

PERKINS IV

PROGRAMS OF STUDY
STATE BY STATE REVIEW
PY 2007-08

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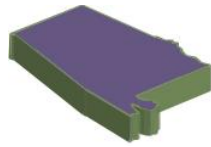
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Source: Perkins IV Transitions Plans, Py, 2007-08

Alabama



Incorporates secondary/postsecondary education elements

- The CTE curriculum incorporates secondary and postsecondary education elements focusing on high-skill, high-wage, and high-demand careers.
- The Courses of Study Committees and Task Force consist of representatives from business and industry, local teachers, career/technical administrators, superintendents, and other secondary, postsecondary, and higher education staff.
- Alabama supports five clusters that support 49 of the 81 national pathways.

Includes coherent and rigorous content aligned with standards

- Career/Technical Education programs of study are designed for students who receive the 4x4 academic core.
- Alabama's high school graduates must pass the Alabama High School graduation exam.

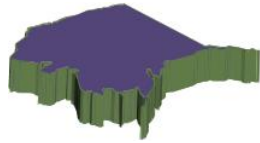
Includes ways of earning postsecondary credits

- Secondary CTE students participate in articulated coursework, dual enrollment, and early college enrollment opportunities within all programs of work.
- Alabama currently has 89 courses that have been cross-walked to postsecondary coursework and approved for statewide articulation.

Leads to credentials/certificates/degrees

- High-skill pathways require postsecondary-level coursework.
- Secondary CTE programs are required to meet Business/Industry certification.
- The Alabama College System has identified industry-recognized credentials specific to its CTE programs of study.
- Alabama also offers postsecondary level Skills Training Certificates, Short-term certificates, Certificates, and Associate Degrees.

Alaska



Incorporates secondary/postsecondary education elements

- Alaska's CTE programs of study will build on the work and experiences of Perkins III program development. The collaborative model will incorporate secondary education and postsecondary education representatives as well as business, industry and specialists in core academics and the needs of special populations. The products will meet the intent of the Perkins IV statute.
- Development of approvable CTE programs of study will take place both at the state level and at the local level depending upon interest and availability of resources.
- Program approval criteria will be developed through a consensus process involving secondary and postsecondary educators and the relevant industry experts.
- State level support will be provided to the pathways that address the state's high skill, high wage, and high demand industries.

Includes coherent and rigorous content aligned with standards

- During Perkins III, local school districts and postsecondary institutions reviewed and revised their career and technical education (CTE) program curriculum to be based on nationally or state industry recognized standards, and to organize their program sequences according to the national career clusters.

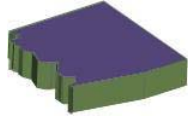
Includes ways of earning postsecondary credits

- May include the opportunity for secondary education students to participate in dual or concurrent enrollment programs or other ways to acquire postsecondary education credits.

Leads to credentials/certificates/degrees

- State encourages incorporating the earning of, or eligibility for, industry-recognized certificates and credentials.

Arizona



Incorporates secondary/postsecondary education elements

- The Career and Technical Education (CTE) Section at the Arizona Department of Education (ADE) and its postsecondary partners have established programs of study. State Staff will develop several additional programs of study within the next year.
- Currently, one program of study leads to a baccalaureate degree. This model will be used to develop other programs of study throughout the implementation of this State plan. The current model is a statewide effort involving the three state universities, community colleges, and secondary CTE programs.
- The program of study establishes an Associates of Arts degree at the community college level. The program will be accepted through a statewide articulation agreement by the three state universities. These credits will be articulated as a degree transfer, meeting the first requirements of the baccalaureate degree.
- Programs of study will be promoted through partnerships with Tech Prep.

Includes coherent and rigorous content aligned with standards

- The secondary program requires two Carnegie Units of prescribed instruction in the content area that is directly aligned with the first two entry courses of the AA degree. Secondary instructors who teach these courses must meet postsecondary adjunct faculty certification requirements in order for students to receive dual credit.

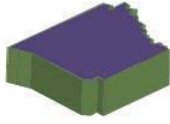
Includes ways of earning postsecondary credits

- The secondary CTE program was established in alignment with the first two courses of the Associate of Arts Degree; therefore, creating dual enrollment opportunities for the first six hours of the Associate of Arts degree for students.

Leads to credentials/certificates/degrees

- The program allows for three points of exit: (1) upon completion of the secondary program the student may take one of two State designated exams and enter the field as a paraprofessional, or (2) upon completion of the Associate of Arts degree may enter the field as a paraprofessional, or (3) upon completion of the baccalaureate degree may enter the field with professional certification.

Arkansas



Incorporates secondary/postsecondary education elements

- Arkansas's secondary career and technical system is based on the national model of 16 career clusters and 81 pathways. At the current time, at least one program of study is approved from each of the clusters. In all, 55 secondary programs of study are approved in 33 different pathways.
- There are 31 pathways that are on the high-skill, high-wage, and high-demand list for the 2007-08 fiscal year. There are 14 programs of study currently offered at the secondary level. There are 43 programs of study currently offered at the postsecondary level in these pathways.

Includes coherent and rigorous content aligned with standards

- Each secondary program of study has a state-defined core of 1½ or 2 units of credit. In addition, each course must have a state-approved curriculum framework that describes what the students should know and be able to do upon completion of the course.
- Statewide end-of-course assessments are based on the frameworks and are used for the CTE skill attainment measure.
- The state recently adopted the "Smart Core" for all high school students, which includes 4 units of English, 4 units of mathematics (Algebra I, Geometry, Algebra II, and a fourth math above Algebra II that might be Pre-Calculus, Trigonometry, Statistics, etc.), 3 units of natural science, 3 units of social studies, ½ unit of oral communications, ½ unit of physical education, ½ unit of health and safety, and ½ unit of fine arts.

Includes ways of earning postsecondary credits

- CTE programs at the local school districts and in the secondary centers often have articulation agreements with postsecondary institutions in their service area.

Leads to credentials/certificates/degrees

- All new CTE programs of study developed and approved will include the secondary and postsecondary connections in the framework, will use the Smart Core as the academic base, and will identify the industry credential/certification available for students upon completion at the secondary level, if any, and the further education or apprenticeship opportunities after high school as well as the industry credentials available upon completion of those levels.

California



Incorporates secondary/postsecondary education elements

- Local educational agencies must provide at least one program of study. The 15 industry sectors are agriculture and natural resources; arts, media, and entertainment; building trades and construction; education, child development, and family services; energy and utilities; engineering and design; fashion and interior design; finance and business; health science and medical technology; hospitality, tourism, and recreation; information technology; manufacturing and product development; marketing, sales, and service; public services; and transportation industry sector.

Includes coherent and rigorous content aligned with standards

- Development and implementation of the high quality CTE programs of study that require alignment with the model academic standards and articulation with postsecondary instruction should enable the State to maintain its high CTE student graduation rates.
- The academic curriculum standards contained within the State's approved Model CTE and Academic Curriculum Standards document are aligned with the academic content and student achievement standards adopted by the State.
- The required alignment of all of the State's CTE programs with the newly adopted model curriculum standards for CTE that integrate rigorous academic content standards with industry-specific knowledge and skills is expected to have a significant impact on CTE student achievement of academic skills.

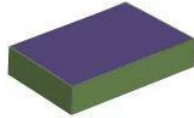
Includes ways of earning postsecondary credits

- The most common alignment of high school and postsecondary curricula occurs through Tech Prep2+2 programming.

Leads to credentials/certificates/degrees

- CTE coursework must be aligned with industry and public certifications required for entry into and promotion within a pathway.
- See *Career Technical Education Framework for California Public Schools, grades seven through twelve*. California Department of Education, 2007.

Colorado



Incorporates secondary/postsecondary education elements

- The CTE plans of study incorporate secondary and postsecondary elements.

Includes coherent and rigorous content aligned with standards

- Colorado is building upon and adopting the work of the national Career Clusters and the College and Career Transition Initiatives.
- The state has combined the 16 national career clusters into six industry sectors or concentration areas each including the foundation knowledge and skills required for academic and career success.
- The state will provide model POS based on the career clusters framework allowing for local adaptation and customization.
- The existing standards for CTE program approvals will be enhanced to assure compliance with the plans of study characteristics.

Includes ways of earning postsecondary credits

- Each model POS will identify the Advanced Credit Pathways (ACP) courses.
- While the ACP articulated credits have statewide applicability, many colleges and districts also have created local articulation agreements that govern dual enrollment agreements.
- Colorado already has a state law called the *Postsecondary Enrollment Option Act* (PSEO) that allows dual or concurrent enrollment programs to supplement existing articulation agreement systems and the growing number of ACP.
- The newly enacted *Fast College Fast Jobs Program* supports a pilot program that allows enrolled students to simultaneously complete high school graduation requirements and an associate degree or a postsecondary certificate during a five-year high school program.
- In addition to the PSEO and ACP, the state has the Early Middle College as another dual/concurrent enrollment modification.

Leads to credentials/certificates/degrees

- The plans of study lead to industry-recognized credentials as well as certificates and degrees.

Connecticut



Incorporates secondary/postsecondary education elements

- State plans to bring in an outside team to facilitate a statewide professional development workshop on how to breathe life into the POS at the secondary and postsecondary level as a collaborative effort.
- State plans to include technical assistance for POS through the regional education service centers.
- Project Lead the Way curriculum is aligned with both the two-year community colleges as well as the four-year university system.

