

Montana Consolidated Annual Report Narrative July 1, 2010 – June 30, 2011

1. Implementation of State Leadership Activities

Secs. 124(b) and (c) of *Perkins IV* describe the required and permissible uses of state leadership funds, respectively.

Required Use of Funds: *(Provide a summary of your state's major initiatives and activities in each of the required areas)*

Conducting an assessment of the career and technical education programs funded under *Perkins IV*

State Response: Montana secondary and postsecondary accountability specialists analyze the indicator data and prepare a report of state level/wide performance issues. Local funds address local issues specific to individual schools, colleges or programs offered by them. From a leadership perspective, data that verifies a consistent performance deficit across school, college or program size or type are examined in February each year for the previous year by three evaluative groups: the State Executive Leadership Team (SELT); secondary and postsecondary staff during the annual planning meeting; and the Montana Perkins Advisory Council. For the 2011-12 grant year, reviewed the 09-10 grant outcomes during an annual planning meeting held March 10th.

Based on the results of the group meetings, strategies were developed to address the issues given the Perkins and CTE funding categories available. The majority of funds were directed towards the Big Sky Pathway/Program of Study (BSP/POS) initiative in 10-11 and again in 11-12 grant years. Given this is the last year for Tech Prep funding, Montana felt a comprehensive effort to implement BSP/POS would solidify secondary, postsecondary, adult basic education, and labor partnerships at the local level. This would build a solid foundation to then address statewide performance deficits.

Secondary Response: The OPI continued to utilize the on-line electronic grant application for Carl Perkins for district applications, funding requests, and payments. Before the initial grant application is approved, each district completes a self-assessment for each CTE program offered. This assessment is used by the secondary CTE State Program Specialists and the school to help identify areas of weakness. A high school specific “report card” shows all eight Perkins core indicators of performance and how each high school performed compared to the state goal. This “report card” is available to each school upon request as well as listed inside the grant application. A partial print screen example is shown below.

Perkins IV ACCOUNTABILITY DATA--Performance Indicators				Academic Year: 2009-2010				
Updated: December 28, 2010; submitted to <i>EDFacts</i> & CAR								
MONTANA	1S1	1S2	2S1	3S1	4S1	5S1	6S1	6S2
Numerator	3861	2589	186	5173	5094	5411	5129	345
Denominator	4935	4935	214	5302	5297	5505	22749	2518
Your Results	78.2%	52.5%	86.9%	97.6%	96.2%	98.3%	22.5%	13.7%
State Negotiated Goal (90% Threshold Target)	66.6%	45.9%	73.8%	73.8%	73.8%	73.8%	14.0%	14.0%

The Perkins “report card” shows high school-specific performance percentages compared to the state negotiated goal. If schools fail to meet 90% of the state negotiated goal they are required to submit an explanation in the on-line application that describes specific strategies and activities they will conduct to improve the indicator. The disaggregated data available to each school from the statewide student data system called ‘Achievement in Montana’ or AIM, will continue to assist schools even more as they analyze their data and use it to make decisions and improvements. The fiscal budgets and funding distribution detail pages of the application are program specific and help us to better monitor the proper usage of funds. The Perkins Purchasing Manual and other technical assistance is available on the [CTE web page](#). These documents provide guidance to local districts on proper usage of Perkins funds. Secondary CTE State Program Specialists perform Perkins program reviews of up to 20% of districts each year on a rotational basis. In 2010-11, 34 high school districts were visited either in person (on-site) or via a desk audit.

Postsecondary Response: Every program submitted by local grant recipients is reviewed and approved by the Perkins Accountability Specialist. Utilizing the comprehensive Perkins IV Postsecondary database, the approved programs and student data are assembled into a number of indicator performance reports. The report most utilized for state decision making is broken down by indicator, then CIP Code, then grantee. Nontraditional gender indicator, as well as ethnicity and special population results are shown. These reports are used to guide program of study development, reserve and state leadership grant initiatives, or incentives to increase development or enhancement of high skill/wage/demand programs.

Fiscal Year: July 1, 2009 - June 30, 2010		Academic Year: Summer 2009 - Spring 20		State Indicator & Goal: 2P1 Completion		53.00%									
Numerator:		Number of CTE concentrators who received, or were eligible to receive an industry-recognized credential, a certificate, or a degree and left postsecondary education during the reporting year.													
Denominator:		Number of CTE concentrators who left postsecondary education during the reporting year.													
Montana Field: Agriculture, Food and Natural Resources - Career Cluster: Agriculture/Food and Natural Resources															
010102 - Agribusiness/Agricultural Business Operations (Nontraditional for Females)															
Totals	Males	Females	American Indian or Alaskan	Asian or Pacific Islander	Black-not Hispanic	Hispanic	White-not Hispanic	Ethnicity Unknown	Disability	PELL or BIA	Non-trad Gender	Displaced Home-makers	Single Parents	Limited English	Grantee Goal:
Remainder	14	10	4	0	0	0	14	0	0	6	4	0	0	0	35.33%
Numerator	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Denominator	14	10	4	0	0	0	14	0	0	6	4	0	0	0	0
Results	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
- Agriculture Technology								Grantee Goal:							61.17%
Remainder	3	2	1	0	0	0	3	0	1	3	1	0	0	0	0
Numerator	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Denominator	3	2	1	0	0	0	3	0	1	3	1	0	0	0	0
Results	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Totals/Results for 010102 - Agribusiness/Agricultural Business Operations (high demand)								OCHE Goal:							53.00%
Remainder	17	12	5	0	0	0	17	0	1	9	5	0	0	0	0
Numerator	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Denominator	17	12	5	0	0	0	17	0	1	9	5	0	0	0	0
Results	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

for state decision making is broken down by indicator, then CIP Code, then grantee. Nontraditional gender indicator, as well as ethnicity and special population results are shown. These reports are used to guide program of study development, reserve and state leadership grant initiatives, or incentives to increase development or enhancement of high skill/wage/demand programs.

In addition, a program report card has been developed so that each program can track Perkins indicator progress. A print screen of this report is shown below highlighted in blue can be given to each Perkins eligible program covered with

local application funds. Since Perkins indicators are measured differently than IPEDS and institution indicators, the definitions of the indicator numerator and denominator are provided.

Perkins Performance Indicators										
Grant ID: 46		Grant Academic Year: Summer 2010 - Spring 2011								
Goals for Montana State University Billings College of Technology:				2011 Concentrators	50.00%	56.91%	65.36%	85.68%	11.29%	8.92%
Programs:				1P1	2P1	3P1	4P1	5P1	5P2	
092 - Practical Nursing (Degree: AAS) - NT M HD HS				76	93.02%	92.31%	89.13%	10.00%	10.00%	
096 - Process Plant Technology (Degree: AAS) - NT F HS				79	88.46%	96.55%	90.91%	11.63%	17.39%	
045 - Radiologic Technology (Degree: AAS) HW HS				32	100.00%	100.00%	78.57%			
063 - Registered Nursing (Degree: ASN) - NT M HD HW HS				66	76.19%	100.00%	100.00%	96.77%	16.13%	16.33%
033 - Sustainable Energy Technician (Degree: AAS) - NT F HW HS										
032 - Sustainable Energy Technician (Degree: CAS) - NT F HW HS										
031 - Welding & Metal Fabrication (Degree: AAS) - NT F HD HS						100.0				
086 - Welding and Metal Fabrication Technology (Degree: CAS) - NT F HD HS				13		31.2				
030 - Welding for Energy Technology (Degree: CAS) - NT F HD HS										
College Results:				644	82.14%	59.9				
College Goals:					50.00%	56.9				
State Goals:					52.00%	55.0				

The report highlighted in green seems to be utilized the most. It identifies all the Perkins programs within a college and

how each is performing. Programs that have never received Perkins funds before are scrambling to bring up low numbers and are making requests for Perkins funds, some for the first time ever. Montana is using these reports to identify programs in need of innovation or enhancements. Those programs underperforming are given first priority for Perkins funds.

Perkins Performance Indicators							
College: [Redacted]							
Program: BUAST-CERT - Business Assistant (Degree: CERT)							
Grant ID: 3		Grant Academic Year: Summer 08 - Spring 09					
		1P1	2P1	3P1	4P1	5P1	5P2
Numerator:		14	8	4	0	0	0
Denominator:		21	14	8	11	9	
Results:		66.67%	57.14%	50.00%	0.00%	0.00%	
College Goal:		22.47%	60.00%	75.00%	18.48%	28.25%	
Over or Under Goal:		44.20%	-2.86%	-25.00%	-18.48%	-28.25%	
State Goal:		50.00%	51.00%	60.00%	73.00%	12.00%	12.00%
1P1 Technical Skill Assessment							
Numerator:	Number of CTE concentrators who passed technical skill assessments that are aligned with industry-recognized standards, if available and appropriate, during the reporting year.						
Denominator:	Number of CTE concentrators who took technical skill assessments during the reporting year.						
2P1 Completion							
Numerator:	Number of CTE concentrators who received, or were eligible to receive an industry-recognized credential, a certificate, or a degree and left postsecondary education during the reporting year.						
Denominator:	Number of CTE concentrators who left postsecondary education during the reporting year.						
3P1 Student Retention or Transfer							
Numerator:	Number of CTE concentrators who remained enrolled in their original postsecondary institution or						

Developing, improving, or expanding the use of technology in career and technical education

Secondary Response: The OPI maintains web sites and uses many different electronic methods to clearly communicate Perkins and CTE-related information with the secondary field. In 2010-11, we utilized official e-mail, monthly summaries to school superintendents, and CTE Updates all provided electronically. In November of 2010 we made substantial improvements to our 'Secondary CTE' web page which is connected to the Montana

Office of Public Instruction web site. The changes improved our communication to the field by providing up-to-the-minute information in an easier and more efficient manner.

