

Wyoming Career and Technical Education Policy Analysis



MPR Associates, Inc.

Preparation for College and Careers

205 SE Spokane Street, Suite 342

Portland, OR 97202

Contact

Jim Schoelkopf

jschoelkopf@mprinc.com

503-963-3759

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Introduction

This policy analysis was produced for the Wyoming Department of Administration and Information by MPR Associates, Inc. Its purpose was to examine federal and state policy related to career and technical education (CTE) to determine whether existing policy (in the form of statutes, rules, regulations, and guidance) could either promote or impede implementation of the May 2007 Wyoming strategic plan for CTE, “New Directions for High School Career and Technical Education in Wyoming.”¹

In general, this analysis found a receptive policy environment for the CTE strategic plan. In fact, current state and federal policy generally contains provisions that would enable implementation of much of the plan or was silent on specific features of the plan. Although there are few statutory or regulatory impediments to implementing the plan, there is no statutory authority for Wyoming to regulate consistent *statewide* implementation. Moving Wyoming CTE toward the vision embodied in the CTE strategic plan will depend on encouraging local initiative. To implement the CTE strategic plan successfully, Wyoming should consider a series of recommendations, offered at the end of this report, focused on five significant policy categories: (1) career pathways or programs of study (PoS), standards, curriculum, and assessment; (2) delivery systems and student guidance; (3) secondary-postsecondary CTE articulation; (4) teacher quality, preparation, professional development; and (5) finance and accountability.

Background

In February 2009, the Wyoming Department of Administration and Information issued a request for proposal to analyze current federal and state policy related to CTE. An analysis of existing CTE policy was recommended in the May 2007 Wyoming CTE strategic plan, “New Directions for High School Career and Technical Education in Wyoming,” produced for the state by MPR Associates, Inc. Wyoming Department of Education (WDE) CTE staff encouraged an analysis of current statutes, rules, regulations, and guidance to determine whether or not there is statutory or administrative rule authority to implement the recommendations in the CTE strategic plan.

¹ Hoachlander, G., Klein, S., and Studier, C. (2007). *New Directions for High School Career and Technical Education in Wyoming, A Strategic Plan*. Berkeley, CA: MPR Associates, Inc.

MPR Associates, Inc. was chosen to conduct Wyoming's CTE policy analysis and did so in two phases. The first phase analyzed federal CTE statutes and federal administrative guidance. At the same time, we analyzed Wyoming's five-year state plan implementing the Carl D. Perkins Career and Technical Education Act of 2006. This phase-one analysis centered on the linkages between Wyoming's five-year plan and the provisions of the Perkins Act, specifically:

- Reviewing Wyoming's state plan and its fidelity to the provisions of the Perkins Act;
- Reviewing the alignment between Wyoming's state Perkins plan and Wyoming's CTE strategic plan recommendations; and
- Considering how Wyoming could use Perkins provisions as a CTE "driver" for implementing the strategic plan.

The second phase of the analysis focused on state statutes and administrative rules and regulations. This analysis was anchored to the Wyoming CTE strategic plan recommendations. We conducted a comprehensive analysis that reached beyond WDE statutes. We also analyzed statutes related to the Wyoming Professional Teaching Standards Board, Department of Workforce Services, and Community College Commission with respect to CTE, in conjunction with a review of WDE statutes.

Review and Analysis Process

The WDE seeks to align the strategic objectives presented in the Wyoming CTE strategic plan with federal and state legislative and administrative policy. Coherent alignment would enable WDE CTE staff to implement the provisions of the Wyoming CTE strategic plan with fidelity and in accordance with authority currently existing in federal and state statutes, administrative rules, and regulations. If fully implemented, the CTE strategic plan would represent Wyoming's future organization and delivery model for CTE.

Interviews conducted with WDE staff indicated a strong commitment to the strategic plan recommendations. WDE CTE staff offered evidence of using the strategic plan recommendations for CTE program improvement, specifically through the CTE Demonstration Site Project. CTE state leaders want to ensure that the approach to CTE embodied in the strategic plan is compatible with federal and state CTE statutes and administrative rules and regulations, while at the same time ensuring that any statutes, rules, and regulations that may deter implementation are addressed.

In the CTE strategic plan, we outline 10 strategic objectives as a framework for strengthening CTE in the state. These are:

1. **Legislative Alignment.** Ensure that state legislative efforts promote school district involvement in career pathways initiatives and support student participation in CTE.
2. **Content Standards.** Enumerate the academic and industry-related standards that are the focus of each pathway.
3. **Plans of Study.** Develop curriculum framework models for each career cluster and career pathway that identify the relevant academic and technical courses needed for secondary completion and postsecondary enrollment and career entry.
4. **Curriculum.** Support development of a standards-based curriculum for core academic and technical courses in each major pathway.
5. **Delivery Systems.** Institute innovative strategies for ensuring student access to career pathways and opportunities for work-based learning and dual enrollment in related postsecondary courses.
6. **Articulation.** Ensure that the program of study for each career pathway is aligned with a wide range of postsecondary options.
7. **Teacher Preparation.** Increase the number of teachers who are highly effective in teaching academic and technical courses in new pathways of integrated academic and technical study.
8. **Assessment.** Create assessments that evaluate students' mastery of both academic and technical knowledge and the core skills essential for career success.
9. **Finance.** As needed and appropriate, modify the state's school finance system to support development and implementation of the career clusters and pathways approach.
10. **Accountability.** Improve CTE programs over time through ongoing monitoring and collection of student and program performance data.