Includes coherent and rigorous content aligned with standards

- State currently adopted 34 career pathways under the 16 career clusters.
- The POS model and career pathways are gaining momentum in the state as an integral component of the secondary school redesign initiative. The proposed POS format now includes rigorous academic courses, a flexible sequence of CTE courses, 21st Century Skills and professional skills.
- The POS may become a requirement for all students in the public education system beginning as early as Grade 6.
- Comprehensive school counseling is viewed as an enabling force in the success of the POS as a part of all students' career development plan. CTE has connected and aligned to the State School Counseling Association career development model and will be presenting the POS model at their fall annual conference.

Includes ways of earning postsecondary credits

- The College Career Pathways program may become a major source of dual/concurrent credit under the secondary redesign effort. Under this effort, alternate means of credit acquisition may allow students to complete high school sooner while entering the college system earlier in their educational path.

Leads to credentials/certificates/degrees

- The POS leads to industry-recognized credentials as well as certificates and degrees.

Delaware



Incorporates secondary/postsecondary education elements

- CTE Pathways should have current articulation agreements between secondary and postsecondary institutions.

Includes coherent and rigorous content aligned with standards

- POS will be provided or developed during the transition year and made available to LEAs and postsecondary institutions.

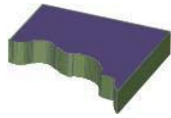
Includes ways of earning postsecondary credits

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Leads to credentials/certificates/degrees

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District of Columbia



Incorporates secondary/postsecondary education elements

- DC passed the *Public Education Reform Amendment Act of 2007: A New Era* (PERAA) last spring that sets the stage for major structural changes in the administration of public education in D, including administration of Perkins IV. New programs will span both secondary and postsecondary education.
- DC's Transitional plan is to continue and accelerate development and implementation of CTE Programs of Study and Career Academies that meet standards of Perkins IV and serve as a catalyst and driver of school-wide high school reform.

Includes coherent and rigorous content aligned with standards

- Four public charter high schools currently offer CTE programs of study: Friendship Collegiate Academy, Integrated Design and Electronics Academy (IDEA), Booker T. Washington Public Charter School for the Technical Arts, and the Latin American Community Center's YouthBuild Public Charter School.
- Postsecondary CTE is provided by the University of the District of Columbia, the only public provider of CTE in the District at the postsecondary level.
- DC offers tech prep programs.
- In 2008 DC will produce a feasibility study of a proposal to use Tech Prep Education as a vehicle for the establishment of a unique, secondary/postsecondary, accelerated workforce education system for DC. The Academy of Educational Development's National Institute for Work and Learning will conduct the feasibility study.
- CTE Programs of Study will be the driving force of both academic achievement and technical skill development of both college and career preparation.
- The focus will be on rigorous core academic content and advanced career-specific technical skills.

Includes ways of earning postsecondary credits

- Concurrent dual enrollment programs presently exist in both secondary and postsecondary education programs.

Leads to credentials/certificates/degrees

- All programs will lead to an industry-recognized credential or certificate at the postsecondary level, and and/or an associate or baccalaureate degree.
- The International Baccalaureate (IB) program and College and Careers Preparation programs are offered.

Florida



Incorporates secondary/postsecondary education elements

- Florida's ongoing articulation and Tech Prep initiatives provide a framework for implementing POS as required by Perkins.
- Sample POS (using the CCTI template) will be developed for each Career Cluster. These samples will reflect postsecondary and employment opportunities in Florida.

Includes coherent and rigorous content aligned with standards

- Secondary CTE initiatives involve the development of curricula that are academically challenging and rooted in career preparation. All CTE programs are aligned with the Florida Sunshine State Standards.
- Postsecondary CTE programs are designed and validated in cooperation with business and industry partners to ensure the curricula are challenging academically and technically relevant.
- The state supports the Volusia/Flagler Career Connection Consortium an initiative that aligns rigorous academic content and student academic achievement. So far, 208 lesson plans link the *Sunshine State Standards* and the *Essential Work Skills* to the career and technical course frameworks.
- The statewide POS templates will be available to districts through a statewide web-based counseling system called FACTS.org. Students will be using the electronic personal education planner with CHOICES to plan the sequence of courses within their chosen career cluster.

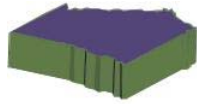
Includes ways of earning postsecondary credits

- The seamless articulation model provides career ladder opportunities for students to acquire college credit while still in high school. These credits may articulate to technical center, community colleges or 4-year colleges.
- Acceleration options allow students to participate in dual enrollment, early admission, advanced placement, credit by examination, IB program, and Tech Prep. Inter-institutional agreements as well as statewide articulation agreements are another mechanism that facilitates student transfer to the next education level.
- The statewide course numbering system, a database of postsecondary courses, guarantees automatic transfer of credit.
- POS will be available through a web-based counseling system at FACTS.org. Students will use CHOICES and ePEP (Electronic Personal Education Planner).

Leads to credentials/certificates/degrees

- Occupational Completion Points (OCPs) make it possible for students to enter and exit without penalty or repetition of entry-level employment competencies.
- Opportunities lead students to industry certification, and postsecondary degrees.

Georgia



Incorporates secondary/postsecondary education elements

- The *Peach State Pathways: Education and Career Planning* tool will be used to develop programs of study that incorporate secondary and postsecondary education.

Includes coherent and rigorous content aligned with standards

- During 2006, the curriculum revision project was launched as a major component of the redesign of CTE. This project includes the development of career pathways as well as end-of-pathway assessments.
- Curriculum teams have been working on performance standards and integrating academic standards to the CTE standards. Postsecondary instructors helped inform the articulation process for the new standards.
- The CTE foundation skills are aligned with the 16 career clusters.
- Eight career pathways were selected for Phase I of the curriculum revision project focusing on pathways that directly link to Georgia's strategic Industries and Centers of Innovation. Over time, 50 career pathways will be developed (29 by the end of 2007).
- Programs of study will be offered to students when planning for and completing their future coursework for CTE content areas.

Includes ways of earning postsecondary credits

- Opportunities will be provided for secondary students to participate in dual or joint enrollment, advanced placement programs, early college or aligned articulated coursework.

Leads to credentials/certificates/degrees

- The postsecondary credits acquired by the students lead to industry-recognized credentials or certificates or an associate or baccalaureate degree.

Guam



Incorporates secondary/postsecondary education elements

- Guam Community College (GCC) is solely responsible for the administration and implementation of career and technical education activities within Guam. GCC is the SEA and the LEA for Career and Technical Education. GCC's president serves as the State Director for Career and Technical and Adult Education. Guam's state plan is administered under the direction of the State Director.
- Guam's CTE programs are offered at the GCC campus and at high school campuses plus the college also operates an adult high school, and adult basic education program, and an ESL program.

Includes coherent and rigorous content aligned with standards

- In addition to career and technical educational programs, Guam provides basic skills, ESL, adult high school, family literacy, and GED preparation classes at the GCC campus as well as at various locations throughout the community. These educational programs are fundamental in providing academic and technical skills required to prepare for high-skill, high-wage careers.
- Guam promotes the development of services and activities that integrate rigorous and challenging academic and career and technical instruction that link secondary to postsecondary education.

Includes ways of earning postsecondary credits

- In FY 2007-2008 Guam will include the opportunity for secondary students to participate in dual or concurrent enrollment programs or other ways to acquire postsecondary education credits.

Leads to credentials/certificates/degrees

- In 2007-2008, Guam will provide programs that lead to an industry-recognized credential or certificate at the postsecondary level, or an associate or baccalaureate degree. GCC confers Associate of Science and Associate of Arts degrees, Certificates, and Journey-worker Certificates in various programs. They offer 12 Associate of Science programs; 3 Associate of Arts programs; 13 Certificate Programs; 17 Industry Standard Certificates; and 33 Journey-Worker Certificates.

Hawaii



Incorporates secondary/postsecondary education elements

- Career and technical education programs of study are embedded in the Hawaii Career Pathway System.
- The six Hawaii Career Pathways are: Arts and Communication; Business, Management, and Technology; Health Services; Industrial and Engineering Technology; Natural Resources; as well as Public and Human Services. See www.careerkokua.org/ce/hcp.
- A program of study begins at the secondary level where core and/or cluster courses within each of Hawaii's six pathways are offered.

Includes coherent and rigorous content aligned with standards

- Curriculum for the core and clusters in each of the pathways is derived from the standards that have been validated by business/industry with input from secondary and postsecondary instructors.
- Pathway standards are derived from local and national sources and standards.

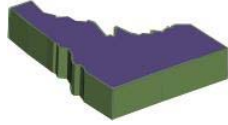
Includes ways of earning postsecondary credits

- Where secondary/postsecondary programs of study are articulated, the introductory course(s) in the postsecondary program includes the same sequence of standards included in the secondary core and cluster program of study so that there is no duplication in the secondary to postsecondary progression of courses. This allows for secondary students to acquire postsecondary credits in a program that leads to an industry-recognized credential or certificate at the postsecondary level, or an associate or baccalaureate degree.

Leads to credentials/certificates/degrees

- In accordance with American Association of Community and Junior Colleges accreditation standards, when accepting transfer credits to fulfill degree requirements, the institution certifies that the expected learning outcomes for transferred courses are comparable to the learning outcomes of its own courses.

Idaho



Incorporates secondary/postsecondary education elements

- Professional-Technical Education in Idaho spans all educational levels—secondary, postsecondary, and adult – contributing to a thorough education by providing students with career knowledge, technical skills, and attitudes necessary to succeed in the workplace.
- Idaho’s professional technical education system has grouped the 16 nationally recognized clusters into six large clusters: Agriculture & Natural Resources; Arts & Communications; Business & Management; Health Sciences; Engineering & Industrial Systems; and Human Resources.