TECHNICAL ASSISTANCE WEBINARS

On September 9, 2010, the Office of Public Instruction (OPI) and the Office of the Commissioner of Higher Education (OCHE) hosted a WEBINAR to explain objectives of the statewide Big Sky Pathway Initiative. The webinar was recorded and posted on the OCHE web page for viewing by participants unable to attend the webinar live.

In January, 2011, we conducted an electronic WEBINAR that provided detailed technical assistance to CTE teachers and school staff explaining the on-line student participation reports. Student Participation Reports are used in-house by CTE State Program Specialists to approve programs—thus making them eligible for Perkins and state-funded monies. This webinar was pre-recorded and immediately posted on the CTE web page as a resource for teachers and administration.

We used technology to communicate both the Spring and Fall CTE data collection information and provided an on-line link for districts to complete their intent to apply for federal Perkins monies for the coming year.

In May, 2011, two additional technical assistance WEBINARS were recorded: ‘An Introduction to Perkins Law and the E-Grant’ and ‘Changes to the upcoming Perkins grant application’. Both webinars were pre-recorded, saved, and posted to our web page for schools to view at their convenience and 24/7. The first was a basic introduction to Perkins for district administration that had no prior Perkins grant experience. The second webinar covered the detailed changes made to the upcoming Perkins grant application from the prior year.

Postsecondary Response: Montana also received funds to add two of the three community colleges to the MUS data system BANNER. This has significantly improve their ability to collect and report data, as well as our ability to use more comprehensive data to make system wide, data driven decisions. While this is the first year data was entered for these colleges and there is only one year of data available, the potential is huge.

The Distance Learning Initiative has produced impressive results. These results significantly impact Montana CTE programs. MUS 2 year campuses offer in excess of 500 online courses to over 8000 students each semester. MUS campuses offer more than 100 online certificate and degree programs, ranging from the certificate and the AA/AS level through the PhD level and delivered more than 115,000 online student credit hours in FY 11. For more information, refer to the following links: <http://mus.edu/online/AnnualOnlineStatisticsReport-FY11.pdf>
<http://mus.edu/data/briefs/DistanceLearning-OnePager.pdf>

The above efforts have allowed Perkins grantees to utilize Perkins funds for other types of program enhancement and development. The majority of which was devoted to new program development and implementation, curricula updates and professional development.

[Offering professional development programs, including providing comprehensive professional development \(including initial teacher preparation\) for career and technical education teachers, faculty, administrators, and career guidance and academic counselors at the secondary and postsecondary levels](#)

Secondary Response:

Statewide Big Sky Pathway Initiative Meetings - In order to help Montana’s high schools develop, improve, and/or expand their Big Sky Pathways (programs of study) the OPI and the OCHE funded participation for all schools to send at least one content-specific teacher and one counselor to attend a regional workshop that brought secondary and postsecondary leaders together. Initial workshops were held throughout the state in various locations in the months of November and December of 2010. Follow-up second meetings were held in similar geographical areas in January and February of 2011. At the conclusion of the second meetings one pathway per school was created and documentation was gathered for approval by the OPI and OCHE.

Rigorous Big Sky Pathway in Construction - There are four school districts participating in the Montana Rigorous Programs of Study (RPOS), a partnership between the Office of Vocational and Adult Education (OVAE), the Montana Office of Public Instruction (OPI), and the Montana Office of the Commissioner of Higher Education (OCHE). They are the Billings Public Schools, Townsend (Broadwater County) School District, Helena Public Schools, and Great Falls Public Schools. The goal of the program is to create a RPOS in construction at each of the four school districts. By definition from OVAE, a RPOS is a program of study that incorporates the “Ten Component Framework” into the program of study. The RPOS program is scheduled to run from October 2010 through September 2014. During that period of time, OVAE will collect data on how well students perform in a RPOS compared to other CTE programs of study as well as the general student population.

In year one, the four high schools focused on improving the college and career readiness of their students. This process included conducting a crosswalk of each school’s construction program of study against the national knowledge and skills statements as published by careerclusters.org. Based on the gap analysis that resulted from the crosswalk, each school district decided to first address the need for students in the construction pathway to learn and apply math skills. Townsend, Helena and Great Falls will implement a math integration program from the National Research Center for Career and Technical Education (NRCCTE) known as Math-In-CTE. The Billings school district is introducing a program that applies the math integration principle by blocking a math class (Technical Geometry) with a construction class (Geometry in Construction) that gives students the opportunity to apply the geometry they learn immediately in the construction setting.

Each school district has also began preparing to implement projects to improve the reading and writing skills of CTE students and to introduce a career counseling and guidance program that improves awareness of CTE careers and curriculums among students, their parents, teachers and counselors.

The New CTE Professionals Workshop - The CTE division’s specialists and staff hosted a New CTE Professionals Workshop on October 20, 2010. Over 40 middle school and secondary CTE Professionals from around the state attended. Classroom teachers were represented from agriculture education, business education, family and consumer sciences education, and industrial, trades, and technology education. Attendees participated in two joint sessions addressing Carl Perkins and state funding, Career Clusters, Big Sky Pathways, and various STatewide ARTiculation (START) agreements. The joint sessions were followed by an area-specific breakout session covering professional organizations, professional development opportunities at the state, regional, and national levels, and resources for curriculum development and classroom management. The afternoon focused on career and technical student organizations (CTSOs) and provided new advisors with tips, tricks, and resources.

Summer Trainings for Teachers

Agriculture Education—Program Specialist, Brad King coordinated the Agriculture Education Teacher Update Conference that was held in Forsyth, Montana from June 20-24, 2011. Sessions addressed Natural Resources and Renewable Energy topics.

Business Education—Program Specialist, Eric Swenson The Montana Business Education Association (MBEA) again partnered with Montana State University-Great Falls College of Technology for the 2011 MBEA Summer Update in which we were able to attend the 2011 Montana Institute on Educational Technology held June 13-17 on the Montana State University-Great Falls College of Technology campus. The 2011 Montana Institute on Educational Technology offered Montana’s business and marketing educators a wide range of workshops and classes including technology tools for the classroom, freeware, Microsoft Office 2010, products with the Abode Suite, Google Apps, Web 2.0, and Cloud Computing. Attendees were able to attend for the full week or on a day-by-day basis and were provided the opportunity to earn two graduate credits from Montana State University-Northern.

Family & Consumer Sciences Education—Program Specialist, Megan Anderson offered nine FCS Regional Workshops in various locations around the state during the first two weeks of August, 2010. Entitled, ‘Connecting

the Dots within FCS', the topics included: Carl Perkins and Big Sky Pathways, Academic Infusion, Brand FACS, Middle School to High School Transitions, Best Practices in FCS, and Leadership Development.

Health Sciences Education—Program Specialist, Renee Harris offered a Health Science Teachers Training in June, 2011, at the University of Montana College of Technology in Missoula, Montana. The training provided teachers with the skills and knowledge necessary to teach a Health Science education course at the high school level with a focus in the health care environment. It included an overview of the National Health Care Standards and Accountability Criteria, health care career clusters, and afforded teachers an opportunity to learn, refine, and apply skills needed to develop a high school Health Science course that meets each of the National Health Care Standards and Accountability Criteria. At the end of the training was a 40-hour Job Shadowing component.

Industrial, Trades, and Technology Education—Program Specialist, Don Michalsky coordinated three teacher trainings. One was hosted at Bozeman High School on July 14-16, 2010. The curriculum training was specific to Mastercam and SolidWorks. On July 19-24, 2010, there was a 'Certified Welding Educator Summer Workshop' offered at Flathead Valley Community College (FVCC) and again at FVCC on February 22-24, 2011, there was a NCCER Curriculum Training workshop for secondary and postsecondary teacher professional development. The training included Agriculture Education as well as Industrial Trades at the NCCER workshop.