These strategic objectives are addressed to varying degrees within the federal and state policies analyzed. Federal and state policy takes a broader view than the detailed view embodied in the strategic objectives. To conduct an effective policy analysis, we grouped the strategic objectives into broader policy analysis categories designed to preserve the intent of the strategic plan framework and the integrity of the strategic objectives. The policy analysis categories are:

CTE Policy Analysis Categories	CTE Strategic Plan Objectives
Career Pathways or Programs of Study, Standards, Curriculum, and Assessment	Objective 1: Legislative Alignment Objective 2: Content Standards Objective 4: Curriculum Objective 8: Assessment
Delivery Systems and Student Guidance	Objective 3: Plans of Study Objective 5: Delivery Systems
Secondary-Postsecondary CTE Articulation	Objective 6: Articulation
Teacher Quality, Preparation, Professional Development	Objective 7: Teacher Preparation
Finance and Accountability	Objective 9: Finance Objective 10: Accountability

Along with WDE staff, we identified the scope of relevant federal and state statutes for review and analysis. Sources of federal and state statutes and state rules and regulations include:

- Carl D. Perkins Career and Technical Education Act of 2006 [PL 109-270];
<http://www.ed.gov/policy/sectech/leg/perkins/index.html>
- Wyoming Department of Education Statutes, Title 21—Education;
<http://legisweb.state.wy.us/statutes/dlstatutes.htm>
- Wyoming Department of Education Technology, Careers, and Data Unit Guidance;
<http://www.k12.wy.us/tcd.asp>
- Wyoming Community College Commission Rules and Regulations;
http://soswy.state.wy.us/Rules/Rule_Search_Main.asp
- Wyoming Department of Workforce Services Rules and Regulations;
http://soswy.state.wy.us/Rules/Rule_Search_Main.asp and
- Wyoming Professional Teaching Standards Board Rules and Regulations;
<http://ptsb.state.wy.us/RulesRegulations/tabid/62/Default.aspx>

We reviewed the relevant statutes, rules, regulations, and guidance according to the five CTE policy analysis categories above to identify appropriate material for analysis. Along with analyzing the relevant material, we spoke with Wyoming state agency stakeholders. These conversations supplied an up-to-date analysis of Wyoming statutes because some recent legislative actions affecting CTE have not yet been reflected in online or print sources.

Policy Analysis

To achieve Wyoming’s goal of creating a coherent, systemic statewide framework for CTE, we reviewed statutes and policies through the lens of each of the five policy analysis categories (described above). In some cases, we found supporting statutes and policies relevant to more than one category. In other cases, we found no explicit statutes or policies relevant to implementing the strategic plan. We analyzed relevant statutes, rules, regulations, and guidance for each policy analysis category.

1. Career Pathways or Programs of Study, Standards, Curriculum, and Assessment

This category represents the instructional design and substance for a high-quality CTE program in Wyoming. The term “program of study” (PoS) is used in this report to label program sequences reflecting the academic and technical content standards, instruction and curriculum, and assessments designed to promote student attainment of academic and technical knowledge and skills. “Program of study” is often used interchangeably with “career pathway.”

The federal Perkins Act and the Wyoming Perkins state plan provide statutory support for Wyoming to establish the level of quality for academic and technical content standards, curriculum, and assessment that Wyoming seeks in its PoS. The Perkins Act describes PoS [Sec. 122 (c)(1)(A)] and supports development of rigorous, challenging integrated academic and CTE curricula [Sec. 124 (b)(3&6)]. The quality of academic content standards within a PoS is reinforced by provisions of Sec. 1111(b)(1) of the Elementary and Secondary Education Act of 1965 (No Child Left Behind). Perkins provisions also are in place to measure the academic and technical knowledge and skill attainment of secondary and postsecondary students within a PoS [Sec. 113 (b)(2)(A-B)].

Wyoming has established an implementation plan for Perkins Act provisions through its five-year Perkins plan. Wyoming submitted a comprehensive plan to address the state’s compliance obligations that establishes eligibility for federal funds distributed through an annual appropriation as authorized by the Perkins Act. The state has received approval from the U.S. Department of Education, Office of Vocational and Adult Education, for its five-year Perkins plan. This plan describes state-specific actions aligned with Wyoming’s strategic objectives included in this policy analysis category. Relevant policy provisions are listed in Appendix A at the end of this report.

Analysis and Recommendations

Wyoming's adoption of the 16 career-clusters framework established by the States' Career Cluster Initiative (<http://www.careerclusters.org/>) provides a widely accepted organizational structure for designing and implementing a coherent, consistent PoS model for Wyoming. The framework design is compatible with the PoS provisions of the Perkins Act and Wyoming's five-year Perkins plan. Development of a model PoS within each career cluster can establish a template to be adapted locally, according to resources and capacity, and simultaneously linked to the statewide framework of content standards, curriculum, and assessment. The industry sector inclusiveness of the cluster framework provides a common platform for aligning PoS development with Wyoming's economic and workforce development goals.

The Perkins Act calls for PoS to be grounded in industry-based, employer-validated academic and technical knowledge and skills. The career cluster framework meets this intent and relieves the state from having to undertake the rigorous process of establishing and validating CTE knowledge and skills.

- **Recommendation:** Establish WDE authority to secure local employer support through a local validation process so that specific local and regional needs are addressed.

