS ASSESSMENTS

National, state, and/or local assessments provide ongoing information on the extent to which students are attaining the necessary knowledge and skills for entry into and advancement in postsecondary education and careers in their chosen POS.

Well-developed technical skills assessments:

- Measure student attainment of technical skill proficiencies at multiple points during a POS.
- Employ industry-approved technical skill assessments based on industry standards, where available and appropriate.
- Employ state-developed and/or approved assessments, where industry-approved assessments do not exist.
- Incorporate performance-based assessment items, to the greatest extent possible, where students must demonstrate the application of their knowledge and skills.

¹ The 10 elements are: (1) statewide student identifier; (2) student-level enrollment data; (3) student-level test data; (4) information on untested students; (5) statewide teacher identifier with a teacher-student match; (6) student-level course completion (transcript) data; (7) student-level SAT, ACT, and Advanced Placement exam data; (8) student-level graduation and dropout data; (9) ability to match student-level P-12 and higher education data; and (10) a state data audit system.

² See http://cte.ed.gov/acrn/ncdg/ncdg_what.htm.