OCTAE Ten Components of a Program of Study

This conference is built on the Ten Components of a Program of Study issued by the U. S. Dept. of Education, Office of Career, Technical, and Adult Education (OCTAE) (https://s3.amazonaws.com/PCRN/docs/POSLocalImplementationTool-9-14-10.pdf), and the U. S. Dept. of Labor, Employment and Training Administration’s (DOLETA) Six Key Elements for Success (http://www.workforceinfofb.org/PDF/CareerPathwaysToolkit2011.pdf). Pages 4–7 of this book summarize the components and elements and show what they have in common. Descriptions of breakout sessions found later in the book show which of the components and elements each session supports.

To support states in developing programs of study (POS) that address each of the required elements identified in Perkins IV, the U.S. Department of Education, Office of Career, Technical, and Adult Education (OCTAE), has issued a design framework to clarify and define the four statutory POS requirements in the Act. The POS framework contains 10 supporting components that are viewed by CTE practitioners as instrumental for creating and implementing a high-quality, comprehensive POS.

**OCTAE COMPONENT 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.

**OCTAE COMPONENT 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 Innovation and Opportunity Act.
- Identify, validate, and keep current the technical/workforce readiness skills that should be taught within a POS.

**OCTAE COMPONENT 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.

**OCTAE COMPONENT 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.

**OCTAE COMPONENT 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.
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- 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.

OCTAE COMPONENT 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.

OCTAE COMPONENT 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 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.

OCTAE COMPONENT 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.

OCTAE COMPONENT 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).

OCTAE COMPONENT 10) TECHNICAL SKILLS ASSESSMENTS: National, state, and/or local assessments provide ongoing information on the extent to which students are attaining knowledge and skills needed 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.
The U.S. Department of Labor, Employment and Training Administration (DOLETA) has just released earlier this year the Career Pathways Toolkit: A Guide for System Development, in which the following six elements are identified as critical to the success of Career Pathways programs.

**DOL ELEMENT 1) BUILD CROSS-AGENCY PARTNERSHIPS AND CLARIFY ROLES:** Key cross-agency partners at the local and state levels are engaged, agree to a shared vision, and gain support from political leaders. Roles and responsibilities are clearly defined and formalized. Key steps:

- Engage a team of cross-agency partners at the state and local levels
- Establish a shared vision, mission, set of goals, and plan
- Define the roles and responsibilities of all partners
- Identify an intermediary to coordinate day-to-day collaboration
- Clarify the working relationship between state and local partners

**DOL ELEMENT 2) IDENTIFY SECTOR OR INDUSTRY AND ENGAGE EMPLOYERS:** Sectors and industries are selected and employers are engaged in the development of career pathways. Key steps:

- Conduct labor market analysis and share results with partners
- Target high-demand and growing sectors
- Identify key employers and clarify their roles
- Sustain and expand business partnerships

**DOL ELEMENT 3) DESIGN EDUCATION AND TRAINING PROGRAMS:** Career pathway programs provide a clear sequence of education courses and credentials that meet the skill needs of high-demand industries. Key steps:

- Identify target populations and their “entry” points
- Review or develop competency models
- Develop career ladders and lattices
- Seek employer validation of competencies and pathways
- Design educational options that are progressive, modularized, accelerated, and contextualized
- Ensure programs lead to industry recognized and/or postsecondary credentials
- Provide comprehensive wrap-around support services
- Provide flexible scheduling

**DOL ELEMENT 4) IDENTIFY FUNDING NEEDS AND SOURCES:** Necessary resources are raised and/or leveraged to develop and operate the career pathway system, and education and training programs. Key steps:

- Identify the costs associated with system and program development and operations
- Determine the funds to be contributed by key partner agencies
- Secure funding from public agencies and private foundations and organizations

**DOL ELEMENT 5) ALIGN POLICIES AND PROGRAMS:** Pursue state and local policy and administrative reforms in order to promote career pathway system development and to support implementation. Key steps:

- Identify and address statutory and administrative barriers to cross-agency collaboration
- Identify and pursue needed reforms in state and local policy
- Reform program procedures as needed

**DOL ELEMENT 6) MEASURE SYSTEM CHANGE AND PERFORMANCE:** Assess system-wide change and measure performance outcomes to ensure continuous improvement. Key steps:

- Define desired system and program outcomes
- Determine how to measure system and program outcomes
- Establish how data will be collected, stored, tracked, and shared
- Analyze data, revisit desired outcomes, and assess progress

The graphic on the following page shows the commonalities between the OCTAE Ten Components and the DOLETA Six Elements.