Montana Association for Career and Technical Education (Montana ACTE) - The focus of this year's institute in October of 2010 was, again, on Montana Career Clusters and on the further development of Big Sky Pathways (program of study) and helping educators address the requirements. General Session topics included:

- College!Now: Dual enrollment guidelines
- Student Leadership Challenge: leadership model grounded in extensive research to incorporate /foster leadership development
- Accountability & Performance Measures: explanation of performance indicators and other accountability measures that affect the Perkins grant
- Navigating Big Sky Pathways with MCIS & MAPS: how to use technology to help students create an individualized program of study using the Montana Career Information Systems (MCIS) and Montana Achievement Plan (MAP)
- Statewide ARTiculations (START): explanation of the statewide articulation process

With the projected activities, the following career and technical educators served were: approximately 173 total attendees broken out by program area as follows: 29 Agriculture educators; 55 family and consumer science educators, 37 industrial technology educators, 38 business educators, and 14 administrative staff.

[Providing support for career and technical education programs that improve the academic and career and technical skills of students through the integration of academics with career and technical education](#)

Secondary Response: During the FCS Regional meetings mentioned above, time was spent sharing and discussing a tool box of strategies for incorporating numeracy and literacy into CTE curriculum. Strategies and examples specific to FCS were discussed and highlighted during the session. Teachers had an opportunity to learn about the new strategies, try them out and discuss places to incorporate the strategies into their curriculum. The curriculum was borrowed from a North Carolina CTE consultant.

All LEAs with Health Science programs received a set of supplementary lesson plans on health science foundation knowledge and skills developed by the National Consortium on Health Science Education. These lessons specifically address all eleven standards and give teachers clear instructional materials to teach all areas.

Postsecondary Response: As part of our collaboration with secondary through Big Sky Pathways, postsecondary teachers are collaborating to align secondary preparation in composition and mathematics with academic requirements by career/technical area. To facilitate this alignment, postsecondary faculty and academic officers

have begun the process of aligning academic requirements for similar career/technical options across postsecondary institutions so that expectations are clearly and consistently communicated.

Three postsecondary institutions developed technical math courses for construction and automotive programs to replace college level algebra as the required math. Given the high number of students in these programs needing remedial math and the number of students that do not complete the programs leaving only a math course unfinished, advisory programs, and industry were consulted to identify the appropriate math skills required for these occupations. Montana is reviewing the data from the first year of these math courses in comparison to the standard required math course. No conclusion can be drawn yet.

[Providing preparation for non-traditional fields in current and emerging professions, and other activities that expose students, including special populations, to high skill, high wage occupations](#)

Secondary Response:

Health Science Education

Health Science/Health Occupations Students of America (HOSA) used posters representing non-traditional fields for recruiting students into health science classes and HOSA chapters and instituted a Social Marketing Campaign using *YouTube* and *Facebook* to recruit new members utilizing National Alliance for Partnerships on Equity strategies. K-12 E-newsletters were e-mailed to over 800 elementary and middle school teachers; “Great Hospital Adventure” (GHA) Puppet Shows put on by HOSA chapter members for elementary students. GHA was developed by the Pennsylvania Area Health Education Center to introduce young learners to health careers in a non-stereotypical presentation. PowerPoint presentations were sent to all high school teachers on health careers with salary/workforce needs. We addressed the reduction of stereotype threats through teacher training at HOSA Fall Leadership Conference. HOSA chapter members invited a non-traditional student to HOSA meeting; Fifty percent (50%) guest speakers were non-traditional health care workers; Work-based learning in all areas of the hospital exposed students to non-traditional opportunities through:

- Guest Speakers and judges represented non-traditional occupations in health care
- Educational Symposiums offered at HOSA State Leadership Conference offered students the chance to explore non-traditional fields

Family and Consumer Sciences Education

Newsletter articles were written for FCCLA members to recruit non-traditional students. Non-traditional students were invited to FCCLA meetings across the state at the chapter level by current members. Newsletters were sent to middle school/junior high programs to promote FCCLA to younger students to encourage participation of all students. At the FCCLA State Leadership Conference, day long career exploration was offered representing non-traditional careers, leadership training was offered and led by a non-traditional student, and educational workshops were provided to members highlighting careers in non-traditional fields as well as topics directed at non-traditional members.

Industrial, Trades and Technology Education

SkillsUSA leaders used posters representing non-traditional fields for recruiting students into Industrial, Trades and Technology classes and SkillsUSA chapters. They presented recruiting strategies and conducted various presentations to all Advisors during the state conference. They provided hands-on exploratory activities for non-traditional students in welding programs at the state conference. They implemented a ‘Student2Student’ mentoring program helping non-traditional high school students mentor middle school students to explore non-traditional careers. Reduction of stereotypes of non-traditional programs and students was addressed through training at the state conference. Non-traditional leadership activities were provided and a web site was developed to emphasize non-traditional inclusion.

To help support and encourage students interested in non-traditional careers, our ‘Secondary CTE’ web page continues to offer the STEM DVD for viewing. The DVD highlights five Montana women who embraced their own careers in science, technology, engineering, and math.

Local school performance indicator data for non-traditional fields (6S1 and 6S2) was again, available to all school districts in 2010-2011 through the grant application. This data was utilized to identify programs not meeting at least 90% of their local levels of performance for the non-traditional indicators. CTE State Program Specialists and the Perkins Accountability Specialist was available to assist schools in creating strategies to help meet these non-traditional indicators.

May it be especially noted that the ‘displaced homemaker’ category does not apply to the secondary level in the state of Montana and, therefore, is not included in either the CAR data or ED Facts data reporting.

Postsecondary Response: Local application data was used to identify programs that did not meet their local negotiated levels of performance for the nontrad indicators. These grantees were given additional funds for 09-10 through state leadership to either develop counseling or other strategies to increase nontrad participation and completion.

Supporting partnerships among local education al agencies, institutions of higher education, adult education providers, and, as appropriate, other entities, such as employers, labor organizations, intermediaries, parents, and local partnerships, to enable students to achieve state academic standards, and career and technical skills, or complete career and technical programs of study

State Response: In the development Big Sky Pathways/Programs of Study a number of partners were enlisted to work with LEAs via pathway specific advisory groups which include the following partners, apprenticeship programs, labor, secondary, postsecondary, business & industry.

Through the Montana Transfer Initiative process, the Montana University System is developing simple and clear procedures and policies regarding the transfer of credits among the various units of the system. The end result includes common course numbering with identified course outcomes. The identification of common course outcomes for postsecondary courses has enabled the crafting of statewide articulation agreements between secondary and postsecondary. This has been a collaborative effort among the Office of the Commissioner of Higher Education, the Office of Public Instruction, postsecondary institutions, secondary schools, and the Tech Prep consortium.

Another partnership that has been forged is one with the Student Assistance Foundation and the Department of Labor/Montana Career Information Service (MCIS). MCIS is adapting its online guidance delivery system to focus on Big Sky Pathways and two-year college opportunities in Montana. The student planner in MCIS (called a Big Sky Pathway MAP) will allow a student to align their four-year high school plan of study with their first two years of postsecondary education. Montana intends to focus on high school counselors and parents in the 2012-2013 grant year. The specific strategies will be developed in the 2012 annual planning meeting.

OCHE further collaborated with Adult Basic Education and the Department of Labor using Work Force Incentive monies to develop a collaborative referral process utilizing MCIS as the common unifying system. Training modules were created to walk customers through the various processes of each applicable agency to get them to the next step in their career path. MCIS will house all of the personal assessment and data needed for agencies to help guide the student/customer.

Serving individuals in state institutions

State Response: Montana chose to spend only 1\$ on institutions this grant year. The choice was a result of Tech Prep funds being eliminated and a significant cut to the Title 1 grant late in the planning year.

Providing support for programs for special populations that lead to high skill, high wage and high demand occupations

Secondary Response: The CTE division at the OPI continues to collaborate with the Special Education division through the State Improvement Grant (SIG) to recruit and/or facilitate the entrance and retention of special

populations and disadvantaged persons into existing programs of career and technical education, or other education and training; provided an access point for the targeted populations of students for a seamless, linked system that promotes their successful attainment of educational and career goals.

Postsecondary Response: Montana has utilized the Occupational Supply and Demand System (OSDS) to tie the high skill/wage/demand criteria to state and national labor market data. We have also collaborated with Les Janis, OSDS Administrator, to use labor marketing, ONET and SOC data to develop a site that gives the workforce percentage for each CIP for each high skill/wage/demand categories. Examples of this can be viewed at the following URL:

(http://test.occsupplydemand.net/Montana2/HDWS/OSD_CIPlistMT.aspx).

Click on any occupation and you will see a results screen that looks like the screen print to the right. This information in addition to the reports mentioned above that describe indicator results by special population groups for each grantee and program will help Montana to pinpoint specific special populations issues for program, grantee and indicator. This information will be used to help define reserve, state leadership priorities and to provide incentives for local applications.