The Perkins Act takes a definitive step toward establishing CTE curriculum based on a standardized set of academic and technical standards.

- **Recommendation:** Establish and implement state policy and practice to transition individual PoS courses toward a consistent statewide structure based on the state's academic and technical standards.
- **Recommendation:** Encourage and continue current work in Wyoming seeking more uniformity and consistency within the CTE PoS curriculum structure. Work currently underway based on the *Secondary School Course Classification System: School Codes for the Exchange of Data (SCED)*² provides the kind of uniformity that assists with statewide implementation and helps achieve a consistent level of fidelity in implementation.

PoS are intended to offer structure, rigor, and engagement to capture sufficient student interest to carry them through high school graduation and prepare them for postsecondary education or advanced training. WDE recognizes that this outcome will require innovative instructional practices. Integrating standards-based academic study with career-related applications of academic knowledge and skills may enhance the learning environment for many

² Bradby, D., Pedroso, R., and Rogers, A. (2007). *Secondary School Course Classification System: School Codes for the Exchange of Data (SCED)* (NCES 2007-341). National Center for Education Statistics, Institute for Education Sciences, U.S. Department of Education. Washington, DC.

students. When implemented with fidelity, academic and technical integration may enable high schools to address their lack of capacity to offer students a full array of courses covering exclusively academic standards and, at the same time, offer separate technical courses potentially covering an overlapping set of academic standards. An integrated instructional model could support students in meeting the academic credit requirements for a high school diploma.

Federal Perkins legislation supports academic and technical integration and provides the federal authority for Wyoming to pursue such integration. Although the Perkins state plan addresses the integration of academic content in CTE coursework, no specific state statutes or policies were identified that enable or encourage integration at the local level.

- **Recommendation:** Consider developing policy or guidance permitting local districts to establish policies to award academic credit in CTE courses that align CTE content with state-defined academic content and performance standards.

Locally developed policies can consider the possibility of “variable” credits in awarding academic credit through CTE. For example, students may need to take more than one CTE course to meet the academic standards being integrated and to acquire a unit of academic credit.

- **Recommendation:** Consider the policies promoting integration being implemented in Oregon and Washington³ as possible models for Wyoming.

2. Delivery Systems and Student Guidance

This category focuses on the delivery structures for standards, curriculum, and assessment within Wyoming’s CTE system. WDE staff understands the system-wide impact of restructuring CTE, including adjustments to instruction, as needed, and student support services.

Wyoming provides secondary CTE through comprehensive high schools. Given the state’s size and the remote locations of some high schools, distance education could boost the CTE capacity of small, rural high schools. Where feasible, locating secondary CTE programs and instruction on a nearby community college campus could strengthen secondary-postsecondary collaboration for CTE PoS. A promising example is the Culinary Arts and Project Lead the Way programs under development in Gillette, in which the high school and the community college will share instructional facilities on the college campus. The state Perkins plan describes state-specific actions, aligning with Wyoming’s strategic objectives

³ Oregon Credit for Proficiency: <http://www.ode.state.or.us/search/results/?id=35>.
Washington Equivalency Credit:
<http://www.k12.wa.us/CareerTechEd/pubdocs/EquivalencyCreditToolkit2.0.pdf>.

that fall in this category. Relevant policy provisions are listed in Appendix A at the end of this report.

Analysis and Recommendations

There are few enabling state statutes or policies to promote implementation of delivery models beyond the traditional ones. At the same time, there are no state statutes or policies restricting implementation of innovative practices.

- **Recommendation:** Consider an administrative rule or policy to provide financial incentives for local practices contributing to the statewide implementation of Wyoming's CTE strategic plan objectives.
- **Recommendation:** Consider providing guidance on the use of distance learning and online instruction as part of broader WDE efforts to use distance and online delivery.

In issuing guidance or developing policy relevant to local providers, WDE may want to reinforce the concept of CTE emphasized by the Perkins Act and Wyoming's state plan: CTE is intended to prepare students for both careers **and** college.

- **Recommendation:** Ensure that guidance for the development and implementation of local CTE delivery models addresses the use of Wyoming's success curriculum [W.S. 21-16-1307] within a PoS.
- **Recommendation:** Collaboration between WDE CTE staff and core academic staff could produce policy and/or guidance for local school districts on academic and CTE integration.

Enabling guidance may encourage secondary schools to pursue academic and CTE integration strategies offering students multiple options to attain either a general, comprehensive, or advanced diploma endorsement.⁴ The Hathaway Scholarship program is a significant influence on secondary student guidance and counseling efforts. The Hathaway provision for guidance to eighth-graders can position CTE and PoS as a way for students to structure their high school experience. This meets Hathaway criteria, while focusing student learning within a career context or program of study. As a result of legislative action in 2009, the extended Hathaway "provisional opportunity scholarship" [W.S. 21-16-1305] enables students to fully participate in a program of study in a secondary and community college sequence and still retain Hathaway scholarship eligibility for a baccalaureate program at the University of Wyoming.

⁴ Wyoming Department of Education, Chapter 31. Graduation Requirements; <http://soswy.state.wy.us/Rules/RULES/5218.pdf>.

- **Recommendation:** Consider offering guidance to local districts highlighting opportunities in the Hathaway Scholarship program that encourage development of PoS as a pathway for CTE-focused students to qualify for a Hathaway Scholarship.