Includes coherent and rigorous content aligned with standards

- The Essential Components required for secondary professional-technical education programs include: Sequence of courses organized using Career Clusters; Recommended academic courses; Alignment with Idaho Content Standards; Realistic work experience provided through laboratory and/or industry-related activities; Advisory Committee; Leadership development that is integral to the program and is generally provided through professional-technical student organizations; Postsecondary Articulation; Certified Instructor(s); and Safety Instruction as appropriate to the program of study.

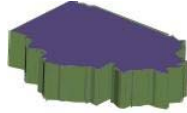
Includes ways of earning postsecondary credits

- Secondary and postsecondary professional-technical education programs provide opportunities for students to earn college credit as outlined in the State Board of Education’s Accelerated Learning Program policies and procedures. The State Board recognizes four different types of advanced learning opportunities: Advanced Placement, dual credit, tech prep, and the International Baccalaureate program.

Leads to credentials/certificates/degrees

- Postsecondary professional-technical education programs consist of a sequence of courses that provide students with the knowledge and competencies required for a postsecondary technical certificate, an advanced technical certificate, or an Associate of Applied Science (A.A.S.) degree. A.A.S. degree programs must include a minimum of 16 hours of general education coursework selected from each institution’s general education core that is comparable to the general education core of the Associate of Arts (A.A.) and Associate of Science (A.S.) degrees.

Illinois



Incorporates secondary/postsecondary education elements

- Illinois secondary and postsecondary education will organize programs of study around the 16 career clusters.
- Approval of career and technical education programs for funding is based on Illinois State Board of Education criteria for program approval. Programs are approved as a part of the Regional Plans. Regardless of which instructional program is being developed to obtain program approval for funding, careful consideration must be given to program approval elements. The Illinois Community College Board uses a similar process to approve programs at the postsecondary level.
- Programs of Study committees comprised of secondary, postsecondary, business, and industry representatives will develop sample Programs of Study. These will be used to guide secondary and postsecondary educators when implementing a Program of Study.
- Joint planning that includes secondary and postsecondary representatives will be used to strengthen Programs of Study at the state and local levels.

Includes coherent and rigorous content aligned with standards

- In addition to technical skills and industry certifications, approved program content must reflect the integration of academic and workplace skills. Curriculum must be aligned with the *Illinois Learning Standards* and industry certifications, when available.

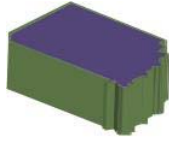
Includes ways of earning postsecondary credits

- The Illinois Articulation Initiative is a statewide effort to coordinate the articulation process for a variety of instructional programs.
- Dual enrollment and dual credit options are encouraged in coordination with the Illinois Community College Board and are viable as part of the program approval process.

Leads to credentials/certificates/degrees

- Experience in and understanding of all aspects of the industry are required, including alignment with industry certifications where available and appropriate.

Indiana



Incorporates secondary/postsecondary education elements

- At the state level Programs of Study are a new concept. However, similar concepts have been implemented at the local level.
- Since Indiana operates as a local control State, the programs, which may be adopted by local education agencies and postsecondary institutions, are only those programs that have been developed and implemented locally.
- The state agents set a common definition for Programs of Study: A Career and Technical Program of Study is a CTE program area that incorporates secondary and postsecondary education elements.

Includes coherent and rigorous content aligned with standards

- The state agents set a common definition for Programs of Study: A Career and Technical Program of Study is a CTE program area that includes challenging academic and CTE content.

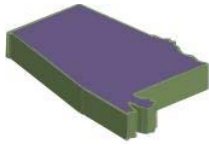
Includes ways of earning postsecondary credits

- The State agents set a common definition for Programs of Study: A Career and Technical Program of Study is a CTE program area that has a coordinated, non-duplicative progression of courses from secondary to postsecondary; and may include an opportunity for secondary students to participate in dual enrollment courses or somehow acquire postsecondary credits while in high school.

Leads to credentials/certificates/degrees

- The State agents have set a common definition for Programs of Study: “A Career and Technical Program of Study is a CTE program area that leads to an industry-recognized credential or certificate at the postsecondary level, or an associate or baccalaureate degree; includes a technical assessment, end of course assessment, or third party assessment at the end of the program (within secondary and within postsecondary; and preferably leads to a current or emerging occupation which is high wage and in high demand (at least within the local region) and/or is associated with Science, Technology, Engineering, Mathematics (STEM) discipline areas.

Iowa



Incorporates secondary/postsecondary education elements

- The requirements in A2 (a) I-IV of the State Plan are addressed in a comprehensive statement that identifies the requirements for programs of study. During the transition year, eligible recipients will be convened to acquire their input regarding programs of study. This input will be used to make modifications within the state plan for a five-year period.
- CTE programs of study will consist of coherent and rigorous curriculum that includes academic and technical content that is a coordinated, non-duplicative progression of courses that align secondary education with postsecondary education to prepare students adequately to succeed in postsecondary education leading to an industry-recognized certificate or credential, including the bureau of apprenticeship and training, credit certificate, diploma, Associate of Applied Science (AAS) or Associate of Science (AS) with a career option in a specific career field.

Includes coherent and rigorous content aligned with standards

- CTE programs of study will consist of coherent and rigorous curriculum that includes academic and technical content that is a coordinated, non-duplicative progression of courses that aligns secondary education with postsecondary education to prepare students adequately to succeed in postsecondary education.

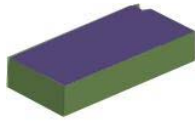
Includes ways of earning postsecondary credits

- The CTE programs of study may include concurrent enrollment opportunities for postsecondary credit. As part of the local needs assessment process, school districts and community colleges shall evaluate opportunities for concurrent enrollment.

Leads to credentials/certificates/degrees

- CTE programs of study will consist of coherent and rigorous curriculum that adequately prepares students to succeed in postsecondary education leading to an industry-recognized certificate or credential, including the bureau of apprenticeship and training, credit certificate, diploma, Associate of Applied Science (AAS) or Associate of Science (AS) with a career option in a specific career field.

Kansas



Incorporates secondary/postsecondary education elements

- Development of State and local programs of study will begin during the FY 2008 transitional plan year. The State programs of study will be modeled after the national templates found at www.careerclusters.org or through the College to Career Transition Initiative (CCTI).
- Kansas has identified six career fields (Environmental & Agricultural Systems, Arts, Communication, & Information, Industrial, Manufacturing, & Engineering Systems, Health Science, Human Resources & Services, and Business, Marketing & Management) inclusive of the 16 career clusters and their pathways.
- Key components to the development and implementation of the programs of study include: identify program content experts, secondary instructors and postsecondary faculty to establish curriculum advisory committees for each of the sixteen career clusters and their respective pathways; work toward creating a seamless system to assist students transitioning from secondary to postsecondary institutions through collaboration between Kansas State Department of Education (KSDE) and Kansas Board of Regents (KBOR); as well as aligning secondary and postsecondary curriculum to assist students entering postsecondary institutions.

Includes coherent and rigorous content aligned with standards

- To encourage collaboration between secondary and postsecondary institutions, all approved postsecondary career and technical education programs leading to a technical certificate and/or an associate degree will be required to develop, submit for review, and implement a program of study that includes a coherent, coordinated and non-duplicative sequence of courses with rigorous academic and relevant technical content. The timeline for development and implementation of programs of study will be reflected in each institution's local plan and annual application for funds.

Includes ways of earning postsecondary credits

- A postsecondary concurrent enrollment policy is already in place and high school students currently have this opportunity. As programs of study are developed and implemented opportunities for statewide articulation of both CTE and academic courses will be identified.

Leads to credentials/certificates/degrees

- All secondary and postsecondary institutions, all postsecondary career and technical education programs leading to a technical certificate and/or an associate degree will be required to implement a program of study that leads to an industry-recognized certificate, postsecondary technical certificate, or an associate degree.

Kentucky



Incorporates secondary/postsecondary education elements

- Kentucky has begun work to include career pathways (programs of study) into its career clusters. A committee is defining career pathways, designing a template for aligning curriculum, and developing six model career pathways templates to be used by eligible recipients.
- The six career cluster areas include Manufacturing, Health Sciences, Education, Construction, Information Technology, and Science/Technology/Engineering/Mathematics.

Includes coherent and rigorous content aligned with standards

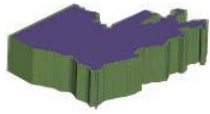
- Programs will consist of non-duplicative rigorous sequences of courses.

Includes ways of earning postsecondary credits

- Articulation and dual credit agreements are in place for the majority of secondary and postsecondary institutions across the state.
- Students who complete the two year postsecondary program of study at a community and technical college will be able to continue the program of study at the baccalaureate degree level through articulation agreements between the community and technical college system and the four year degree institutions.

Leads to credentials/certificates/degrees

- The content of the programs of study will be developed in conjunction with and validated by appropriate business and industry representatives.
- If national or state industry certifications are available, secondary and postsecondary programs and the teachers will be encouraged to obtain certification by the industry.
- In cases where industry certification is not available, the appropriate industry will validate the program content and student standards of achievement.
- Upon successful completion of the program, students will be able to receive an industry-recognized credential or certificate, or an associate or baccalaureate degree at the postsecondary level.



