

PART B: NARRATIVE PERFORMANCE INFORMATION

1. Implementation of State Leadership Activities

a. Required Uses of Funds:

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

- Colorado Community College System (CCCS) staff lead a comprehensive pilot assessment of all Colorado agricultural education programs during the 2008-2009 year. This assessment was conducted using the National Quality Program Standards (NQPS) developed and released by the National Council on Agriculture Education in 2008. The evaluation tool was introduced to instructors at the Mid Winter Conference in January and followed up by state wide notification during the spring semester. The assessment process involved creation of teams consisting of the agriculture education instructor, school administration and representation of the local advisory committee. These teams completed the assessment using the NQPS document which contains seven standard areas, 10 standard statements and 81 quality indicators, including equal access to the program, inclusive and non-biased instruction materials and barrier free facilities. Each quality indicator provided a five level rubric for the assessment team to use in scoring the programs. Each of the 99 secondary agricultural education programs will conduct this assessment and record the resulting data online. This data was, and will in the future, be utilized to determine focus of professional development provided for instructors. In addition to state wide professional development focus the assessment teams at each program developed a five year plan targeting areas of improvement as shown in the assessment results. CCCS will explore the NQPS as input for developing a CCCS exemplary program rubric to award highest quality achievement recognition to any Colorado Career and Technical Education (CTE) program that reaches a premier level in the rubric.
- During the Colorado FY2008-2009, the Program Directors conducted two training sessions on the Program Approval process where faculty and CTE administrators could come to the CCCS computer lab and receive step by step instruction on how to complete and submit a program approval. These trainings included a significant component on analyzing program data to drive program updates and five year plans. Over 50 secondary and postsecondary faculty and administrators participated in the trainings. Each workshop received an excellent approval rating by the participants.
- The 2008-2009 program year was the inaugural year for the use of our newly created interactive web-based Perkins Local Plan process using the programmed Career and Technical Education Online System described in the previous Consolidated Report. The programming logic incorporated within the Perkins Local Plan pages added control of the following elements:
 - The Perkins Local Plan and budget estimate must be submitted as “funded projects” that use at least one of the Perkins Performance Metrics as the project objective.

- The annual Local Plan budget must align exactly to the allocation amount and the amount budgeted for indirect costs are calculated by the online system and cannot exceed that amount.
- The Local Plan must include analysis of the previous year's projects in relation to their impact on the Perkins Performance metrics.
- Equipment over \$5,000 for one unit cannot be reimbursed unless it was included within the approved Perkins Local Plan.
- All pages within the plan must be completed to allow plan submittal.

The system is also programmed to automatically add a Local Improvement Plan page, if a recipient does not reach 90% of the state target for any one or more of the Performance metrics. The Fiscal Year 2008-2009 plans only included benchmark data for 3 secondary performance indicators so there were no Local Improvement Plans required in 2008-2009.

In June, 2009, the fiscal year 2009-2010 allocations and the local recipients' performance metrics reports were released through this new system. The system identified all recipients who needed to complete a Local Improvement Plan and automatically inserted that page within their account. Their Local Plan could not be submitted without completion of that section.

This system also includes access to reports that help the Perkins Director track plan submittals, plan approvals, Award Packet statuses, and Voucher statuses. More reports are planned for future implementation. This allows close monitoring of Local Plans for adhering to deadlines and allows CCCS to contact local administrators if delays are found.

Program year 2008-2009 was also used to complete and update all Perkins related sections of the Colorado CTE Administrators' Handbook and all CTE Online Technical Guides for the Perkins processes were completed. These are all posted at http://www.coloradostateplan.com/admin_handbook.htm.

Extensive small group trainings were provided to the field, available every Friday for six months, regarding the use of the new CTE Online System.

- CCCS facilitates a 25-member Perkins Field Council that identifies best practices regarding the use of Perkins funds. These volunteers read all Perkins Local Plans that had been approved by the CCCS Perkins Director and selected those plans that indicated best practices. The volunteers then visited the selected sites and prepared notes about the visit and observed how the funds were being used. CCCS communications staff used the notes to write a narrative description of the highlights. These were collected as a brochure and distributed to all CTE Directors across the State as a guide for strategic use of Perkins funds. Each consortium director received enough copies to distribute one to each of their consortium district members. The narrative reports were also posted to the CCCS CTE website as samples of Project-Based Perkins Local Plans. These are located at <http://www.coloradostateplan.com/strategies.htm> under the bullet labeled "Adopting a Project-Based Focus." This process will be repeated each fiscal year.