3. Secondary-Postsecondary Career and Technical Education Articulation

A cornerstone of CTE PoS is the alignment of secondary and postsecondary CTE programs to allow students to earn college credit while still in high school. WDE staff have recognized the potential value of secondary-postsecondary articulation by incorporating features into the CTE Demonstration Project. Wyoming PoS are being designed, developed, and implemented with secondary-postsecondary alignment and articulation as a fundamental element. This action is supported by the Perkins Act and reinforced by the state Perkins plan.

Analysis and Recommendations

Wyoming's Perkins plan and conversations with WDE staff signal a commitment to the alignment and articulation of secondary and postsecondary CTE. However, beyond statements in the state plan, there is no statewide "system" for articulation, dual credit, or concurrent enrollment. Local agreements are in place, but they range from formal written documents to *ad hoc* verbal agreements. Inconsistent articulation arrangements may result in unequal opportunities for students in different areas of the state. Informal articulation agreements may not be sustainable over time, especially if these are solely verbal. Once the original parties to such an agreement are no longer involved, opportunities for students may cease.

Wyoming's current general education transfer agreement between the state's community colleges and the University of Wyoming could be an example for the creation of a secondary-postsecondary articulation agreement in principle. WDE staff may want to consider the Wyoming Legislative Services Office study on the status of dual or concurrent enrollment between high schools and community colleges.

- **Recommendation:** Consider establishing implementation guidance, policies, or guiding principles for statewide articulation standards.
- **Recommendation:** Conduct an evaluation at Laramie County Community College and Sheridan College on their use of the National Alliance of Concurrent Enrollment Partnerships (NACEP) standards as part of a statewide strategy for secondary-postsecondary articulation.

There is little policy guidance on the alignment of high school exit requirements with community college placement criteria or entrance requirements for limited or restricted-entry CTE programs. PoS alignment and articulation are intended to enable students to transition from secondary into postsecondary education without needing postsecondary remediation. The lack of alignment between high school exit requirements and postsecondary entrance requirements can unintentionally impede a smooth transition within a PoS.

- **Recommendation:** Consider a collaborative secondary-postsecondary effort to identify and communicate Wyoming community college placement criteria and requirements for Wyoming's limited or restricted-entry postsecondary CTE programs. Once requirements are identified, offer guidance to the field on incorporating high school exit and college placement requirements into PoS.
- **Recommendation:** Consider establishing statewide placement criteria and uniform entry requirements for limited or restricted-entry postsecondary CTE programs.

States have been addressing this alignment issue through various strategies, including early assessment of high school students to determine their level of readiness for postsecondary entry and placement. A specific example is the collaboration between the California Department of Education and the California State University System to develop the Early Assessment Program.⁵ This could serve as potential model for Wyoming to evaluate for possible local guidance or policy development.

4. Teacher Quality, Preparation, Professional Development

Implementing and sustaining high-quality PoS will rely, in part, on teacher quality. Creating a high-quality teaching staff in PoS will require professional preparation and ongoing, sustained professional development. The Perkins Act supports professional development through required uses of the federal funds allocated through the Act [Sec. 124 (b)(3)(A-D)]. Wyoming reinforces support for teacher professional development through the implementation plans outlined in the state's Perkins plan. Relevant policy provisions are listed in Appendix A at the end of this report.

Analysis and Recommendations

CTE is a dynamic instructional environment that challenges CTE teachers to update their technical skills continually, as the knowledge and skill demands of careers change. Unlike some core academic disciplines, which can remain unchanged for lengthy periods, CTE must

⁵ Early Assessment Program; California State University System; <http://www.calstate.edu/EAP/>.

reflect a constantly changing technological environment. Wyoming has chosen to focus on a set of careers in areas of state economic and workforce growth, as identified by economic development agencies. Wyoming CTE needs to be positioned to contribute to Wyoming's workforce needs. CTE teacher preparation, however, currently may not be aligned to meet Wyoming's needs in the areas of energy, construction, hospitality/service, technology (information technology; science, technology, engineering, and mathematics, or STEM), and healthcare.

Fortunately, it appears that WDE has forged a solid partnership and collaborative relationship with Wyoming's Professional Teaching Standards Board (PTSB) [<http://ptsb.state.wy.us>]. The review of PTSB statutes and rules shows no obstacles that would restrict WDE from providing advice to PTSB on conditions for CTE teacher licensure that would promote high-quality CTE instruction.

- **Recommendation:** Encourage sustained communication between WDE and PTSB on updating teacher licensure endorsements to align with career clusters. Consider joint WDE and PTSB communication to the field to reinforce implementation of the updated licensure requirements.
- **Recommendation:** Consider adopting an internal WDE CTE teacher licensure review process that takes advantage of PTSB's unique position to influence the content of Wyoming CTE teacher preparation programs.

With the updating of teacher licensure endorsement standards to reflect current CTE curriculum content, PTSB is in a unique position to influence the content of Wyoming teacher preparation programs to ensure a supply of well-prepared CTE teachers. The WDE adoption of the secondary CTE common course SCED codes for program development provides a foundation for PTSB to align appropriate teacher licensure requirements.

- **Recommendation:** Encourage WDE collaboration with PTSB to design, refine, and implement policy guidance for effective alternative teacher licensure processes to ensure a supply of CTE teachers for high-demand economic and workforce development areas where teacher preparation programs are limited or non-existent.

An alternative licensure process would enable industry professionals to meet established criteria needed to enter a secondary CTE classroom and provide technical instruction.