Louisiana

Incorporates secondary/postsecondary education elements

- Development of programs of study within five career pathways is specifically targeted for current year: Construction; Hospitality & Tourism, Information Technology, Advanced Manufacturing, and Healthcare; during the transition year it will be expanded to include: Automotive and Education (i.e., Students Teaching and Reaching).
- The State level Success through Articulation-START (formerly STOP—Secondary to Postsecondary Steering Committee) will continue to collaborate in aligning postsecondary courses with the existing and newly developed secondary programs of study to establish clearly defined pathways from secondary to postsecondary in order to assist students with completion of the related postsecondary industry-based certification, certificate, diploma, and/or degree programs.

Includes coherent and rigorous content aligned with standards

- All secondary career and technical education model course guidelines are aligned with the State's core academic standards and Grade Level Expectations for high school students to ensure coherent and rigorous academic content.
- Eligible recipients will use the model course guidelines to assist in the development of programs of study.

Includes ways of earning postsecondary credits

- At the end of eighth grade year, the State's Career Options Law requires middle school students to complete a Five Year Educational Plan. The plan is completed for grades 9 through 13 (one year after high school) based on the student's area of interest.
- The plan is designed to help students develop a plan for their future beyond high school. Emphasis will be placed on "key junctures" for students moving from their secondary courses into their first postsecondary courses to include counseling experiences, junior/senior years of high school, and Dual Enrollment/Early and Middle College opportunities.
- Students have the opportunity, throughout the State, to participate in Dual Enrollment programs and/or articulated credit courses.

Leads to credentials/certificates/degrees

- All current programs of study and future programs of study are required to lead to the earning of a postsecondary certificate and degree, along with industry based certifications that may be available.

Maine



Incorporates secondary/postsecondary education elements

- Maine's programs of study will be developed in partnership with secondary schools, postsecondary schools, employers, industry groups, and other stakeholders to create curriculum and to support academic, technical, and workplace standards.

Includes coherent and rigorous content aligned with standards

- A program of study is a planned sequence of courses that integrates high quality core academic knowledge with technical and occupational skills and knowledge.
- At the secondary level, academic rigor is ensured through the connection to the Maine Learning Results and No Child Left Behind.

Includes ways of earning postsecondary credits

- A program of study may include articulation, but it is not required.
- The State will require that a contact/position be identified by the individual postsecondary Community Colleges and the individual secondary schools to be responsible for the facilitation, record keeping and reporting on Articulation Agreements, Enhanced Articulation Agreements, and Program of Study Agreements.

Leads to credentials/certificates/degrees

- Students would have up to three years to take advantage of the postsecondary credits and programs of study made available under the Articulation Agreements.

Maryland



Incorporates secondary/postsecondary education elements

- Maryland's ten career clusters guide the continuous improvement of CTE programs of study: Arts, Media and Communication; Business Management and Finance; Construction and Development; Consumer Service, Hospitality, and Tourism; Environmental, Agriculture, and Natural Resources; Health and Biosciences; Human Resource Services; Information Technology; Manufacturing, Engineering, and Technology; as well as Transportation Technologies.
- These ten clusters are aligned with Maryland's economic and workforce development needs and support the establishment of non-duplicative learning pathways from high school through postsecondary education.

Includes coherent and rigorous content aligned with standards

- The CTE program of study template includes the sequence of academic and technical courses necessary for students to complete in order to be prepared for both college and careers. The template outlines the secondary program of study as well as the postsecondary program of study.
- CTE students are expected to meet State-established academic standards based on Maryland's high school core learning goals and voluntary state curriculum

Includes ways of earning postsecondary credits

- Each career cluster pathway program consists of a planned, sequential program of study linking academic and technical courses from secondary to postsecondary education.
- The program adds value to students' overall educational programs by earning credit through dual enrollment, articulated credit, transcript credit, and apprenticeship.
- Since the inception of Tech Prep, all CTE programs have been, designed to provide students with a variety of options for earning credit toward postsecondary education, including advanced placement courses and credit by examination.

Leads to credentials/certificates/degrees

- CTE programs of study combine academic and technical courses beginning in high school and continuing for two or more years of postsecondary education.
- Maryland is working to align postsecondary community college programs with baccalaureate degree programs.
- CTE programs of study include opportunities for students to earn industry-recognized credentials; or students can earn advanced placement in postsecondary education.

Massachusetts



Incorporates secondary/postsecondary education elements

- Plans are underway to complete the development of 43 *Program of Study Grids* based on each of the 43 *Vocational Technical Education Frameworks* that may be adopted by eligible recipients.
- The *Frameworks* may be adapted into coordinated, non-duplicative progression of courses.
- Faculty in public two-year colleges, as well as business and industry, validated these *Frameworks* to ensure transition from secondary to postsecondary and apprenticeship.

Includes coherent and rigorous content aligned with standards

- The *POS Grid* and the *Frameworks* include coherent and rigorous content aligned with challenging academic standards.
- The *Frameworks* are based on all aspect of the industry with six knowledge and skills strands representing each aspect of the industry.
- The state will provide technical assistance concerning cross-walking the K&S standards contained in the *Frameworks* with those in the existing CTE programs, as well as professional development on developing lesson plans for each CTE POS.
- The state will launch an initiative to institutionalize the development of Career Plans for all students in CTE programs.
- Through the development and implementation of transition services and activities such as college placement testing (CPT), remedial work and college advising is offered while students are enrolled in secondary CTE.

Includes ways of earning postsecondary credits

- The *Frameworks* and *POS Grids* provide an opportunity to develop statewide articulation agreements as well as participation in dual or concurrent enrollment, including registered apprenticeship programs or other ways to acquire postsecondary education credits.

Leads to credentials/certificates/degrees

- The *Frameworks* and the *POS Grids* lead to a postsecondary certificate, journey worker status, associate or baccalaureate degree in CTE.

Michigan



Incorporates secondary/postsecondary education elements

- Michigan adopted the *States Career Clusters* model that incorporates knowledge and skills for careers, including secondary and postsecondary components.
- About 50% of the secondary CTE programs in Michigan have signed articulation agreements with community colleges.

Includes coherent and rigorous content aligned with standards

- The state will collaborate with LEAs, business and industry advisory committee members, and other stakeholders to develop state-recognized standards in all state-approved CTE programs. These will be validated by secondary and postsecondary educators with business and industry input.
- The combination of new academic requirements and statewide technical standards will ensure that CTE students receive instruction in rigorous academic and CTE content.
- The state will convene task forces to develop POS based upon the state identified and industry recognized standards for each CTE program.
- Michigan has a valuable resource through the Michigan Careers website: www.michigan.gov/careers.

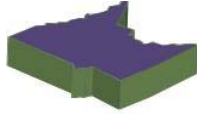
Includes ways of earning postsecondary credits

- Students will be able to participate in dual enrollment, middle college programs, or tech prep articulated programs to acquire postsecondary education credits.
- There are two middle colleges operating in Michigan with plans to start five new ones focusing on Health Care Careers in the fall of 2007.

Leads to credentials/certificates/degrees

- Approved POS must lead to an industry-recognized credential or certificate at the postsecondary level, an associate or baccalaureate degree, or recognized apprenticeships.
- The state facilitates statewide research and validation of national and state industry recognized credentials, licenses, and/or certificates.

Minnesota



Incorporates secondary/postsecondary education elements

- Even though the state has long used the 16 CTE career clusters as a data-organizing framework, only recently has it begun exploring the use of career pathways and POS as a structural framework for organizing the coordinated delivery of CTE in high schools and colleges.
- The state intends to use this framework to support the new consortia structure characterized by greater collaboration among secondary and postsecondary partners at the local level.
- Examination of the 81-career pathways model has begun as well as classification of existing college CTE programs within the 16 career clusters and 81 pathways.

Includes coherent and rigorous content aligned with standards

- Several Tech Prep consortia have recently developed POS for grades 9-14 in Health, IT, and Manufacturing.
- Plans for a state model POS in the area of Agriculture and Natural Resources are in progress.
- Career pathways and POS will either be developed locally or by the state with local input and span at least grades 11-14.
- The state is promoting early consideration of career clusters as a guidance tool (middle school) focusing on a set of Career Fields (5 or 6) that encompass the 16 career clusters.
- The state will identify at least three model POS during the FY 08 transition year.

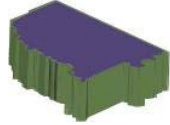
Includes ways of earning postsecondary credits

- The state has decided to make articulation and dual enrollment required activities.
- Minnesota expects the concept of *brokering of services* to be a key ingredient in forging new articulation agreements that extend beyond a single consortium, and set the stage for regional and statewide articulation agreements.

Leads to credentials/certificates/degrees

- Obtaining credentials is a criterion in developing a statewide strategy.

Mississippi



Incorporates secondary/postsecondary education elements

- The POS incorporates secondary and postsecondary education elements by establishing baseline occupational competencies in secondary statewide curriculum frameworks that directly relate to postsecondary occupational program areas.

Includes coherent and rigorous content aligned with standards

- Additional emphasis has been placed on reading, math, and science skills as well as tying all curricula to appropriate licensure or national certification standards, standards in the state's subject area testing program as required by NCLB, and the 21st Century Skills.
- Mississippi is currently implementing an initiative titled *Redesigning Education for the 21st Century Workforce* that includes implementation of career pathways for students.
- In the winter of 2007, members of the Career Pathway Advisory Task Force (CPAT) will meet with the Instructional Design Specialists to develop statewide pathway plans of study linking grades 9-16, as well as competencies in each of the Mississippi career clusters (seven clusters aligned with the national 16 career clusters).
- The plans of study will be similar to those developed by the States' Career Clusters.
- The initiative will also include a strong career guidance component.