- As part of the Colorado CTE Regional Meetings in 2008-2009, a former CTE administrator who works as a consultant for several of the Perkins recipients partnered with the Perkins Director and did presentations about how to do strategic planning for the use of Perkins funds and how to monitor the plan at the local level, after it has been approved. This consultant's work consistently is selected as examples of best practices.
- CCCS worked on Program Approval Reengineering that adds robust and user friendly elements to CTE Program Approval processes. The program approval interface, for example, now includes installation of an automatic review of the field provided (VE-135 data) CTE program data for program trends in enrollment, program completion and student demographics. Programs that have a 30% deficit in any of these State program approval performance trends, are automatically flagged for review and technical assistance.

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

- CCCS, Colorado FBLA-PBL, and Colorado DECA are recognized as partners of the Internet Safety Foundation, (the first of its kind in the United States). The Program Director for Business and Marketing sits on the board of directors for the foundation and has an active role in the activities and events that are offered to schools and communities in Colorado. The mission of this partnership is to raise awareness about the issue of online safety for children and to serve as a clearinghouse for resources, software, and information that can be used by law enforcement, educators, counselors, parents, and children in Colorado and around the country to increase the safe use of the Internet by children. CCCS staff have taken on the responsibility of working with the iCrew (secondary and postsecondary students) – development of pod casts that are made available on the foundation's website, development of curriculum to be used in the local schools and communities, assistance with and development of student, teacher, counselor, school board and administration workshops & presentations about internet safety when called upon. DECA and FBLA have become active with ISF through conference participation.
- FBLA continues to lead the way with online testing for competitive events. Students may take written exams within their own school setting and the results are transferred to district and state sites for input into the student's competitive area.
- As part of the Family & Consumer Sciences (FACS) Professional Development Workshop Series 2009, teachers had the opportunity to attend a two day workshop on using technology in the classroom titled "Digitizing Your Classroom." Teachers learned topics such as Google Tools- Google Apps, Google Docs, Google Sites, Google Calendars, Google Forms, iGoogle, blogs and many more. Teachers were exposed to these applications in a computer lab and were given time to create modules that they could use in the classroom. From their exposure, the FACS Program Director created a website specifically for FACS teachers, along with a Google Group for email communication.

- CCCS allocated \$6,000 for CTEA Innovation Mini Grants - The Colorado Technology Education Association (CTEA) managed the grant process geared toward support and assistance of technology education programs across Colorado. The grant funding was awarded in three categories: Three classroom grants totaling \$2,500 were awarded for the purchase of training equipment and materials for high school Technology Education programs. Another \$2,500 was used for on-going professional development training for Technology instructors at the CTEA state conference. CTEA officers received \$1,000 which was used as supplemental funding helping the officers attend the 2009 International Technology Association (ITEA) conference held in Louisville, Kentucky.
- The Perkins Director made use of the NAPE Stem Equity Pipeline free webinars to help develop the State's new Workplace Balance Strategic Plan. During the new, required, non-traditional careers mini-grants bidders' conference teams from Colleges were introduced to the Stem Equity Pipeline website and taught how to use the Root Cause Analysis procedures.
- Perkins Local Plans and funding continue to support the purchase of updated technology that keeps CTE programs modern. Much of the health robotic equipment has increased Colleges' capacity to provide clinical-like experiences to a larger number of students studying in the health related fields.
- Inclusion of the "Go to Meeting" virtual conference call software has enhanced all programs. Health, Criminal Justice, and other related discipline content team meetings were with this virtual conference system. They also conducted online meetings with business and industry partners who were unable to meet on site. Using "Go to Meeting" has increased participation for committee members located throughout the State and provided economic relief since long distance travel does not have to be a concern.

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

- The Business and Marketing Program Director piloted a mentoring program for new secondary instructors. Fifteen (15) Business and Marketing teachers were matched with experienced Business and Marketing teachers in their area. This was also made available to local advisors of FBLA and DECA. Many of the experienced teachers came from the professional organizations – Colorado Marketing Education Association and the Colorado Business Educators Association. The CCCS Program Director and Assistant Program Directors for Business and Marketing take an active role in participation and presentations at the various conferences that are held by these professional organizations, throughout the year.
- The LITE (Leadership in Technical Education) program selected twenty (20) new, veteran and prospective CTE leaders to become more knowledgeable of CTE programmatic needs, develop management skills, become more culturally effective leaders, and develop 21st

century leadership skills. Program participants were nominated by existing CTE Directors, CCCS Program Directors, or other CTE educators. The LITE participants met five (5) days over an 8 month window to pursue the objectives of the program which included topics from special populations to Perkins Local Plans. The program design was a seminar format where participants would do professional readings, investigate current research in leadership and CTE as well as interact with others in the program and the CTE profession. Each participant was also required to develop a leadership plan as a result of their participation in the program.