OSDS OCCUPATIONAL SUPPLY DEMAND SYSTEM								
Test Site for Kathy Wilkins								
Montana								
CIP Information: 11.0901 Computer Systems Networking and Telecommunications								
Sub-Baccalaureate Occupations			Criteria			Employment		
SOC Code	SOC Title	Employment 2004	High Demand	High Wage	High Skill	High Demand	High Wage	High Skill
15-1041	Computer Support Specialists	1,305	yes		yes	1,305		1,305
15-1099	Computer Specialists, All Other	224	yes	yes	yes	224	224	224
43-9011	Computer Operators	469			yes			469
51-4012	Numerical Tool and Process Control Programmers	3	yes	n/a	yes	3		3
Totals		2,001				1,532	224	2,001
Percent of Total Employment						76.56%	11.19%	100.00%

Offering technical assistance for eligible recipients

Secondary Response: Our CTE State Program Specialists provide ongoing and consistent technical assistance to Montana stakeholders—either by phone, e-mail, or with an on-site visit. This technical assistance is provided to local teachers, counselors, administrators, Perkins Grant Managers, and other personnel associated with all aspects of CTE. Technical assistance is also provided upon request on site at Perkins-eligible schools. Because of the vast geographical distances in Montana, technical assistance is also offered via electronic webinars, conference calls, and Adobe Connect communication. Two technical assistance webinars (as stated earlier) communicated the objectives of the statewide Big Sky Pathway Initiative held in the fall of 2010. The webinar was recorded and posted on the OCHE web page for viewing by participants unable to attend live. The second webinar detailed how CTE teachers and school staff should complete the on-line student participation reports. Both webinars were posted on the ‘Secondary CTE’ web page and made available 24/7 for any school to access at their convenience. In addition, all CTE staff contact information was provided at the end of both webinars, thereby making technical assistance available for individual schools with specific questions not covered in the webinar.

The Perkins Accountability Specialist provided clear and on-going technical assistance throughout the year regarding both the fall and spring CTE accountability data collections. Technical assistance was provided by various electronic sources: communication using the OPI Communication Server, FAQ’s and written guides for data collection posted to the ‘Secondary CTE’ web page, and phone calls to individual school districts with questions about accountability data.

Postsecondary Response: The Montana annual face-to-face best practice and technical assistance meeting was held Wednesday, September 29th, 2010 in Helena. [Notes](#) from this and all technical assistance meetings can be viewed on our website.

Because of the state focus on Big Sky Pathways (Rigorous Programs of Study), the local grantees also participated in Big Sky Pathways orientation training Sessions by Pathway area throughout August and September. Participants were trained to work with secondary to develop a pathway template and how to use MCIS to reinforce the use of the templates. This was also an opportunity to meet with their feeder high schools and begin to develop teacher to faculty relationships.

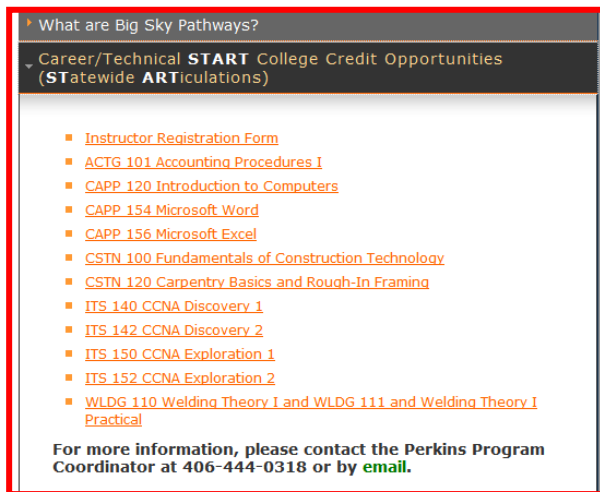
Permissible Activities Include: *(Provide a summary of your state's major initiatives and activities in any of the permissible areas that your state has chosen to undertake during the program year)*

[Improving career guidance and academic counseling programs](#)

State Response: A growing partnership with Montana Career Information System (MCIS) began in early 2008 and has remained strong. The initial partnership effort was directed towards a collaboration of Montana specific Career Cluster and Pathway printed materials. The partnership has now extended beyond this collaboration to include MCIS as a full partner in implementing Big Sky Pathways/Programs of Study. Career information continued to be the focus for the third year of the Workforce Incentive Grant. The grant funded the collaboration of Labor, Adult Basic Education and Higher Education to create Adult Pathways. MCIS was placed at the center of the collaboration as the tool that will unify the efforts of these agencies, the student, and other collaborating workforce partners. Training modules were created and marketed to every partner agency. The modules can be viewed by [clicking here](#).

[Establishing agreements, including articulation agreements, between secondary school and postsecondary career and technical education programs to provide postsecondary education and training opportunities for students](#)

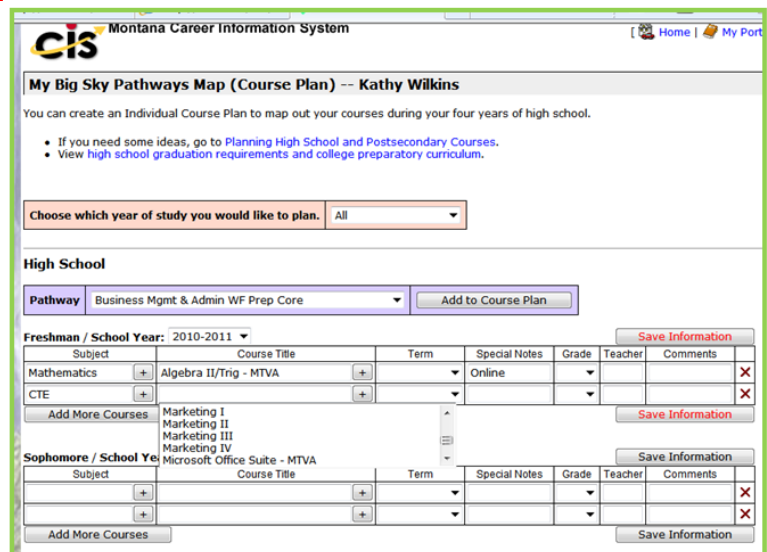
State Response: State Response: During the 08-09 grant year, Montana joined efforts with the state Transferability Initiative. The Transfer Initiative began the process of aligning common courses and course



numbers. Pathway articulation teams participated in the alignment sessions and were able to identify key courses to prioritize for statewide articulation development. While this process has taken longer than expected, the results are statewide and focus on high volume courses. In addition, the results of all college credit, “Statewide ARTiculation for CTE” (START), dual credit, or advanced placement are easier to track. Beginning in Spring of 2010, the following START articulations were implemented.

As results are compiled, new articulations will be added and existing articulations reviewed by pathway advisory councils.

The partnership with MCIS has been working on listing all advanced credit opportunities for each pathway template in the Montana Career Information System (MCIS) Montana Achievement Plan (MAP). Students will be able to view a cluster specific sequence of courses, including advanced credit opportunities specific for their high school and desired 2-year college. Below is a screen print of a MAP template. The high school and college courses have been added in the drop down boxes shown. Dual credit opportunities will appear at the top of the screen as soon as the enhancement to the system is completed. Every Perkins funded high school in Montana was trained to load their courses and Pathway templates into MCIS in the 10-11 grant year. Currently, of 484 pathways developed in 10-11, slightly over half have entered this information in MCIS. The MCIS component will be emphasized more in the 12-13 grant year as a tool for reaching parents and counselors.



Supporting initiatives to facilitate the transition of sub baccalaureate career and technical education students into baccalaureate programs

State Response: No activities have been completed nor planned for this grant year.

Supporting career and technical student organizations

Secondary Response: The OPI continues to be very committed to the support of CTE student organizations in Montana. The majority of our CTE State Program Specialists are also state advisors in their respective career fields, so they directly provide state leadership to their related career and technical student organization (CTSO). Secondly, we support them in resources and with funding—our office staff provide administrative and leadership resources to assist the Specialists’ state competitive event conferences.

In 2010-11 we additionally supported CTSOs by providing a state officer leadership training camp in June, 2010. State Leadership (state officer) teams from Business Professionals of America (BPA), Family Career and Community Leaders of America (FCCLA), and SkillsUSA participated in team building activities, leadership styles, and situational leadership activities. The CTSO’s supported in Montana are: FFA, Business Professionals of America (BPA), DECA, Family, Career and Community Leaders of America (FCCLA), Health Occupations Students of America (HOSA), Technology Student Association (TSA), and SkillsUSA.

Supporting public charter schools operating career and technical education programs

State Response: N/A

Supporting career and technical education programs that offer experience in, and understanding of, all aspects of an industry for which students are preparing to enter

State Response: Please refer to the Partnership with MCIS mentioned earlier in this document.

Supporting family and consumer sciences programs

Secondary Response: As mentioned above, the FCS Education Specialist offered nine FCS Regional Workshops in various locations around the state during the first two weeks of August, 2010. This was the second year that she traveled to locations around the state to make it easier for teachers to receive state support of their family and consumer sciences programs. Each month, the FCS Education Specialist sends informational updates to all Family and Consumer Science programs via e-mail. The updates include a variety of pertinent information including curriculum ideas, lesson plans, classroom resources, and state and national professional development opportunities. In addition, the FCS Education Specialist attends and presents at professional development conferences and meetings around the state to provide direct technical assistance to Montana educators.