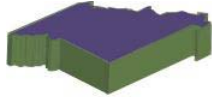
Includes ways of earning postsecondary credits

- Currently, seven statewide articulation agreements are in place. Plans are underway to develop articulation agreements for all programs by committees of secondary and postsecondary educators.
- Also there are dual-credit opportunities in place for students to earn college credit in core courses, such as English composition, Math, etc.

Leads to credentials/certificates/degrees

- All postsecondary programs lead to a certificate or associate degree.
- The state will promote the use of nationally recognized standards and certification as an exit criterion for secondary and postsecondary programs.

Missouri



Incorporates secondary and postsecondary education elements

- The state will prepare a framework and process for secondary and postsecondary education to develop POS.
- Recipients will show collaborative efforts with secondary, postsecondary and business and industry in preparing a gap analysis between course/program outcomes and industry-recognized knowledge and skills.

Includes coherent and rigorous content aligned with standards

- Each POS will include a three-part curriculum framework built around a 4+2+2 articulation model.
- CTE course competency alignment to the Missouri Show-Me Standards as well as knowledge and skills validated by industry advisory councils are part of the criteria.
- Comprehensive student career guidance and counseling must be included in the development of POS.

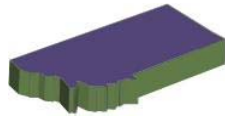
Includes ways of earning postsecondary credits

- All secondary CTE programs are required to have at least one articulation agreement/dual credit arrangement with a postsecondary institution.
- Criteria for statewide articulation agreements will be developed so the awarding of credit will be uniform across the state.

Leads to credentials/certificates/degrees

- National certification or accreditation is being pursued.

Montana



Incorporates secondary/postsecondary education elements

- The POS have been named *Big Sky Pathways* (BSP) will include pathway specific knowledge and skills taught at the secondary level while the occupational specialties will be primarily taught at the postsecondary level.
- The state will not design BSPs for all the 81 identified career pathway options.

Includes coherent and rigorous content aligned with standards

- Building upon and adapting the work of the States' Career Clusters initiative, Montana's career cluster framework will use 6 career fields, 16 clusters, and 81 pathways.
- The state will launch a curriculum crosswalk process whereby CTE teacher will identify state academic standards (identified on a course-by-course basis) that are appropriate for each BSP and each CTE course.
- In addition, for each BSP, core technical skills and competencies (based on industry skill standards) will be identified on a course-by-course basis.
- This more specific set of technical skills will be the foundation for a new technical skill assessment process.

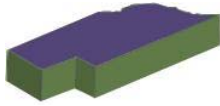
Includes ways of earning postsecondary credits

- The state is pursuing a statewide policy for dual enrollment ("dual-credit" and "college credit-only") opportunities for secondary students.
- There are also opportunities for students to pursue Advanced Placement and early college or aligned/articulated coursework.
- Model and statewide articulation agreements will be developed through the work of the redesigned Tech Prep program.
- Other BSPs will include coursework that is articulated so it leads directly into a registered apprenticeship program.

Leads to credentials/certificates/degrees

- Each BSP will indicate one or more postsecondary level credentials, and can be customized so it is most relevant to the local job market.

Nebraska



Incorporates secondary/postsecondary education elements

- The Nebraska Career Fields and Clusters Model were developed from the Career Clusters Framework as developed by the States Career Cluster Initiative; the Model groups the 16 clusters into six career fields.
- The secondary POS will include a curriculum framework that includes academic courses, CTE exploratory (middle school), CTE foundational (8-10 grade), CTE concentration (10-12), and postsecondary articulated/aligned curriculum.
- The postsecondary POS will identify both the academic and CTE courses required to reach a credential.

Includes coherent and rigorous content aligned with standards

- A POS planning committee will develop model POSs; other committees will develop and validate the actual model POS at the cluster and pathway levels.
- These committees will identify the course/knowledge and skill requirements for each POS, using the national plans of study as a guide.
- The POS will use the Nebraska Career Fields and Clusters Model that provide a system of organizing instruction and provides a framework for career guidance and counseling.

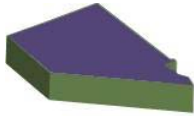
Includes ways of earning postsecondary credits

- Students will have opportunities to earn postsecondary credit through dual enrollment, articulated credit, and transcript credit.
- A portion of the reserve funds will be used to support the development and implementation of articulation agreements through the Advanced Learning Partnerships.

Leads to credentials/certificates/degrees

- One of the postsecondary essential components is the alignment/articulation of courses/knowledge and skills between short-term, certificate, two-year degree and four-year degree programs.

Nevada



Incorporates secondary/postsecondary education elements

- Secondary-postsecondary linkages have been implemented through local articulation agreements.
- Secondary-postsecondary articulation agreements are currently required.
- The model to be developed includes the traditional 2+2 and a new 2+2+2.

Includes coherent and rigorous content aligned with standards

- A comparative analysis of the secondary and postsecondary curricula ensures the proper alignment and sequencing of course goals, objectives, and competencies.
- CTE programs are organized under six umbrella areas that are further defined by the State approved sixteen career clusters; programs are further organized in career pathways.
- Statewide skills standards have been developed for secondary CTE programs; all state standards integrate academic standards in English, math and science.
- An academic crosswalk with each CTE performance standards documents this integration.
- The development of POS and career pathways will be used as “tools” to help guide students through high school.

Includes ways of earning postsecondary credits

- Secondary-postsecondary linkages have been promoted through articulation agreements.
- Students earn college credit immediately upon completion of articulated coursework.
- Students may earn up to 15 postsecondary credits in articulated programs.

Leads to credentials/certificates/degrees

- Students are eligible to earn a baccalaureate or associate degree, industry certificate or credential and/or a certificate of completion.

New Hampshire



Incorporate secondary/postsecondary education elements

- Career Clusters have been introduced statewide.
- A template, based on the national career clusters model, has been created for designing programs of study, known as Career Pathway Plans of Study (CPPOS).
- Secondary and postsecondary staff will use this template to design articulations.
- CPPOS will map sequences of instruction that start at the seventh grade and end at the baccalaureate level.

Includes coherent and rigorous content aligned with standards

- New Hampshire has built a solid foundation for expanding and updating programs of study.
- The state has established the rigor, standards, and sequence of instruction needed for CPPOS.
- Business and industry will be brought in to validate whether these programs meet their standards.
- The state is exploring options for creating program advisory committees with oversight of programs at statewide or regional levels.
- Tech Prep has also taken the lead in developing a career guidance document to be used as a tool with students.

Includes ways of earning postsecondary credits

- Tech Prep took the lead in developing articulation agreements that have evolved into Memoranda of Understanding (MOU) that go beyond the narrower, more traditional agreements and address such issues as dual-credit opportunities.
- New Hampshire Community Technical Colleges will offer the Running Start program. This initiative allows high school students to enroll in college, credit-bearing courses at a significant reduction in tuition. This dual-credit program meets high school requirements and satisfies college credits.

Leads to credentials/certificates/degrees

- The CPPOS will contain the necessary requirements for students to successfully complete, without duplication, instruction that leads to certification or a degree.
- A team will research existing industry recognized credentials to determine which will be added as another set of CPPOS outcomes.

New Jersey



Incorporates secondary/postsecondary education elements

- New Jersey has adopted the States' Career Clusters Model. As such, the state will implement CTE programs of study that are consistent with this model and the associated 81 pathways.
- This framework will help the state to develop, improve, and expand CTE offerings.

Includes coherent and rigorous content aligned with standards

- The state places strong emphasis on linking CTE to the New Jersey Core Curriculum Content Standards.
- The state will conduct an inventory of all eligible recipients to identify all current courses, their sequencing, and their role in a career pathway/program of study under the appropriate Career Cluster.
- On-site visits will be conducted to review CTE offerings and model programs of study will be identified.
- The state plans to assist local recipients in developing more academically and technically rigorous CTE programs of study.
- The state supports strong developmental career counseling programs and is a member of the National Leadership Cadre.

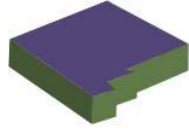
Includes ways of earning postsecondary credits

- The state will place strong emphasis on the development and implementation of articulation agreements.

Leads to credentials/certificates/degrees

- All college-based postsecondary programs lead to a certificate, apprenticeship, or degree.

New Mexico



Incorporate secondary/ postsecondary education elements

- The Educational Plan for Student Success (EPSS) builds a career-technical education program of study that includes secondary/postsecondary elements.
- The state's graduation requirements are foundational coursework, which includes local graduation requirements.

Include coherent and rigorous content aligned with standards

- The state's 7 career clusters aligned with the 16 national career clusters.
- The Program of Study (POS) is a non-duplicative sequence of courses that encompass rigorous content aligned with challenging academic standards and relevant technical knowledge and skills.
- The POS sets the parameters for and directs LEAs on implementation within the POS of a fully integrated college preparatory core.
- This college preparatory, non-duplicative sequence of courses reflects NM's commitment to designing and assisting LEAs in the development of POS that adequately prepare students to succeed in postsecondary education.
- A strong academic core that prepares the learner to enter the workplace with high level, contextually relevant competencies in the areas of mathematics, reading, language and science is included.

Includes ways of earning postsecondary credits

- POS include strong engagement for a fourth year of mathematics that aligns to the career area of study (conducive to dual/articulated credit opportunities).