Wyoming is fortunate to have an enabling statute permitting school districts to use community college faculty to provide secondary CTE instruction under certain circumstances. This ability to draw upon community college faculty for secondary CTE instruction could strengthen the bridge between the secondary and postsecondary elements of a PoS.

- **Recommendation:** Communicate with and offer policy guidance to local secondary CTE providers about using community college faculty as instructors, as authorized by Wyoming state statute.

5. Finance and Accountability

CTE finance in Wyoming has been established, in part, through a comprehensive review of the state's educational funding system prompted by the January 2006 Wyoming Supreme Court ruling implying a need to improve educational instruction, including CTE. Wyoming has established a foundation for CTE funding through the use of federal Perkins funds and a state funding stream.

Coupled with financial support for CTE, the state has implemented accountability compliance requirements designed to measure student outcomes resulting from the Perkins federal investment. As part of the CTE Demonstration Project, WDE staff has created evaluation criteria to document the effectiveness of the demonstration site implementation. MPR researchers have observed WDE use of both federal and state CTE accountability data to identify areas in need of improvement and where best to target staff and financial resources.

Analysis and Recommendations

The CTE finance structure in Wyoming has been developed thoughtfully and reflects the added costs of CTE. Wyoming has leveraged the federal Perkins allocation to assist local districts and community colleges in developing high-quality CTE. The decision to consolidate the state's federal Perkins Tech Prep allocation with the Perkins Basic Grant is consistent with this commitment to local CTE program support, with a focus on the development and implementation of PoS. There is also a state postsecondary commitment to sustain secondary-postsecondary articulation efforts begun with Tech Prep support. This commitment is reinforced by the increase in the postsecondary split of the federal Perkins IV funds from 35 percent to 40 percent.

WDE has the opportunity to maximize the flexibility of the federal Perkins funds through their state leadership funds and—potentially—the use of the Perkins reserve fund provision. Wyoming has chosen not to exercise the reserve fund provision so that maximum Perkins funds can flow to eligible local CTE programs. Using the reserve fund provision, however, would allow WDE to emphasize implementation of specific efforts and practices directed at PoS.

- **Recommendation:** Consider the benefits and risks in using the Perkins reserve fund provision to determine whether the WDE-directed use of a reserve fund is seen as more benefi-

cial than having the use of funds determined by eligible local recipients. As appropriate, develop policy guidance to the field on the reserve fund distribution formula and focused uses of such funds.

- **Recommendation:** Consider evaluating the eligibility of an integral academic course fundamental to CTE PoS for the weighted CTE reimbursement factor and issue guidance on the criteria for identifying such academic courses.

For example, an algebra II course as part of a Project Lead the Way pre-engineering program of study or an anatomy and physiology course as part of healthcare PoS might be considered for eligibility for weighted reimbursement.

The federal Perkins statute provides a clear framework for state compliance with Perkins accountability provisions by defining a set of core indicators of secondary and postsecondary performance. Wyoming has responded to these accountability provisions through the state Perkins plan. Wyoming's response to the accountability requirements appears closely to follow the March 2007 non-regulatory guidance⁶ provided by the U.S. Department of Education, Office of Vocational and Adult Education. The secondary and postsecondary Perkins accountability core indicators are designed to measure the performance of students concentrating in CTE at each level.

Wyoming seeks to develop and implement secondary-postsecondary PoS. Currently, however, there are no federal or state provisions for measuring the performance of CTE students who transition from the secondary to postsecondary parts of a PoS. Potential measures of this transition could include: 1) number of students continuing from secondary to postsecondary programs; 2) number of students continuing in the same PoS area; 3) number of students placed in postsecondary remedial writing and mathematics courses; and 4) number of students completing a full PoS sequence. Such data could be used to compare student performance in the PoS model with student performance in the traditional CTE model.

- **Recommendation:** Provide guidance on data collection about PoS to determine if Wyoming's investment in PoS is beneficial. Consider financial incentives for local PoS that meet or exceed state-benchmarked performance.

WDE also may want to consider establishing a CTE funding incentive based on PoS performance criteria set by WDE and WCCC in collaboration with local secondary and postsecondary CTE providers.

⁶ Student Definitions and Measurement Approaches for the Core Indicators of Performance Under the Carl D. Perkins Career and Technical Education Act of 2006 (Perkins IV); March 13, 2007. <http://www.ed.gov/about/offices/list/ovae/pi/memoperkinsiv.html>

Summary of Recommendations

This CTE policy analysis sought to determine if relevant federal and state statutes, rules, and regulations align with the future envisioned for CTE in Wyoming in the state CTE strategic plan, “New Directions for High School Career and Technical Education in Wyoming.” The Wyoming Department of Education has charted a course guided by the CTE strategic plan and the Perkins state plan. Both plans reinforce the state’s intention to move CTE toward a PoS structure built on rigorous academic and technical standards, alignment and articulation of secondary and postsecondary programs, a high-quality teaching staff, and support for students. The analysis offers some overarching observations and specific recommendations.

State staff may want to consider how best to address the recommendations. If the recommendations are considered useful in moving the state’s CTE agenda forward, would it be best to introduce or modify state statutes, create or modify administrative rules, or issue state agency guidance? Each approach carries benefits and risks. Formal state legislation may signal stronger policy-level support than issuing guidance. The introduction and passage of legislation, however, may take longer than issuing guidance. Guidance may be the more expedient approach, but may be perceived as reflecting less serious intent. Wyoming needs to weigh the risks and benefits of establishing formal, legislative policy as compared to guidance or regulation on existing statute.