- CCCS partnered with Colorado State University to support the Professional Development Credit program. There were 43 participants enrolled. Types of activities that provided credit for this course included: CTSO activities – Board of Directors or Advisory Committee meetings, State and National Fall Leadership Conference participation, Competitive Events, Legislative Day, Professional Division Conferences, Content Team participation, CCCS sponsored professional development, mentoring of new teachers, National CTE Week Activities, writing of news articles, and other individual activities per participant.
- The Business & Marketing Program Director also arranged for instructors to be eligible for professional development graduate level credit through CSU. Up to four credits could be earned for the activities that were completed outside of the contract day that have a direct affect on their classroom, and CTE program (including the CTSO as well).
- CCCS staff also managed the Family and Consumer Sciences (FACS) Professional Development Workshops Series which focused on continuing professional development training and workshops during June 2009. Nine days of targeted education and information were offered to FACS teachers throughout the state of Colorado. Over twelve different workshops were offered including topics such as Digitizing your classroom, FCCLA Adviser Training, Early Childhood, Professional Sewing, Bioactive Compounds, CTE 101 and many more. The workshop sessions built partnerships between Colorado State University's Food Sciences department, along with making connections to multiple business and industry partners. Over 117 Colorado Family and Consumer Sciences teachers attended the free workshops.
- FACS teachers were once again awarded the opportunity to receive college credit from Colorado State University for activities that they participated in as a teacher from July 1, 2008-June 30, 2009. Teachers had the opportunity to receive up to 4 credits for activities that related to FCCLA, professional workshops, attending conferences related to CTE, working on a curriculum team, etc. The summer 2009 credit was awarded to twenty-five teachers.

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

- Nearly 40 mathematics and CTE business and industrial technology instructors from school districts in northern Colorado participated in the first Colorado Math-in-CTE professional

development pilot. Math-in-CTE is a curriculum model designed to enhance mathematics that are embedded in career and technical education content. The process provides the opportunity for math and CTE instructors to work together in communities of practice to identify where math intersects with CTE concepts and applications. The process leads to the creation of math-enhanced CTE lessons. Instructors in the pilot project attended ten days of professional development training during the period of one school year. Using the Math-in-CTE model, CTE instructors, with the help of their math partners, developed and presented the math-embedded lessons throughout the school year. Assessments were developed to determine the students' understanding of various math concepts. Due to the success of this pilot, CCCS plans to continue funding for this professional development in the next program year. Additionally, when the Perkins Field Council completed their review of Colorado's Performance Reports they recommended that CCCS continue support for this type of professional development.

- CCCS CTE leadership was instrumental in the development of the Colorado definition of "Postsecondary and Workforce" Readiness. "Postsecondary and workforce readiness" describes the knowledge, skills, and behaviors essential for high school graduates to be prepared to enter college and the workforce and to compete in the global economy. The description assumes students have developed consistent intellectual growth throughout their high school career as a result of academic work that is increasingly challenging, engaging, and coherent. Input from secondary and postsecondary instructors guided the final definition and descriptors which were approved in June.
- CCCS continued to use Perkins funding to support all secondary health programs' participation in the national health science assessment. Students in program year 2008-2009 participated in a health science pre- and post-test to assess growth in health science knowledge. The assessment focuses on the national health science standards that are fundamental standards for all health science disciplines.

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

- CCCS was able to achieve extensive cost savings by purchasing large quantities of Non-Traditional Careers based poster sets that were then distributed to hundreds of teachers and administrators at the annual CACTA Conference, the annual Technical Students Association Leadership Conference, the annual Pre-Collegiate Conference for Counselors and the annual SkillsUSA Leadership Conference. Also, the CCCS STEM Program Director is distributing the remaining sets that emphasize women in a variety of engineering careers.
- CCCS collaborated with both internal and external staff to develop a multi-year strategic plan specific to Non-Traditional Careers. The plan was completed mid-year and introduced at the 2009 CACTA Conference. It is named the Workplace Balance Project Strategic Plan and it was added as an appendix with our request for State Plan revisions in April, 2009. CCCS partnered with internal and external personnel to develop the "Requests-For-Proposals;" the