Lead to credentials/certificate/degrees

- Funded entities must identify the appropriate industry based certification within the identified POS, i.e., funded entities must identify the industry recognized credentials and/or certification(s) offered to students through this program of study (e.g. Oracle Certification).
- The credential/certification does not dictate the curriculum; the credential/certification is the result of the sequential education/training program that is embedded within the POS and aligned to an associate or baccalaureate degree where appropriate.
- Industry recognized credentials and/or certifications are only required if they are available and appropriate for the pathway.

New York



Incorporates secondary/postsecondary education elements

- The state is creating a regional technical assistance consortia approach to address career pathways and career cluster transition issues.

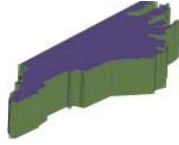
Includes coherent and rigorous content aligned with standards

- Tech Prep in New York will be renamed Career Pathways Programs.

Includes ways of earning postsecondary credits

Leads to credentials/certificates/degrees

North Carolina



Incorporates secondary/postsecondary education elements.

- The state has a comprehensive CTE Standard Course of Study developed by educators with input from business industry, community college, and university representatives.
- The pathway leads to a seamless transition from secondary to postsecondary education.

Includes coherent and rigorous content aligned with standards

- Curriculum is aligned to academic standards/courses.
- The State developed a booklet “Building Career Pathways” that includes 50 career maps describing possible careers and how students may prepare for them.
- A modification process allows schools to offer courses not included in the Standard Course of Study, if approved by the State.

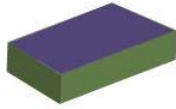
Includes ways of earning postsecondary credits

- A dual enrollment program is a joint effort between Local Education Agencies (LEA) and Community Colleges that allows high school students to enroll in college courses for credit prior to graduation.
- Middle College High Schools provide students the opportunity to complete their high school education on a community college campus.
- Articulated curriculum is cooperatively developed between secondary and postsecondary education.
- The state initiated a statewide articulation agreement consisting of 63 high school courses that equate to 71 community college courses.

Leads to credentials/certificates/degrees

- Whenever there is an industry-recognized credential, programs are designed to prepare students for industry recognized credential requirements.

North Dakota



Incorporates secondary/postsecondary education elements

- The Career Clusters model is used to develop POS that incorporate secondary and postsecondary education elements.

Includes coherent and rigorous content aligned with standards

- Model POS will be based on industry standards and each program will be based on curriculum standards that address academic and technical achievement in a coordinated and non-duplicative manner.
- The standards process begins with a review of national and industry standards and ends with cross walking the standards with the academic areas.
- There is a partnership between the Career Development Supervisor, local counselors, and the ND CRN to provide a coordinated occupational and career information delivery system including career planning through career tabloids, Choices Planner and Explorer, TestGEAR.

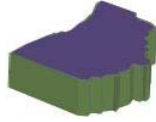
Includes ways of earning postsecondary credits

- Students have always been able to take college courses for credit. The dual credit program was signed into law in 1997.

Leads to credentials/certificates/degrees

- Each of the pathways is designed to lead to all levels of education.

Ohio



Incorporates secondary/postsecondary education elements

- A program administration planning team of statewide stakeholders, including secondary and postsecondary recipients, will develop and recommend criteria and processes for the development of local POS.
- Secondary applications for career technical state funding include assurances and descriptions of secondary and postsecondary program linkages.

Includes coherent and rigorous content aligned with standards

- State models of POS will be available in FY 2008. Local implementation will begin in FY 2009.
- The state is developing 16 career field technical content standards documents that integrate technical and academic content and span grades 9 through the associate degree.
- The state is developing inquiry-based instructional modules that emphasize problem solving, scientific thinking, and reasoning and teamwork skills.

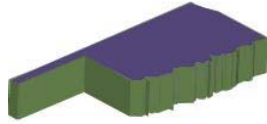
Includes ways of earning postsecondary credits

- Career Technical Credit Transfer guarantees transferability of credits from high school programs to community and four-year colleges.
- Ohio's Partnership for Continued Learning includes the development of dual enrollment and postsecondary enrollment options.

Leads to credentials/certificates/degrees

- Stackable Certificates is an initiative to align industry training, WorkKeys, and pre-college curriculum to college coursework through a system of certificates.
- Industry credentialing is being added as part of Ohio's secondary/postsecondary assessment system.
- The state is expanding adult workforce credentialing and disaggregated reporting of program data.

Oklahoma



Incorporates secondary/postsecondary education elements

- The Oklahoma Department of Career and Technology Education (ODCTE) will use the national career clusters and pathways as their models.
- The cluster program of study (POS) is a career major for Oklahoma's secondary and postsecondary students.
- All eligible high schools and postsecondary institutions will have at a minimum one POS.

Includes coherent and rigorous content aligned with standards

- Students have developed individualized career plans and career portfolios that give them assistance with their pathways. Secondary CTE students are offered a clear option to pursue a postsecondary program by State law implemented May 2005.
- All programs will be reviewed for academic content using the National Career Cluster knowledge and skills.

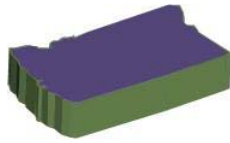
Includes ways of earning postsecondary credits

- Alliances are formed between higher education partners with associate of applied science (AAS) degree programs and a technology center.
- Students may also enroll in concurrent academic courses. Through state law up to 12 hours of concurrent collegiate level coursework is offered free of charge to eligible students.

Leads to credentials/certificates/degrees

- Each high school career major must lead to industry standards where applicable aligned with industry credentials or certificates.
- During the transition year, postsecondary recipients must align their portion of POS with industry credentials where applicable.
- In addition, *An Industry Certification Resource Guide* was developed by the Statewide and regional high priority lists as well as the State's list of Industry Recognized Certifications for CTE programs currently used by the Community Technology Centers (CTC) in the State.

Oregon



Incorporates secondary/ postsecondary education elements

- Oregon will sustain the 18 regional consortia that partner area high schools with Oregon's 17 community colleges. Regional consortia have used Oregon's program identification hierarchy of 6 board career pathways, 26 clusters and 111 focus areas to identify their program of study.
- The regional program of study work will build on the foundation of strong secondary and postsecondary articulation and will focus on deeper alignment of secondary and postsecondary CTE standards.
- Oregon is utilizing the high school education plan diploma requirement along with the postsecondary career pathway "roadmap" to construct a CTE program of study template. The national Career Cluster/CCTI template is being used as the standard.

Includes coherent and rigorous content aligned standards

- Oregon's POS will include knowledge and skills aligned with Oregon's Academic Content Standards as well as industry skill levels and GE requirements.
- Shared technical content (between secondary and postsecondary) incorporates the knowledge and skills identified in the Oregon Skill Sets developed and validated through national and state industry input.
- Oregon has developed a crosswalk of existing approved secondary and postsecondary CTE programs that align with Oregon's 26 career clusters.
- Oregon will leverage the momentum generated from the state wide implementation of the Career Guidance and Academic Advising Framework to assist students in the development of their program of study.

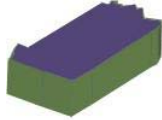
Includes ways of earning postsecondary credits

- Oregon supports local and regional development of dual credit for both academic and CTE courses. A Dual Credit Task Force is beginning discussions on the implementation of statewide articulation.
- Alignment of content between secondary and postsecondary education, may include course articulation and/or other ways to acquire postsecondary education credits, e.g. Oregon's credit for proficiency.

Leads credentials/certificates/degrees

- Acquisition of diplomas, certificates, degrees, and industry credentials will be documented through the existing data collection system.
- The postsecondary component of Oregon's POS will be targeted at the program outcome of an industry-recognized credential or college certificate or degree.

Pennsylvania



Incorporates secondary/postsecondary education elements

- The existing CTE program approval system requires secondary entities to submit secondary and postsecondary scope and sequence. Articulated credits are submitted as part of the approval process.
- Postsecondary entities are required to identify their secondary partners and to ensure the programs of study components at the secondary and postsecondary levels are aligned.
- The state is developing statewide committees that have the following required representations: secondary academic and technical instructors, postsecondary academic and technical faculty, counselors and college admissions, business and industry, trade associations, and professional associations.

Includes coherent and rigorous content aligned with standards

- The academic standards and general education courses are aligned to the technical content and occupations related to each program of study.
- Statewide committees comprised of business and industry representatives will validate standards lists. The standards are inclusive of secondary and postsecondary program components.
- Technical coursework is aligned to industry skill standards.
- Students have developed individualized career plans and career portfolios that give them assistance in selecting and following a career choice.

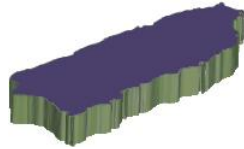
Includes ways of earning postsecondary credits

- Secondary education students are offered dual enrollment programs at local community colleges and postsecondary institutions, and include early college, middle college, and gateway to college programs.

Leads to credentials/certificate/degree

- All programs are aligned with industry standards where applicable, and aligned with industry credentials or certificates at the secondary and postsecondary levels.
- In addition, an *Industry Certification Resource Guide* was developed by the State. All certifications were identified by program area. The list is applicable to secondary and postsecondary programs.

Puerto Rico



Incorporates secondary/postsecondary education elements

- The secondary and postsecondary CTE system will work collaboratively to expand articulation agreements. The goal is to have statewide agreements in place throughout the island by July 1, 2008.

Includes coherent and rigorous content aligned with standards

- PR's secondary CTE system is moving towards the national model of 16 career clusters and 81 pathways. Currently, 69 POS are approved within 25 pathways, within 10 career clusters.
- At the current time at least one POS is supported in each school. In all, 155 schools are approved in different pathways.
- The statewide end-of-course assessments are based on the curriculum frameworks and are used for occupational skill attainment measure.
- A model for career action planning was developed under Perkins III and has become widely implemented. This model encourages annual involvement of parents and uses teachers as advisors.