The policy analysis reviewed a minimal number of relevant state statutes, administrative rules, and regulations. With a minimum level of state statutory authority, WDE is challenged to encourage local providers to implement CTE structures beyond the minimum required. The federal Perkins Act does provide statutory authority to promote and require movement toward a CTE PoS structure, also endorsed in the CTE strategic plan. WDE has created policy regulation and guidance to promote implementation of basic PoS features, but local discretion will determine the fidelity of implementation. At this time, there is no statutory authority or administrative rule supporting WDE in regulating consistent statewide implementation.

WDE has demonstrated a commitment to collaborate with other state agencies sharing a role in CTE. Our analysis of the statutes, rules, and regulations from other state agencies reveals the challenge of keeping policy from multiple agencies in alignment with WDE’s direction for CTE. Fortunately, there appears to be no significant conflict among CTE-related policies across partner agencies. Close collaboration to monitor ongoing policy alignment is needed between WDE and the Wyoming Professional Teaching Standards Board to ensure that teacher licensure requirements are compatible with the state’s direction for CTE. The articulation of secondary and postsecondary PoS would benefit from close alignment in the CTE

policies of WDE and Wyoming Community College Commission. Creating compatible policies between WDE and the Wyoming Department of Workforce Services could encourage the development of CTE PoS responsive to economic and workforce demands in the state.

Besides these overarching policy considerations, specific program-level policy and guidance might be considered for each of the policy analysis categories. The extent of WDE authority in addressing each recommendation would depend on whether WDE seeks statute, rule, regulation, or policy guidance.

The following is a summary of all recommendations in this policy analysis report.

Recommendations: Career Pathways or Programs of Study, Standards, Curriculum, and Assessment

- Establish WDE authority to secure local employer support through a local validation process so that specific local and regional needs are addressed.
- Establish and implement state policy and practice to transition individual PoS courses toward a consistent statewide structure based on the state's academic and technical standards.
- Encourage and continue current work in Wyoming seeking more uniformity and consistency within the CTE PoS curriculum structure. Work currently underway based on the *Secondary School Course Classification System: School Codes for the Exchange of Data (SCED)*⁷ provides the kind of uniformity that assists with statewide implementation and helps achieve a consistent level of fidelity in implementation.
- Consider developing policy or guidance allowing local school districts to establish policies permitting the award of academic credit through CTE instruction that aligns CTE content with state-defined academic content and performance standards.
- Consider the policies promoting integration being implemented in Oregon and Washington⁸ as possible models for Wyoming.

⁷ Bradby et al. (2007). *Secondary School Course Classification System: School Codes for the Exchange of Data (SCED)*.

⁸ Oregon Credit for Proficiency: <http://www.ode.state.or.us/search/results/?id=35>
Washington Equivalency Credit:
<http://www.k12.wa.us/CareerTechEd/pubdocs/EquivalencyCreditToolkit2.0.pdf>

Recommendations: Delivery Systems and Student Guidance

- Consider an administrative rule or policy to provide financial incentives for local practices contributing to the statewide implementation of Wyoming's CTE strategic plan objectives.
- Consider providing guidance on the use of distance learning and online instruction as part of broader WDE efforts to use distance and online delivery.
- Ensure that guidance for the development and implementation of local CTE delivery models addresses the use of Wyoming's success curriculum [W.S. 21-16-1307] within a PoS.
- Collaboration between WDE CTE staff and core academic staff could produce policy and/or guidance for local school districts on academic and CTE integration.
- Consider offering guidance to local districts highlighting opportunities in the Hathaway Scholarship program that encourage development of PoS as a pathway for CTE-focused students to qualify for a Hathaway Scholarship.

Recommendations: Secondary-Postsecondary Career and Technical Education Articulation

- Consider establishing implementation guidance, policies, or guiding principles for statewide articulation standards.
- Conduct an evaluation at Laramie County Community College and Sheridan College on their use of the National Alliance of Concurrent Enrollment Partnerships (NACEP) standards as part of a statewide strategy for secondary-postsecondary articulation.
- Consider a collaborative secondary-postsecondary effort to identify and communicate Wyoming community college placement criteria and requirements for Wyoming's limited or restricted-entry postsecondary CTE programs. Once requirements are identified, offer guidance to the field on incorporating high school exit and college placement requirements into PoS.
- Consider establishing statewide placement criteria and uniform entry requirements for limited or restricted-entry postsecondary CTE programs.

Recommendations: Teacher Quality, Preparation, Professional Development

- Encourage sustained communication between WDE and PTSB on updating teacher licensure endorsements to align with career clusters. Consider joint WDE and PTSB communication to the field to reinforce implementation of the updated licensure requirements.
- Consider adopting an internal WDE CTE teacher licensure review process that takes advantage of PTSB's unique position to influence the content of Wyoming CTE teacher preparation programs.
- Encourage WDE collaboration with PTSB to design, refine, and implement policy guidance for effective alternative teacher licensure processes to ensure a supply of CTE teachers for high-demand economic and workforce development areas where teacher preparation programs are limited or non-existent.
- Communicate with and offer policy guidance to local secondary CTE providers about using community college faculty as instructors, as authorized by Wyoming state statute.

