The 10 Components of a Program of Study (POS) Design Framework

Note: NCPN will use the following 10 Components in the place of strands.

The 10 Components
1)Legislation and Policies
2)Partnerships
3)Professional Development
4)Accountability and Evaluation Systems
5)College and Career Readiness Standards
6)Course Sequences
7)Credit Transfer Agreements
8)Guidance Counseling and Academic Advisement
9)Teaching and Learning Strategies
10)Technical Skills Assessments

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.

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 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/workforce trends to identify statewide/ 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/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
- 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 en- sure 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 course- work taken during high school.

7) **CREDIT TRANSFER AGREEMENTS**: Credit transfer agreements provide opportunities for secondary students to be awarded transcripted 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 cre- dit 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.
- 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 know- ledge and skills.