Includes ways of earning postsecondary credits

- Puerto Rico will build on the success of articulation agreements in place as result of the past tech prep initiative.
- All new CTE POS identify the state credential/certification as well as apprenticeship opportunities upon completion after high school.

Leads to credentials/certificates/degrees

- The Higher Education Council approves postsecondary certificate and degree programs.
- Certificate programs designed for professional certification or licensure also require documentation of approval by the appropriate agency or board.
- Students have opportunities for further education, apprenticeship, and industry credentials.

Rhode Island



Incorporates secondary/postsecondary education elements

- Rhode Island Department of Education (RIDE) Pre k – 16 system is designed to smooth transitions from one level to the next and seamlessly move students from secondary schools to postsecondary institutions.

Includes coherent and rigorous content aligned with standards

- The strength of the system includes a support for standards and assessments, establishes a logical progression, reduces the need for remediation, is efficient and effective, and opens doors to new ways of doing business.

Includes ways of earning postsecondary credits

- No specific mention of these programs other than to say that RIDE follows all dictates of Perkins IV school requirements.

Leads to credential or certificate/degrees

- No specific mention of these programs other than to say that RIDE follows all dictates of Perkins IV school requirements.

South Carolina



Incorporates secondary/postsecondary education elements

- During the transition period, South Carolina, with a local plan consortium agreement, will develop a framework and process for secondary and postsecondary education to identify and implement programs of study, using the Nebraska career fields and cluster model as defined by the State career cluster initiative.

Includes coherent and rigorous content aligned with standards

- The secondary POS will include courses with rigorous content.
- It will include academic courses, CTE exploratory (middle school), CTE foundational (8-9-10 grade) CTE concentration (10-11-12 grade), and postsecondary articulated/aligned curriculum.

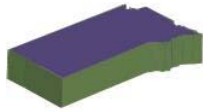
Includes ways of earning postsecondary credits

- May include giving secondary education students the option of taking dual or concurrent programs, or other ways to obtain postsecondary credits.

Leads credentials/certificates/degrees

- The postsecondary POS will include the necessary curriculum to qualify for the appropriate certificate, or degree, as well as the opportunity to articulate to a four-year college or university.
- The postsecondary POS will identify what courses will lead to the acquisition of diplomas, certificates, degrees, and industry credentials as well as the opportunity to articulate to four-year colleges and universities.

South Dakota



Incorporates secondary/postsecondary education elements

- Requires implementation of career clusters and programs of study in all approved secondary and postsecondary CTE programs.
- Committees are aligning current program and course standards with the Career Cluster knowledge and skills statements. (This is designed to point out gaps in the scope and sequence of courses within a program of study.)
- Established the Postsecondary Vice-President's Cabinet and the Secondary CTE Director's Cabinet in 2006-2007 as a forum for discussing new and innovative ideas for collaboration between secondary and postsecondary education.

Includes coherent and rigorous content aligned with standards

- Program improvement is based on the Perkins accountability requirements.
- State goals align with Perkins IV accountability measures, in particular increasing graduation rates and enrolling more students in higher-level academies. South Dakota CTE Scholar Program encourages CTE students to maintain high grades in both CTE courses and academics. The technical coursework is eligible for articulated credit to the postsecondary technical institutions.
- South Dakota has begun the implementation of career clusters via the development of pathway programs of study.

Includes ways of earning postsecondary credits

- Dual credit and/or concurrent enrollment, articulation, and AP opportunities for CTE students exist.
- Goal 3 of South Dakota's *Finishing Strong* targets increasing the number of articulation agreements between technical schools and the Board of Regents institutions.
- State recruits students 25 and older by extending accessibility to higher education programs.
- State targets increasing retention rates at all postsecondary institutions.

Leads to credentials/certificates/degrees

- Goal 2 of 2010 E's *Finishing Strong* focuses on raising the percentage of students going on to college, technical education, or advanced training.
- State promotes alternative routes to certification.
- Many programs at the postsecondary level in SD currently lead to industry-recognized credentials and/or certificates, or an Associate of Applied Science (AAS) degree. Emphasis is on transportable credentials or certificates.

Tennessee



Incorporates secondary/postsecondary education elements

- Tennessee's secondary CTE system is transitioning to the States' Career Clusters model (7 career clusters presently and transitioning to 16) and has developed 74 programs of study with both secondary and postsecondary elements.
- The transition planning team is made up of representatives from secondary and postsecondary education, workforce development, teacher educators, academic and CTE teachers and program consultants, counselors, and business and industry representatives (these include the Tennessee Department of Education (TDOE) Divisions of Career and Technical Education and Teaching and Learning and the Tennessee Department of Labor and Workforce Development (TDLWD) staff).

Includes coherent and rigorous content aligned with standards

- All students will have access to a rigorous core curriculum; courses will have challenging subject matter, depth rather than breadth of coverage, and critical thinking and problem solving elements. Twenty-seven CTE courses currently substitute for core academic courses. Curriculum is tied to the *Tennessee Curriculum Standards*.
- Tennessee has joined the American Diploma Project (ADP) that has as one of its goals to raise the rigor of the high school standards, assessments, and curriculum and better align these expectations with the demands of post-secondary education and work.

Includes ways of earning postsecondary credits

- Alignment within the programs of study begins in the 8th grade and promotes smooth transitions to post-secondary certifications, diplomas, associate, or baccalaureate degrees through new articulation, dual enrollment, and dual credit opportunities

Leads to credentials/certificates/degrees

- National industry certifications are encouraged for teachers in all CTE areas.
- A Project Management Oversight Committee (PMOC) was formed to evaluate the feasibility of all CTE program areas meeting some type of certification.
- The programs of study developed begin broad on the secondary level and then narrow to specific goals at the post-secondary level ending in an industry recognized credential, certificate, diploma, associate, or baccalaureate program.

Texas



Incorporates secondary/postsecondary education elements

- The Texas Transition Plan for 2007-2008 (under Perkins IV) includes secondary and postsecondary career and technical education components.
- Texas's two initiatives, *AchieveTexas College and Career Initiative* and *Closing the Gaps by 2015* both focus on strengthening connections between secondary and postsecondary education.

Includes coherent and rigorous content aligned with standards

- The Texas plan provides increased focus on improving the academic and technical achievement of CTE students that includes designing state and local accountability systems to promote continuous improvement of CTE programs.
- Local educational agencies and postsecondary institutions may adopt Texas CTE programs of study. These include coherent and rigorous content, aligned with challenging academic standards, and relevant career and technical content in a coordinated, non-duplicative progression of courses that align secondary education with postsecondary education.
- Currently there are 112 state-recognized programs of study developed and aligned with the 16 career clusters. At least one program of study has been developed for each of the 81 cluster pathways.
- Secondary schools are required to offer a minimum of three CTE programs of study (POS) from 3 different clusters.
- Each state-recognized POS includes rigorous secondary academic courses based on the Recommended or Distinguished Achievement high school graduation plans.

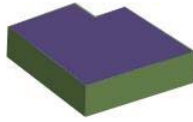
Includes ways of earning postsecondary credits

- The Texas plan includes the opportunity for secondary education students to participate in dual or concurrent enrollment programs.
- Each state-recognized program of study includes postsecondary connections for dual credit, statewide-articulated courses, locally articulated courses, or AP/IB college credit opportunities.

Leads to credentials/certificates/degrees

- Each state-recognized program of study includes postsecondary education programs leading to associate, baccalaureate and graduate degrees, opportunities for industry-recognized certifications/licensures, extended learning experiences including curricular, extracurricular, work-based learning, and service learning.

Utah



Incorporates secondary/postsecondary education elements

- CTE programs of study (CTE Pathways) incorporate academic and technical components, ensuring learning in CTE subjects as well as core academic subjects.
- Regional secondary and postsecondary pathway partnerships have been organized in the state to facilitate the development and implementation of articulated pathway agreements.
- Secondary and postsecondary academic and CTE standards are aligned through regional pathway articulation agreements.

Includes coherent and rigorous content aligned with standards

- State CTE Pathways are crosswalked to the 16 clusters.
- CTE programs of study are taught to coherent and rigorous content, aligned with challenging academic standards.
- State CTE core curriculum is based on industry standards.
- The state is funding a Regional Pathway Coordination Initiative enabling each region to fund a pathways coordinator and activities to support development and implementation of CTE Programs of Study and Pathways.
- Comprehensive professional development (including new teacher mentoring) will be provided for CTE, academic guidance to promote the implementation of CTE programs of study and pathways to enable students to take coherent and rigorous CTE content aligned with challenging academic content.
- The Utah Comprehensive Counseling and Guidance model provides a Student Education Occupation Plan (SEOP) process.

Includes ways of earning postsecondary credits

- Developing and implementing regional articulation agreements that include both CTE and academic courses.
- Converting regional 2+2 Tech Prep agreements to regional Pathway articulation agreements.
- Arranging both CTE and academic concurrent enrollment opportunities for secondary students.
- Developing new pathway maps and articulation agreements.

Leads to credentials/certificates/degrees

- Regional pathway articulation agreements link secondary CTE to postsecondary CTE degree and/or certification training programs.

Vermont



Incorporates secondary/postsecondary education elements

- Vermont's Perkins IV implementation focuses on transforming CTE programming from occupational skills training to the broader, higher level, and more durable knowledge and skills within a career pathway. Its national career cluster/pathway model that uses 12 clusters and 37 pathways.
- Industry, postsecondary, and regional secondary CTE teachers and administrators will be primary partners in this reform effort.