Recommendations: Finance and Accountability

- Consider the benefits and risks in using the Perkins reserve fund provision to determine whether the WDE-directed use of a reserve fund is seen as more beneficial than having the use of funds determined by eligible local recipients. As appropriate, develop policy guidance to the field on the reserve fund distribution formula and focused uses of such funds.
- Consider evaluating the eligibility of an integral academic course fundamental to a CTE program of study for the weighted CTE reimbursement factor and issue guidance on the criteria for identifying such academic courses.
- Provide guidance on data collection about PoS to determine if Wyoming's investment in PoS is beneficial. Consider financial incentives for local PoS that meet or exceed state-benchmarked performance.

Appendix A: Policy Provisions Relevant to Implementing the Wyoming Career and Technical Education Strategic Plan

1. Career Pathways or Programs of Study, Standards, Curriculum and Assessment

Wyoming Perkins State Plan

- Sec. II.A (2)(a) Program Administration; adoption of 16 career clusters and creation of a program of study for each of the 16 career clusters.
- Sec. II.A (2)(l) Program Administration; local identification of CTE courses that provide integration of academic content.
- Sec. II.A (7)(a) Program Administration; curriculum integration, particularly language arts and mathematics, will be professional development focus.
- Sec. II.A (7)(c) Program Administration; same challenging academic standards for CTE students as for all students [W.S. 21-9-101].
- Sec. IV.B (2) Accountability and Evaluation; identification of CTE program areas and technical skill assessments.

Wyoming State Statutes, Rules, and Regulations

- W.S. 21-9-101. Educational programs for schools; standards; core of knowledge and skills; special needs programs; class size requirements; co-curricular activities. (b) Each school district within the state shall provide educational programs sufficient to meet uniform student content and performance standards at the level established by the state board of education in the following areas of knowledge and skills: (J) Career/vocational education.
- W.S. 21-12-105. Career-technical education demonstration project grants; application; criteria; limitations. (i) Prepare high school students for a full range of postsecondary options, including two (2) year and four (4) year college, apprenticeship, military and formal employment training; (ii) Connect academic and technical curriculum grounded in academic and industry standards; (iii) Provide innovative strategies for ensuring student access to career choices, as well as opportunities for work-based learning and dual enrollment in

related postsecondary education courses; (iv) Support workforce, education and economic needs of Wyoming.

- W.S. 21-13-309. Determination of amount to be included in foundation program for each district. (II) Career-vocational education programs offered in grades nine (9) through twelve (12) consisting of a sequence of three (3) or more vocational courses in an occupational area or career cluster that provides students with the technical knowledge, skills or proficiencies necessary to obtain employment in current or emerging occupations or to pursue advanced skill training.
- W.S. 21-22-106. Distribution of trust funds available to public schools; innovative program grants; criteria. (iv) Acquisition of technological equipment for programs expanding curriculum, enriching student education, enhancing staff development and providing community service; (v) Applied science and technology programs designed to meet future labor market demands and to integrate public school programs with needs of business and industry
- W.S. 21-2-304. Duties of the state board of education. The board shall ensure that educational programs offered by public schools in accordance with these standards provide students an opportunity to acquire sufficient knowledge and skills, at a minimum, to enter the University of Wyoming and Wyoming community colleges, to prepare students for the job market or postsecondary vocational and technical training and to achieve the general purposes of education that equips students for their role as a citizen and participant in the political system and to have the opportunity to compete both intellectually and economically in society.

2. Delivery Systems and Student Guidance

Wyoming Perkins State Plan

- Sec. II.A (2)(a) Program Administration; adoption of 16 career clusters and creation of a program of study for each of the 16 career clusters.
- Sec. II.A (2)(b) Program Administration; implementation of PoS will be consistent with Wyoming Statute 21-13-309 (D)(II).
- Sec. II.A (2)(b) Program Administration; Hathaway Scholarship requires all eighth graders create a high school graduation plan with a career component.
- Sec. II.A (2)(b) Program Administration; use of Hathaway Scholarship provisions to strengthen career guidance. Increase the role of Wyoming Department of Workforce Services (DWS) in career counseling. Development of Career Cluster Guides.

Wyoming State Statutes, Rules, and Regulations

- W.S. 21-7-303. Certificate or permit required; exception. b) Faculty members employed by any postsecondary education institution accredited by a regional accrediting agency may teach courses offered at a public high school in this state without holding or being qualified for a certificate or permit issued by the Wyoming professional teaching standards board.

3. Secondary-Postsecondary Articulation

Wyoming Perkins State Plan

- Sec. II.A (2)(a) Program Administration; adoption of 16 career clusters and creation of a program of study for each of the 16 career clusters.
- Sec. II.A (2)(c) Program Administration; collaborative development of a more uniform format and approach to the development of articulation agreements between WDE and the Wyoming Community College Commission (WCCC).
- Sec. II.A (2)(k) Program Administration; use program of study as a framework to link secondary and postsecondary CTE.

Wyoming State Statutes, Rules, and Regulations

- W.S. 21-12-105. Career-technical education demonstration project grants; application; criteria; limitations. (i) Prepare high school students for a full range of postsecondary options, including two (2) year and four (4) year college, apprenticeship, military and formal employment training; (ii) Connect academic and technical curriculum grounded in academic and industry standards; (iii) Provide innovative strategies for ensuring student access to career choices, as well as opportunities for work-based learning and dual enrollment in related postsecondary education courses; (iv) Support workforce, education and economic needs of Wyoming.
- W.S. 21-22-106. Distribution of trust funds available to public schools; innovative program grants; criteria. (vi) Technical preparation programs integrating specific public school programs with community college programs and working with business and industry to prepare students for technical and academic careers
- W.S. 21-7-303. Certificate or permit required; exception. b) Faculty members employed by any postsecondary education institution accredited by a regional accrediting agency may teach courses offered at a public high school in this state without holding or being

qualified for a certificate or permit issued by the Wyoming professional teaching standards board.