Supporting partnerships between education and business, or business intermediaries, including cooperative education and adjunct faculty arrangements at the secondary and postsecondary levels

State Response: Extensive development of the Big Sky Pathway Initiative was a huge effort in partnership between business, secondary and postsecondary partners around the state. The initiative resulted in 464 Big Sky Pathway Partnerships; being formed in 10 different Career Clusters; for 12 2-year colleges & 160 high schools.

The secondary Health Science Specialist is closely associated with the Montana Office of Rural Health and the Area Health Education Center (MORH-AHEC). MORH-AHEC deals directly with all hospitals, clinics and medical organizations and the Health Science Specialist is a part of these advisory boards. This allows for a more planned and strategic approach to developing a K-12 health care pipeline in Montana, connections with business and industry, and a better use of federal dollars. Exposure to health careers begins in the elementary grades through a “Great Hospital Adventure” puppet show. Secondary health science/HOSA students present the puppet show as part of their health science program. For 4-8th graders, MORH/AHEC provides “In a Box” to multiple schools throughout the state. These boxes include five lesson plans to focus on specific anatomy such as eye, ear, brain, muscles, bones. Each box introduces students to a variety of health professions. AHEC works with local hospitals to set up one-day exploratory programs for 9th graders and works with the OPI to contact schools in specific regions. Additionally, MORH/AHEC funds week-long Med Start Camps at three universities across the state to expose special population students (*Perkins definition*) to campus life, medical careers, job shadowing, and financial aid for

higher education pursuits. These partnerships have allowed the Health Science Career Cluster to expand programming at an exponential rate.

The OPI Business Education Specialist works in partnership with business and industry as an active Board member of the Montana Council on Economic Education. This Board is comprised of secondary school administrators, postsecondary faculty, representatives from the banking, insurance, and service industries as well as from the state and federal government.

The OPI Division Administrator serves as a current member of the State Workforce Investment Board (SWIB) and spent time in the spring and summer of 2011 on a planning committee to sponsor a Big Sky Pathways Summit in August, 2011. More information about the Summit will be reported in the SY2012 Consolidated Annual Report.

Secondary Cooperative Work experience is one of five components of a quality program included in our current Montana Standards and Guidelines. The following program areas are served: Agriculture Education, Business and Marketing Education, Health Science Education, Family & Consumer Sciences Education, Industrial Technology Education, and Trades and Industrial Education. These work experience programs provide participating students with on-the-job experience and training along with CTE classroom instruction related to their career interests. A cooperative arrangement among the school, employer, and student is made and classroom activities and work experiences are planned and supervised by the school and the employer to ensure that both activities contribute to the students' employability.

Ongoing partnerships between education and business occur in all CTE program areas through the various career and technical student organization (CTSO) leadership and career development activities throughout the year. Partnerships are developed and enhanced as representatives from various Montana businesses and industries, along with postsecondary staff and faculty, volunteer to judge and facilitate competitive events as well as provide valuable workshops for student members.

[Supporting the improvement or development of new career and technical education courses and initiatives, including career clusters, career academies, and distance education](#)

State Response: Refer to the Big Sky Pathways initiative noted throughout this document.

Secondary Response: Project Lead the Way—STEM programs in Engineering and Biomedical Science—The Billings School District began their Engineering program four years ago. Bozeman High School piloted a Biomedical Science program three years ago and both programs continue to grow. We are seeing a continued expansion of Project Lead the Way (PTLW) programs in Montana; adding more engineering and Biomedical science programs in the years to come.

[Awarding incentive grants to eligible recipients for exemplary performance or for use for innovative initiatives under Sec. 135\(c\)\(19\) of Perkins IV](#)

State Response: Montana postsecondary developed its Performance Based Funding formula with the assistance of MPR through a technical assistance grant from OVAE to be used for the 10-11 grant year. Because of the funding cuts, it was the unanimous decision of the State Executive Leadership Team and the local postsecondary grantees to table implementation of the formula. The data will be gathered so grantees can see how the formula would have impacted them. This will help to refine the formula to achieve the desired outcomes while preserving funding to assist programs that are improving but struggling.

[Providing activities to support entrepreneurship education and training](#)

State Response: None at this time.

[Providing career and technical education programs for adults and school dropouts to complete their secondary school education](#)

State Response: Using Workforce Incentive Grant money, OCHE, OPI and DOL collaborated to provide seamless transitions between the three agencies for adult customers. The partnership uses an online Personalized Employment Plan available through the Montana Career Information System. The individual can utilize this portfolio throughout their life to update skills, education, work experience, personal assessments and career exploration searches.

[Providing assistance to individuals who have participated in Perkins assisted services and activities in continuing their education or training or finding appropriate jobs](#)

State Response: See answer to previous question

[Developing valid and reliable assessments of technical skills](#)

State Response: See the answer for question #2 (below)

[Developing or enhancing data systems to collect and analyze data on secondary and postsecondary academic and employment outcomes](#)

Secondary Response: The OPI continues to use an agency-wide data collection system called, ‘Achievement in Montana’ or AIM. This secure web-based on-line system is enhancing the collection, reliability, and analysis of data collected by the OPI. Because the AIM data system does not collect transcript-specific information, we rely on each local district to input accurate and reliable data.

The OPI on-line electronic grants management system (E-Grants) continues to be utilized for the Perkins ‘Intent to Apply’, local applications, amendments, funding requests, and payments. The E-Grant application is consistently helpful in communicating and collecting valuable data in an efficient manner. It helps the OPI State Program Specialists to monitor the proper usage of funds and provide technical assistance to those local districts with questions about their Perkins monies.

Currently we are in year three of a four-year Statewide Longitudinal Data System (SLDS) project funded by the U.S. Department of Education. In Montana, this data system is called GEMS (Growth and Enhancement of Montana Students). The RFPs for the new data system were released in November, 2010 and six proposals were received in January, 2011. These proposals have been evaluated and scored by the evaluation committee. The top three proposals were received from Vexcel/Aspect, Versifit, and Pearson/Choice Solutions. In March, 2011, these vendors came to Helena and demonstrated their proposals which were evaluated and scored by the review committee. Pearson/Choice Solutions received the bid for the RFP.

In other GEMS activities, the project team implemented a formalized data governance structure within the OPI. There is now improved agency-wide awareness and input regarding OPI data collection and reporting requirements. A formal data governance process began which is initiated by a request for a new data collection, changes to existing collections, modifying business rules regarding data and other data issues. This new process has recently been presented to Division Administrators and many other staff with the OPI.

Additionally, there are now five functioning committees meeting regularly to establish policies and procedures for data governance and for addressing OPI data issues. These committees are the Strategic Directions: Use and Analyze Data Committee, the Data Privacy and Security Committee, and the recently formed Data Governance, Core Data Stewards and Ad-hoc Committees. Other committees including key stakeholders outside of the OPI will also be established as this project progresses.

Postsecondary Response: The data system used in Perkins III did not gather a number of pieces of data needed for Perkins IV data collection. There were also inherent design flaws that overwrote data. Lastly, the student tracking system and grant databases were separate. A new system was developed to address these three issues.

The new online data system will allow data to be shared more easily and will allow data to be shared with like programs across the state. This is particularly important as the Big Sky Pathways/Programs of Study relationships are built and articulations decisions are made.

Utilizing the new database, program and student data are assembled into a number of reports. The report most utilized for state decision making is broken down by indicator, then CIP Code, then grantee. Nontraditional gender indicator, as well as ethnicity and special population results are shown. These reports are used to guide program of study development, reserve and state leadership grant initiatives, or incentives to increase development or enhancement of high skill/wage/demand programs. We are hoping to obtain similar secondary information in the future which will allow for more universal strategic planning. (A sample of these reports is provided above under the 1st required use.)

Beginning in September 2011, 8 of the 12 local grantee data for the Perkins database will come directly from the Banner system for the Montana University System affiliated schools. One community college and 3 tribal colleges will remain independent from the university system. This new system of gathering data will have a very significant impact on the local grantees. While the reports will not change, the time spent importing and managing the data will decrease to almost nothing. With the budget cuts of 11-12 and the threat of more for 12-13, in addition to the low admin allowance, it is particularly important to reduce administrative effort where ever possible.

Partnerships with FEDES and Montana Department of Labor were developed in Perkins III.

[Improving the recruitment and retention of career and technical education teachers, faculty, administrators, or career guidance and academic counselors, and the transition to teaching from business and industry, including small business](#)
Secondary Response: Health Science New Teacher Training is ongoing; however, due to cuts in Perkins, the health care industry partners have picked up the cost of this continuing training for health science professionals. To increase the number of health science programs offered across the state, secondary science and secondary health enhancement teachers were recruited to expand health science program offerings in smaller schools. This cross-training within schools allowed smaller schools to add to their CTE programs without incurring additional FTE or additional staff at a time when funding is limited.