Includes coherent and rigorous content aligned with standards

- Student learning standards define the highest order skills in the career field that experts work to master throughout their careers; technical content standards in the career field; academic standards most essential for success in career field; and knowledge worker skills essential for 21st century workplaces. Presently piloting a process with the automotive technology program—a six-year process projected to bring this model to scale.
- Vermont is introducing four year programs of study that identify both academic and technical courses a student should complete in each career pathway.
- Vermont uses the Tech Prep model setting high standards for all CTE programs.

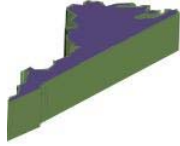
Includes ways of earning postsecondary credits

- State level agreements that focus on required program student assessments and center level articulation agreements.
- Articulation agreements with postsecondary institutions offer degree programs in areas that align with secondary CTE clusters/pathways.
- Agreements that provide direct value and incentive to secondary students to attain and demonstrate skill proficiency on required program student assessments include awarding of college credits, advanced standing, guaranteed admission, scholarships, apprenticeship hours, access to a worksite internship, temporary employment, guaranteed job placement interview, etc.
- Center level articulation agreements already exist and continue to be developed (e.g., faculty sharing and dual enrollment).

Leads to credentials/certificates/degrees

- Vermont has linkages to industry-recognized credentials.
- They are working with state college programs offering associate and Bachelor degrees in selected clusters/pathways.

Virginia



Incorporates secondary/postsecondary education elements

- VA continues to reinforce high academic achievement for secondary students and provide postsecondary connections through the High Schools That Work (HSTW) program, [Commonwealth \(State\) Scholars Initiative](#), and Tech Prep programs.
- In 2007-2008, VA will develop programs of study in Information Technology (IT) and Manufacturing that incorporate the secondary and postsecondary elements so that high school graduates of public schools in VA, who are enrolled in these programs can transition into an appropriate community college associate of applied science or associate of science degree program in IT or Manufacturing without duplication of instruction.

Includes coherent and rigorous content aligned with standards

- Virginia has in place the HSTW program model, the [Commonwealth \(State\) Scholars Initiative](#), and Tech Prep programs that focus on rigorous content aligned with standards.
- VA has eight program areas designed to prepare students for particular fields of study that require rigorous mastery of both academic and technical skills.
- The VA programs of study, in development, will include appropriate academic and career and technical courses that are identified to provide consistent and rigorous content as identified by required statewide Standards of Learning (SOL) for academic courses and the required essential competencies for career and technical courses. These are aligned with postsecondary education.

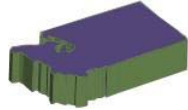
Includes ways of earning postsecondary credits

- There are statewide articulation agreements [and](#) dual enrollment in VA.
- The Vice Chancellor of Workforce Development has created a career pathways unit that has in it Perkins, Tech Prep, Career Coaches, National Science Foundation grants, Apprenticeship Related Instruction, Middle College (a college recovery program targeted to young adults ages 18-24 who do not have a high school diploma or GED), Career Readiness Certificate, and an Institute of Excellence credit and non-credit programs in emerging technologies.

Leads to credentials/certificates/degrees

- Opportunities for industry certifications/credentials/licensures [are available at both the secondary and postsecondary level](#).
- Community college degree and certificate programs and apprenticeship-related instruction are offered in community colleges and secondary schools.

Washington



Incorporates secondary/postsecondary education elements

- The programs of study will include both secondary and postsecondary elements.
- All plans will address how funds will be used to effectively link academic and CTE at the secondary and postsecondary levels in a manner that increases student academic and career and technical achievement.

Includes coherent and rigorous content aligned with standards

- During the transition year, the Perkins Transition Team will analyze examples of model programs that include, but are not limited to, Tech Prep, career pathways, Career Clusters, career academies, and Centers of Excellence for determining the elements of the programs of study to adopt.
- The state's transition Team will identify those programs of study that are currently in place that meet the Perkins guidelines; program approval at the secondary level will require identification of how and where CTE curriculum is aligned with rigorous and challenging academic content.
- CTE course approval at the postsecondary level will require schools to demonstrate curriculum relevancy and identify employment opportunities in high-skills, high-wage, or high-demand occupations.
- Programs of study will be developed during 2007-2008 as a collaborative effort between the Workforce Technical Education Coordinating Board, Office of Superintendent of Public Instruction and State Board for Community and Technical Colleges with input from stakeholders. These will include coherent and rigorous content, aligned with challenging academic standards, and relevant career and technical content in a coordinated, non-duplicative progression of courses.

Includes ways of earning postsecondary credits

- Programs of study will provide opportunities for secondary education students to participate in dual or concurrent enrollment programs or other means to acquire postsecondary education credits.
- Programs of study are designed to provide students with a non-duplicative sequence of progressive achievement leading to technical skill proficiency, a credential, a certificate, or a degree, and linked through credit transfer agreements between the two institutions.

Leads to credentials/certificates/degrees

- Programs of study may lead to an industry-recognized credential or certificate at the postsecondary level, or an associate or baccalaureate degree.

West Virginia



Incorporates secondary/postsecondary education elements

- All CTE programs will incorporate programs of study that provide a seamless progression from secondary to postsecondary education.

Includes coherent and rigorous content aligned with standards

- All programs at both the secondary and postsecondary levels require academic content that is assessed annually to ensure that participants are meeting challenging academic standards.
- The program of study model ensures that academic preparation at the secondary level is aligned with the academic demands at the postsecondary level.
- CTE students in WV's secondary schools will continue to benefit from the state's continuing commitment to the *High Schools That Work (HSTW)* initiative. This commitment includes 75% of all secondary schools statewide.
- WV has expanded HSTW to include 17 high schools in the *21st Century High Schools That Work* program. This new effort incorporates the six elements of the 21st century learning that form the basis of the *Partnership for 21st Century Skills* (The partnership is comprised of 26 member organizations of top corporations.)
- WV shares tech prep best practices across the state and will monitor consortia progress.

Includes ways of earning postsecondary credits

- Utilizing the programs of study model, students may acquire college-level credit through early entrance, dual credit courses, and EDGE (Earn a Degree-Graduate Early) program which grants college credit for identified career-technical secondary-level courses.
- One-year certificates, associate degree level programs are offered.

Leads to credentials/certificates/degrees

- All new CTE programs developed at the postsecondary level will follow the programs of study model and will lead to a credential.
- Each CTE concentration will obtain and maintain an appropriate industry-recognized accreditation/certification, when one is available, and will provide students the opportunity to obtain an industry recognized credential as part of the instructional program.

Wisconsin



Incorporates secondary/postsecondary education elements

- Wisconsin has secondary/postsecondary programs working together.
- The Wisconsin Technical College System Board (WTCS) and Wisconsin Department Public Instruction (WDPI) have committed to work together to require the adoption of the national Career Cluster/Pathways model for aligning secondary and postsecondary programs funded through Perkins IV in all Wisconsin secondary schools.

Includes coherent and rigorous content aligned with standards

- Wisconsin has Tech Prep and work-based learning programs in place to effectively link academic and CTE at the secondary level and at the postsecondary level in a manner that increases student academic and career and technical achievement.
- Present state statutes require each school board in Wisconsin to establish, in cooperation with a technical college district board, a technical preparation program in each public high school located in a school district.

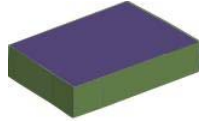
Includes ways of earning postsecondary credits

- State statutes require that the Tech Prep programs consist of a sequence of courses, approved by the WTCS Board, that are designed to allow high school pupils to gain advanced standing in the technical college's associate degree program upon graduation from high school. These sequences include academic as well as career and technical education course work.
- Adoption of the WI model requires secondary and postsecondary partners to develop career pathway material and to identify academic as well as career and technical education courses at the secondary level and to develop articulation agreements between the secondary recipients and postsecondary partners.

Leads to credentials/certificates/degrees

- Wisconsin state statutes require that the Tech Prep programs consist of a sequence of courses, approved by the WTCS Board, designed to allow high school pupils to gain advanced standing in the technical college's associate degree program upon graduation from high school.

Wyoming



Incorporates secondary/postsecondary education elements

- In 2006 the Wyoming Department of Education, in collaboration with the Wyoming Department of Workforce Services, the Wyoming Business Council, the University of Wyoming and Wyoming Community College Commission, defined a model for CTE in Wyoming that incorporates secondary and postsecondary elements.
- Wyoming has adopted 16 Career Clusters as defined by NASDCTEc and ED.

Includes coherent and rigorous content aligned with standards

- The Wyoming plan includes industry and workplace knowledge and skills to be taught in grades 9-10, Pathway-specific knowledge and skills taught in grades 10-12, and occupational specialties taught at the postsecondary level.
- All plans are aligned to standards. All students must meet a common core of knowledge and skills for graduation from high school; challenging academic standards are a part of each Career Program of Study.

Includes ways of earning postsecondary credits

- Articulation agreements that extend postsecondary options to secondary students currently exist within Tech Prep consortiums and outside the consortiums.
- Articulation agreements will be required as a component of the postsecondary allocated funds application.
- Future development of Career Programs of Study will include transitions to postsecondary through improvement of the articulation agreement process, and development of common criteria for adjunct faculty.
- All CTE programs of study lead to certification, or an associate or baccalaureate degree.

Leads to credentials/certificates/degrees

- The Wyoming Department of Education encourages offering of credentials and certificates by secondary and postsecondary institutions as well as through industry groups and organizations.