- W.S. 21-20-201. Wyoming Postsecondary Education Options Program. Agreement between districts and postsecondary education institutions authorized; student participation; credits; financial arrangements; transportation; accessibility. (a) A Wyoming school district board of trustees and a Wyoming community college district board of trustees or the University of Wyoming may enter into an agreement to establish a postsecondary education enrollment options program whereby students resident of the participating district may attend postsecondary education programs offered by the university or a participating community college. (c) A student participating in a postsecondary education enrollment options program pursuant to this section shall upon successfully completing any course offered under the program, receive academic credit by the resident school district which shall be counted towards the graduation requirements of the district.

4. Teacher Quality, Preparation, Professional Development

Wyoming Perkins State Plan

- Sec. II.A (3)(a-f) Program Administration; comprehensive professional development of CTE staff, including initial teacher preparation and activities that support recruitment and retention.

Wyoming State Statute, Rule, and Regulation

- W.S. 21-7-303. Certificate or permit required; exception. b) Faculty members employed by any postsecondary education institution accredited by a regional accrediting agency may teach courses offered at a public high school in this state without holding or being qualified for a certificate or permit issued by the Wyoming professional teaching standards board.
- W.S. 21-22-106. Distribution of trust funds available to public schools; innovative program grants; criteria. (iii) Administrator and staff development and improvement programs such as performance incentives, awards for excellence, professional training and development programs and performance evaluation programs
- PTSB Ch. 6 | Document 4896. Secondary Programs.
Section 2—Agricultural Program Approval Standards
Section 3—Business Program Approval Standards; Section 5—Computer Science Program Approval Standards

Section 7—Family and Consumer Science Program Approval Standards

Section 8—Industrial Education Program Approval Standards

Section 12—Mathematics Program Approval Standards

Section 15—Science Program Approval Standards

- PTSB Ch. 13 | Document 6639. Additional Endorsements.
 - Section 2—Cooperative Vocational Education
 - Section 3—Trade and Industrial Education Endorsements
 - Section 6—Computer Industry Certification
- PTSB Ch. 14 | Document 6640. Permits.
 - Section 5—Trade and Technical Education Instructor Permit.

5. Finance and Accountability

Wyoming Perkins State Plan

- Sec. VI.A (1-6) Fiscal Requirements; establishes a 60 percent secondary and 40 percent postsecondary split of federal Perkins funds.
- Sec. IV.A (1-9) Accountability and Evaluation; development of valid and reliable measurement definitions for core indicators of performance and description of state and local adjusted levels of performance for students participating in CTE.
- Sec. IV.A (10) Accountability and Evaluation; systems and processes to evaluate the effectiveness of CTE programs.

Wyoming State Statute, Rule, and Regulation

- W.S. 21-13-309. Determination of amount to be included in foundation program for each district. (D) Vocational education computations within the education resource block grant model shall be based upon: Section: (D)(I-III)
- WY DOE Rule Ch. 37 | Document 6073. Vocational Education Funding Eligibility
- WY DWS Rule Ch. 2 | Document 5869. Workforce Development Training Fund Pre-Hire Training Grants
- WDE, Federal Programs Unit, *Wyoming Consolidated Grant Manual*. Perkins Program Summary at a Glance, Pg. 73–77
- W.S. 21-20-201. Wyoming Postsecondary Education Options Program. Agreement between districts and postsecondary education institutions authorized; student participation; credits; financial arrangements; transportation; accessibility. (e) A student participating in

the program shall be counted within the average daily membership of the resident school district as defined under W.S. 21-13-101 (a)(i) and concurrently by the participating higher education institution for its full-time equivalent enrollment count.

Appendix B: Wyoming Career Clusters Alignment with Secondary School Course Classification System: School Codes for the Exchange of Data (SCED)

May 20, 2009

Tom Martin, CTE Section Supervisor

Career Cluster Title and Letter Code	SCED Course Certification Numbers
Agriculture, Food and Natural Resources: AFNR	18001-18999
Architecture and Construction: ARCN	17001-17999 and 21101-21149
Arts, A/V Technology and Communications: ATCM	11001-11999
Business, Management and Administration: BUMA	12001-12099
Education and Training: EDTR	19151-19199
Finance: FINA	12101-12149
Government and Public Administration: GOPA	15201-15999
Health Science: HESC	14001-14999
Hospitality and Tourism: HOTO	16001-16999 and 22201-22249
Human Services: HUSE	19001-19149, 19201-19999, 22201-22249
Information Technology: INTE	10001-10999
Law, Public Safety, Corrections and Security: LPCS	15001-15199
Manufacturing: MANU	13001-13999
Marketing, Sales and Service: MASS	12151-12999
Science, Technology, Engineering and Mathematics: STEM	21001-21999
Transportation, Distribution and Logistics: TRDL	20001-20999
**All teachers certified in each of the above cluster areas qualify to teach Career Exploration/Development.	22151-22153