An industry collaborative model in several Montana communities, the medical facility pays for an RN to teach the Certified Nursing Assisting curriculum for secondary students.

Agricultural Education teachers with three years experience or fewer were able to participate in the mentoring program for Agriculture teachers. In this program, teachers are paired with the experienced teacher chosen by the beginning teacher. Research has shown 50% of teacher/education graduates will leave teaching within the first five years largely due to a lack of individual support and fellowship. The mentoring program helps to provide this support and fellowship.

As mentioned in the above professional development section, the ‘New CTE Professionals Workshop’ held on October 20 was free to all CTE teachers who were new or had less than four years of teaching experience in the classroom. The focus on new teachers was intentional—to help assist and improve the retention of these teachers. The workshop offered to those new in the classroom the ability to develop the essential knowledge and skills to be successful in the classroom and in the CTE teaching profession while learning about the leadership and professional growth opportunities available for themselves and their students.

[Supporting occupational and employment information resources](#)

State Response: refer to answer above for MCIS on pages 11 & 12. Montana is also working with the Occupational Supply and Demand System maintained by Georgia State. Montana developed a form to identify programs that meet the high skill, high wage or high demand criteria set by the state. These criteria are matched

against continually updated supply and demand data. Montana has presented at 2 national conferences with the OSDS DBA, Les Janis to encourage national consistency of this information.

Progress in Developing and Implementing Technical Skill Assessments

(Sec. 113(b) of Perkins IV describes the core indicators of performance for career and technical education students for which each state is required to gather data and report annually to the Department. Among the core indicators are student attainment of career and technical skill proficiencies, including student achievement on technical assessments aligned with industry-recognized standards, if available and appropriate. [See Sec. 113(b)(2)(A)(ii) of Perkins IV.] While the Department recognizes that a state may not have technical skill assessments aligned with industry-recognized standards in every career and technical education program area and for every career and technical education student, the Department asked each state to identify, in Part A, Sec. VI (Accountability and Evaluation) of its new Perkins IV State Plan. Please provide an update on your state's progress and plan for implementing technical skill assessments with respect to items one through three below.)

(1) The program areas for which the state had technical skill assessments

Secondary Response: The OPI collected and reported Technical Skill Assessment scores for the Agriculture, Health Sciences, and Industrial Technology program concentrators for whom we could locate scores. The Agriculture assessments were conducted by collegiate FFA in March of 2011 and based on industry standards and national standards adopted by the National FFA Organization. Scores from five different state-level Career Development Events were collected and analyzed to make a single technical skill assessment score for Agriculture. As a result of Perkins cuts, Montana is no longer a member of the National Consortium for Health Science Education (NCHSE) and, therefore, we were not financially able to pay for the NCHSE assessment. Montana Health Science teachers collaborated on 50 anatomy & physiology questions and used an additional 50 questions from the HOSA National Concepts of Health Care exam to give as a health science TSA in 2010-11. The Industrial, Trades, and Technology assessments were conducted by collegiate SkillsUSA in April of 2011 and based on industry standards adopted by the National SkillsUSA Association and NATEF national standards.

In 2010-2011, Montana joined the American Association of Family and Consumer Sciences Pre-Professional Assessments and Certifications Consortium. This membership allowed FCS professionals to access assessments at a reduced cost. However, due to local control and no direct requirement from the state, FCS teachers did not access and offer the assessments at the local level due to lack of funding opportunities. Hence, there were no FCS technical skills assessment scores to report.

Estimated percentages of students who would be reported in the state's calculation of CTE concentrators who took assessments:

During the 2010-11 school year there were 257 technical skills assessments reported in the state's calculation of CTE concentrators who took assessments in the fields of Agriculture, Health Sciences, and Industrial, Trades and Technology Education. This is an increase of 17% over the previous years' report.

Technical Skill Assessments, as available and appropriate, were and will be reported as follows:

- Agriculture Education—end of school year 2008-09—accomplished.
- Health Sciences Education—end of school year 2009-10—accomplished.
- Trade & Industrial Education—end of school year 2009-10—accomplished.
- Family & Consumer Sciences Education—end of school year 2011-12.
- Business Education—end of school year 2011-12.
- Communication Arts—end of school year 2011-2012.

Postsecondary Response: Montana Postsecondary grantees focused on identifying programs by CIP where at least one program in the state identified a Gold Standard Assessment (GSA) as identified in the above definition. Grantees were able to review the reports shown below. The report in red identifies programs that refer to a GSA. The report highlighted in blue give the college notes about the assessment referred to. This information is growing each year as more schools add assessments and hints for successful information gathering.

1p1 Technical Skill Assessment by CIP & College

CIP & CIP Title: BCC DCC FPCC FVCC MCC MSUB MSUGF MSUN MTCOT SKC UMH UMM

- 010101 - Agricultural Business and Management, General
- 010102 - Agribusiness
- 010104 - Farm/Farm Management
- 010205 - Agricultural Education
- 010301 - Agricultural Education
- 010302 - Animal/Livestock
- 010307 - Horse Husbandry
- 010507 - Equestrian/Equestrian Management
- 030201 - Natural Resources
- 030506 - Forest Management
- 100203 - Recording Arts
- 100303 - Prepress/Desktop Publishing
- 110101 - Computer Applications
- 110103 - Information Technology
- 110201 - Computer Programming
- 110202 - Computer Programming
- 110401 - Information Science/Studies
- 110501 - Computer Systems Analysis/Analyst
- 110602 - Word Processing (NEW)
- 110801 - Web Page, Digital/Multimedia & Information Resources
- 110902 - Data Modeling/Warehousing and Database Administration
- 110901 - Computer Systems Networking and Telecommunications

College	Program ID and Title	TSA	Assessment Notes
150499 - Electromechanical & Instrumentation and Maintenance Technologies/Technicians, Other			
MSUB	D96 - Process Plant Technology	Gold	Students are prepared to sit for the following exam: Center for the Advancement of Process Technology (CAPT) exit testing program. If/how the results are tracked by the college is yet to be determined.
UMM	AAS-ELEC - Electronics Technology		
151001 - Construction Engineering Technology/Technician			
MSUN	A33 - Carpentry Technology		
UMH	AAS-CP - Construction Technology	Gold	Instructor exams, course completion, program completion, GPA, and curriculum that mirrors National Center for Construction Education and Research (NCCER). Students received certification in NCCER and gain national certification the portable throughout the
BCC	BT - Building Trades		
FPCC	BT-AAS - Building Trades		

CIP	BCC	DCC	FPCC	FVCC	MCC	MSUB	MSUGF	MSUN	MTCOT	SKC	UMH	UMM
110401 - Information Science/Studies					prog							
110501 - Computer Systems Analysis/Analyst								prog				
110602 - Word Processing (NEW)							prog					
110801 - Web Page, Digital/Multimedia & Information Resources			prog		prog		*GOLD*			prog		
110902 - Data Modeling/Warehousing and Database Administration				prog								
110901 - Computer Systems Networking and Telecommunications				prog			*GOLD* *GOLD*	prog	prog			*GOLD*

Grantees that did not indicate a GSA for a program where another grantee identified one was available were required to contact those grantees. By the end of 11-12, our goal was for all grantees will refer to a GSA where a GSA exists for one or more grantees with the same program. Because of competing efforts to implement Big Sky Pathways and the new data system, in addition to turnover of all but one staff member, progress for this goal has been minimal. Montana will continue to make progress based on the plan outlined. The results may be slower than planned.

CIP	CIP Title	Colleges with Programs	Colleges with a GSA for the Program
110103	Information Technology (NEW)	3	1
110201	Computer Programming/Programmer, General	2	2
110801	Web Page, Digital/Multimedia & Information Resources Design (NEW)	3	2
110901	Computer Systems Networking and Telecommunications (NEW)	9	4
111002	System, Networking, and LAN/WAN Management/Manager (NEW)	1	1
111004	Web/Multimedia Management and Webmaster (NEW)	2	1
111099	Computer/Information Technology Services Administration & Management, Other (NEW)	1	1
120503	Culinary Arts/Chef Training	2	2
131210	Early Childhood Education and Teaching (NEW)	4	2
150201	Civil Engineering Technology/Technician	1	1
150303	Electrical, Electronic & Communications Engineering Technology/Technician	4	1
150401	Biomedical Technology/Technician	1	1
150499	Electromechanical & Instrumentation and Maintenance Technologies/Technicians, Other	2	1
151001	Construction Engineering Technology/Technician	4	1
151202	Computer Technology/Computer Systems Technology (NEW)	3	2
151302	CAD/CADD Drafting and/or Design Technology/Technician (NEW)	5	1
220301	Legal Administrative Assistant/Secretary	3	1
430203	Fire Science/Firefighting	3	1
460201	Carpentry/Carpenter	8	5
470201	Heating, Air Conditioning, Ventilation & Refrigeration Maintenance Technology/Technician	2	2
470603	Autobody/Collision and Repair Technology/Technician	3	2
470604	Automobile/Automotive Mechanics Technology/Technician	6	3
470605	Diesel Mechanics Technology/Technician	4	1
470607	Airframe Mechanics & Aircraft Maintenance Technology/Technician	1	1
480508	Welding Technology/Welder	7	4
480599	Precision Metal Working, Other	2	1
490101	Aeronautics/Aviation/Aerospace Science & Technology, General	1	1

490202	Construction/Heavy Equipment/Earthmoving Equipment Operation	6	3
490205	Truck and Bus Driver/Commercial Vehicle Operation	1	1
500713	Metal and Jewelry Arts	1	1
510601	Dental Assisting/Assistant	2	2
510602	Dental Hygiene/Hygienist	1	1
510707	Health Information/Medical Records Technology/Technician	1	1
510708	Medical Transcription/Transcriptionist	4	2
510712	Medical Reception/Receptionist (NEW)	4	1
510713	Medical Insurance Coding Specialist/Coder (NEW)	6	4
510801	Medical/Clinical Assistant	4	3
510805	Pharmacy Technician/Assistant	3	3
510806	Physical Therapist Assistant	1	1
510904	Emergency Medical Technology/Technician (EMT Paramedic)	3	3
510908	Respiratory Care Therapy/Therapist	2	2
510909	Surgical Technology/Technologist	3	3
510911	Radiologic Technology/Science - Radiographer (NEW)	5	4
511501	Substance Abuse/Addiction Counseling	3	1
511601	Nursing - Registered Nurse Training (RN, ASN, BSN, MSN)	7	6
511613	Licensed Practical /Vocational Nurse Training (LPN, LVN, Cert, Dipl, AAS)	6	5
520302	Accounting Technology/Technician and Bookkeeping	8	1
520402	Executive Assistant/Executive Secretary	4	1
520407	Business/Office Automation/Technology/Data Entry	6	1
520411	Customer Service Support/Call Center/Teleservice Operation (NEW)	1	1
520901	Hospitality Administration/Management, General	3	1
520904	Hotel/Motel Administration/Management (NEW)	1	1
521501	Real Estate	1	1
521701	Insurance	1	1
Totals		175	101

(2) [The estimated percentage of students who would be reported in the state's calculation of career and technical education concentrators who took assessments](#)

Secondary Response: During the 2010-11 school year there were 257 technical skills assessments reported in the state's calculation of CTE concentrators who took assessments in the fields of Agriculture, Health Sciences, and Industrial, Trades and Technology Education. This is approximately 5% of the total CTE Concentrators reported in the state's calculation of CTE Concentrators who took assessments. It is an increase of 17% over the previous years' report.

Postsecondary Response: Montana has shown a slight increase in assessment results in the past year. While only 38% of programs report utilizing a TSA, the majority of students are in the programs that do offer TSAs. Many of the programs that do not offer a TSA are small with only a few students. Montana will focus on assuring programs using an assessment share strategies with like programs to increase the number of schools referring to a TSA and the number of students reporting the results in those additional programs. The next goal will be to look at high student count programs without assessments and identify a strategy for implementing student referral and results reporting.

(3) [The state's plan and timeframe for increasing the coverage of programs and students reported in this indicator in the future.](#)

Secondary Response: Technical Skill Assessments, as available and appropriate, were and will be reported as follows:

- Agriculture Education—end of school year 2008-09—accomplished.
- Health Sciences Education—end of school year 2009-10—accomplished and the number of reported scores slightly increased in 2010-11.
- Trade & Industrial Education—end of school year 2009-10—accomplished and the number of reported scores increased in 2010-11.
- Family & Consumer Sciences Education—end of school year 2011-2012.
- Business Education—end of school year 2011-12.
- Communication Arts—end of school year 2011-2012.

Postsecondary Response:

College	Total Programs	Programs With 1 or More Gold Assessments in MT	Programs with Gold Assessments	% of Programs with Assessments (of programs having at least 1 gold assessment in MT)	% of Total Programs
BCC	20	10	4	40.00%	20.00%
FPCC	36	23	5	21.74%	13.89%
FVCC	78	45	34	75.56%	43.59%
MCC	45	26	12	46.15%	26.67%
MSUB	35	27	24	88.89%	68.57%
MSUGF	59	44	31	70.45%	52.54%
MSUN	24	11	1	9.09%	4.17%
MTCOT	36	22	4	18.18%	11.11%
SKC	17	11	7	63.64%	41.18%
UMH	56	32	21	65.63%	37.50%
UMM	46	33	19	57.58%	41.30%
Totals	452	284	162	57.04%	35.84%

Montana postsecondary intends to focus on increasing the number of programs in column 4 (programs with gold assessments) to equal column 3 (programs with 1 or more gold assessments in MT). When the programs throughout the state all refer students to a gold standard assessment where one is in place in the state, the next goal will be to tackle the remaining programs that do not refer to a gold assessment. Programs with the highest student count will be dealt with first. While focusing on horizontal increases, or increasing the number of programs with assessments, Montana will also focus on

collaboration of programs across the state to increase the number and quality of results reported. Currently, using third party assessments, the successful results are easier to obtain than failures or unknown results. For GY 10-11, little progress was made because of the focus on Big Sky Pathways and the significant budget cuts.

• **Implementation of State Program Improvement Plans**

(Sec. 123(a)(1) of Perkins IV requires each state, that fails to meet at least 90 percent of an agreed upon state adjusted level of performance for any of the core indicators of performance described in Sec. 113(b)(3) of Perkins IV, to develop and implement a program improvement plan, with special consideration given to performance gaps identified under Sec. 113(c)(2) of Perkins IV. The plan must be developed and implemented in consultation with appropriate agencies, individuals, and organizations. It must be implemented during the first program year succeeding the program year for which the state failed to meet its state adjusted levels of performance for any of the core indicators of performance.

Please review your state's accountability data in Part D of this report. If your state failed to meet at least 90 percent of a state-adjusted level of performance for any of the core indicators of performance under Sec. 113 of Title I of the Act, please provide a state program improvement plan that addresses, at a minimum, the following items:

- The core indicator(s) that your state failed to meet at the 90 percent threshold
- The disaggregated categories of students for which there were quantifiable disparities or gaps in performance compared to all students or any other category of students
- The action steps which will be implemented, beginning in the current program year, to improve the state's performance on the core indicator(s) and for the categories of students for which disparities or gaps in performance were identified
- The staff member(s) in the state who are responsible for each action step
- The timeline for completing each action step

Core Indicator	Disaggregated categories of students	The action steps which will be implemented	Assigned to	Complete by
1S2 Goal 61.2% Actual 54.8%	36% = 10 or fewer Concentrators Additional comments on pg. 19	Results will be presented to the State Executive Leadership Team (SELT) during the next strategic planning meeting to develop a specific action plan. <u>Subject to SELT approval:</u> require all LEAs missing the 1S2 indicator to add a math component into their CTE curriculum—documented in the End-of-Year report section of the Perkins application. In addition, they will add a CTE component to their existing curriculum-wide math improvement plan (part of the NCLB accreditation process).	SELT will assign staff	End of SY 11-12

6S2 Goal 14% Actual 12.9%	Industrial, Trades & Tech missed the majority of this indicator. Special Populations and/or economically disadvantaged 55.6% Additional comments on pg. 19	Results will be presented to the State Executive Leadership Team (SELT) during the next strategic planning meeting to develop a specific action plan. <u>Subject to SELT approval:</u> require all LEAs missing the 6S2 indicator to describe at least one strategy they will implement to improve this percentage—documented in the End-of-Year report section of the Perkins application.	SELT will assign staff	End of SY 11-12
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Secondary Core Indicators for 1S1 and 1S2 (EDEN N142) Clarification of Past Practice

The NCLB scores for reading/language arts and mathematics were tests taken in the reported CTE Concentrators 10th grade school year—two years prior. Therefore, due to this two-year delay, we also use the FAUPL negotiated targets also from two years prior. To clarify clearly: on the 2011 CAR, the state goal used for 1S1 was 83% and for 1S2 was 68%. That makes our threshold targets 74.7% and 61.2%, respectively.

Postsecondary Indicators: No state improvement plan required. All indicators were above 90% of FAUPL. The completion indicator dropped. We believe this may be partially due to the move to Banner for 3 colleges. A more thorough investigation of the supporting data will occur as more data is added to the system.

Description	1P1	2P1	3P1	4P1	5P1	5P2
FAUPL	52.00%	55.00%	62.00%	75.00%	13.50%	12.50%
FAUPL 90%	46.80%	49.50%	55.80%	67.50%	12.15%	11.25%
Actual	86.34%	49.70%	70.80%	74.45%	16.36%	12.27%
Above 90% FAUPL	39.54%	0.20%	15.00%	6.95%	4.21%	1.02%
Locals Missing Target	0	3	1	4	2*	2*

* The goal for these LEAs were significantly higher than the state target

Locals who missed these targets automatically complete an improvement plan as a part of the grant application process.

FAUPL	90% of FAUPL	Disability		Economically Disadvantaged		Non-Trad		Displaced Homemaker		Single Parent		Limited English		
		Actual	Actual - 90% Goal	Actual	Actual - 90% Goal	Actual	Actual - 90% Goal	Actual	Actual - 90% Goal	Actual	Actual - 90% Goal	Actual	Actual - 90% Goal	
1P1	52.00%	46.80%	81.25%	34.45%	91.30%	44.50%	93.55%	46.75%	66.67%	19.87%	95.83%	49.03%	100.00%	53.20%
2P1	55.00%	49.50%	40.88%	-8.62%	51.75%	2.25%	41.38%	-8.12%	54.87%	5.37%	45.66%	-3.84%	38.46%	-11.04%
3P1	62.00%	55.80%	70.34%	14.54%	73.84%	18.04%	69.89%	14.09%	75.93%	20.13%	69.09%	13.29%	71.43%	15.63%
4P1	75.00%	67.50%	69.14%	1.64%	73.83%	6.33%	83.20%	15.70%	56.76%	-10.74%	68.37%	0.87%	55.56%	-11.94%
5P1	13.50%	12.15%	19.51%	7.36%	16.87%	4.72%	16.36%	4.21%	16.85%	4.70%	19.58%	7.43%	25.00%	12.85%
5P2	12.50%	11.25%	16.36%	5.11%	13.11%	1.86%	12.27%	1.02%	11.36%	0.11%	19.61%	8.36%	36.36%	25.11%

The most significant indicator deficits for these special population categories are completion for Non-Trad and students with disabilities; and placement for displaced homemakers/workers. While the indicator performance for limited English students is low, there are only 54 identified students in Montana. The indicator data will be reviewed with the local recipients and a plan to improve these target groups will be developed.

2. Implementation of Local Program Improvement Plans

Sec. 123(b)(1) of Perkins IV requires each state to evaluate annually, using the local adjusted levels of performance described in Sec. 113(b)(4) of Perkins IV, the career and technical education activities of each eligible recipient receiving funds under the basic grant program (Title I of the Act). Sec. 123(b)(2) of Perkins IV further requires that if the state, after completing its evaluation, determines that an eligible recipient failed to meet at least 90 percent of an agreed

*upon local adjusted level of performance for any of the core indicators of performance described in Sec. 113(b)(4) of Perkins IV, the eligible recipient shall develop and implement a program improvement plan with special consideration given to performance gaps identified under Sec. 113(b)(4)(C)(ii)(II) of Perkins IV. The local improvement plan must be developed and implemented in consultation with appropriate agencies, individuals, and organizations. It must be implemented during the first program year succeeding the program year for which the eligible recipient failed to meet its local adjusted levels of performance for any of the core indicators of performance.
(Please review the accountability data submitted by your state's eligible recipients and address the following.)*

Indicate the total number of eligible recipients that failed to meet at least 90 percent of an agreed upon local adjusted level of performance and that will be required to implement a local program improvement plan for the succeeding program year.

Secondary Response: In 2010-11, there were a total of 139 eligible recipients or Local Education Agencies (LEA) that failed to meet at least 90 percent of an agreed upon local adjusted level of performance of one or more performance indicators. 38 districts missed only one of the eight indicators, 52 districts missed two indicators, 28 districts missed three indicators, 17 districts missed four indicators, 3 districts missed five indicators, and 1 district missed six indicators. Built into the electronic grant application (E-Grant) is a place for any eligible LEA to complete an improvement plan. Approval of the current Perkins application will be suspended until the improvement plan is on file and has been reviewed and accepted by the appropriate CTE State Specialist staff. The highest priority will be given to the indicator furthest from the state negotiated goal. If activity changes require budget amendments, a budget revision/amendment will be submitted and flagged as an Improvement Plan revision.

Note trends, if any, in the performance of these eligible recipients (i.e., core indicators that were most commonly missed, including those for which less than 90 percent was commonly achieved; and disaggregated categories of students for whom there were disparities or gaps in performance compared to all students.)

Secondary Response: In 2010-11, the three core indicators that were most commonly missed were 1S2—Mathematics (74.1% of the total LEAs missing this indicator); 6S2—Non-Traditional Completion (56.8% of the total LEAs missing this indicator); and 1S1—Reading/Language Arts (46.8% of the total LEAs missing this indicator).

1S2—Mathematics—In review of this indicator, it is very apparent that our biggest state concern relates to reporting such extremely small CTE Concentrator numbers due to our very rural, small schools. 36% of the total number of schools who missed this indicator reported ten or fewer total concentrators. These tiny numbers have a monumental affect on our statistics and are very volatile from year to year. In spite of these volatile numbers, it is interesting to note that we improved our mathematics score from 52.6% last year to 54.8% this year, however, our threshold target also jumped from 45.9% to 61.2%.

6S2—Non-Traditional Completion—Again, what concerns us as a state is being required to report such small CTE Concentrator numbers also in this indicator. 19% of the total number of schools missing this indicator reported ten or fewer total concentrators. Like last year, it's interesting to note that of the 79 schools that missed the 6S2 indicator, 58 schools (73.4%) PASSED 6S1. This indicates that schools are doing well in providing opportunities in non-traditional areas but struggling with Concentrator completion.

1S1—Reading-Language Arts—Similar to 1S2, 38.5% of the total number of schools who missed this indicator reported ten or fewer concentrators. As a state, we did make a small improvement from 78.34% last year to 78.5% this year, however, our threshold target also jumped from 66.6% to 74.7%.

3. Tech Prep Grant Award Information

Sec. 205 of Perkins IV requires each eligible agency that receives a tech prep allotment to annually prepare and submit to the Secretary a report on the effectiveness of the tech prep programs that were assisted, including:

A description of how grants were awarded in the state. Please provide a description of how grants were awarded during the program year

State Response: Tech Prep funding was eliminated effective 2010-2011. Montana was in the last year of a 3-year Tech Prep Consortium agreement. The contracted consortia declined to serve the full 3-year time period leaving the last year of to the state to manage. With the emphasis on Big Sky Pathways (Rigorous Programs of Study) which includes statewide articulation to postsecondary, Montana awarded TP funds to consortia of secondary and postsecondary grantees by pathway. The college chose the pathways to offer to their partner high schools. High schools choose from the colleges offering the pathways they intended to work on. Below is the allocation worksheet indicating 464 Big Sky Pathway Partnerships/Pathways were developed.

CAMPUS	# BSPs	Base @ \$4000/ea	Additional '10-19	\$1,000	Additional >20	2000	Additional >30	3000	# High School Partners @450			
Billings	8	\$32,000	3	\$3,000	1	2000			\$37,000	94	42300	\$79,300
Butte	7	\$28,000		\$0		0			\$28,000	35	15750	\$43,750
Gallatin	1	\$4,000		\$0		0			\$4,000	4	1800	\$5,800
Glendive	4	\$16,000	3	\$3,000		0			\$19,000	50	22500	\$41,500
Great Falls	8	\$32,000	4	\$4,000		0			\$36,000	66	29700	\$65,700
Helena	4	\$16,000		\$0		0			\$16,000	16	7200	\$23,200
Kalispell	8	\$32,000	1	\$1,000		0			\$33,000	46	20700	\$53,700
Missoula	7	\$28,000		\$0		0	1	3000	\$31,000	80	36000	\$67,000
Northern	7	\$28,000	4	\$4,000		0			\$32,000	70	31500	\$63,500
Blackfeet	1	\$4,000		\$0		0			\$4,000	1	450	\$4,450
Fort Peck	1	\$4,000		\$0		0			\$4,000	1	450	\$4,450
Salish-Kootenai	1	\$4,000		\$0		0			\$4,000	1	450	\$4,450
TOTAL	57	\$228,000	15	15000	1	2000			\$245,000	464	\$208,800	\$456,800

Include a listing of the consortia that were funded and their funding amounts.

State Response: see above

Please review the accountability data submitted by your state's consortia as described in Sec. 203(e) of Perkins IV.

Indicate the total number of consortia that failed to meet an agreed upon minimum level of performance for any of the indicators of performance.

State Response: Given this was our first year of this effort under this structure; our progress was primarily to establish programs of study which include articulation for every local grantee in the state. This is a significant first step in assuring all grantees establish statewide articulations, a key component of Big Sky Pathways (Rigorous Programs of Study). Given Tech Prep funding has been eliminated, Montana will continue to focus on implementing the 10 Component Framework for Programs of study including #7 Credit Transfer Agreements.

Note trends, if any, in the performance of these consortia (i.e., the indicators that were most commonly missed, and number of years the consortia omitted the indicators).

State Response: N/A