Mini-Grant Recipients Scorecard; and the agenda for the first bidders' conference. CCCS funded the first Workplace Balance Mini-Grant Bidders' Conference. CCCS also started recruiting non-traditional career practitioners to serve on the Project's Advisory Council and to become grant proposal scorers. The Workplace Balance Project Strategic Plan core development team included internal staff from communications, student services, special populations, accountability, trades and technical education, and STEM and IT education. A representative from the Colorado Department of Labor also volunteered to serve on the development team. This process was extremely successful in expanding the non-traditional careers agenda beyond being a set-aside, isolated program. It is now perceived by all departments and CTE staff as integral to program quality and student success.

- The new CCCS STEM, Arts, and IT Program Director was instrumental in developing the Women In IT –Military Spouse Pilot while she was employed at Pikes Peak Community College. The Base Realignment and Closure (BRAC) Grant: Women in Technology (WIT) pilot program brought together a multi-sectoral group of partner organizations to provide Information Technology (IT) education and job assistance services to dislocated female military spouses. The program was hosted by Pikes Peak Community College and consisted of five CTE IT certificates: IT Fundamentals, Software Fundamentals, Network Essentials, IT Security Essentials, and IT Support Essentials. In addition, students were provided with job placement assistance and offered the option of completing a practicum or internship with an IT company after completing the coursework. Fourteen of the women completed all of the five certificates, and 12 completed both the certificates and practicum. Partners included: Colorado Department of Labor and Employment, Pikes Peak Workforce Center, Pikes Peak Community College, Volt Technical Services, Microsoft Corporation, National Center for Women in Information Technology, and the Colorado Coalition for Gender in Information Technology. In her employ with CCCS, this program director maintains these partnerships and contacts and shared learned concepts from this project as the gender balance strategic plan was developed.

Supporting partnerships among local educational 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

- In an effort to identify and quantify career opportunities in the energy cluster, CCCS conducted a one day summit on energy. Eighty eight (88) participants representing 14 community colleges and technical schools, 3 universities, the Governor's energy office, the National Renewable Energy Lab (NREL) and state wide energy businesses and industries participated in the meeting. The focus of the event was to identify career opportunities in the emerging field of renewable energy generation, energy conservation and energy efficiency. After presentations on the renewable energy career outlook by the Governor's energy office and representatives of major renewable energy employers in the state, the participants conducted analysis of current CTE programs and identified certificates and degree programs that will be developed. Results of this meeting were also shared with the Colorado

Renewable Energy Collaboratory which represents Colorado School of Mines, University of Colorado, Colorado State University and the Governor's office.

- CCCS CTE leadership partnered with the Colorado Photonics Industry Association to host a Optics/Photonics Education Workshop. The workshop was presented by the National Center for Optics and Photonics Education (OP-TEC) through partial funding from the National Science Foundation's Advanced Technological Education Program. The workshop was free of charge to educators and administrators. The day provided an opportunity to learn about the growing need for photonics technicians, possible plans of study and the postsecondary programs to train them.
- CCCS CTE staff partnered with Colorado Council on the Arts, Colorado Department of Education, and CollegeInColorado to advocate for arts education and bring awareness to the creative career opportunities within Colorado. Our staff presented at the Statewide Arts Education Summit, Colorado Music Educator's Conference, Think Big conference, and several smaller Arts venues. Participation varied from Educators to administrators and Business and Industry leaders.
- Colorado continues to work with a consortium of businesses (Colorado Succeeds) for informing the public about the added educational value of career and technical education programs. Several CCCS staff serve on the Governor's P-20 Council.
- CCCS was a collaborator with the Center for Nursing Excellence team to determine how to best support the seamless transition for an AND to BSN to MSN. This included development for an online Masters in Nursing Education program in partnership with the University of Northern Colorado to help address the severe need for Masters prepared Nursing educators.
- CCCS input into the new Colorado Department of Labor Wired Brochures. This facilitated assurance that underrepresented genders were represented in non-traditional career fields featured in the brochure.
- The Workplace Balance Project Strategic Plan includes connecting strategies to involve business and industry representatives. The Advisory Council consists of underrepresented gender practitioners employed in non-traditional careers. One objective of the strategic plan includes connecting with companies to help increase their gender balance workforce and providing extensive recognition to those companies that improve the gender balance at their worksites.
- The Perkins Field Council continues to include local administrators, counselors and student support services staff as well as representatives from businesses, foundations, the Department of Labor and unions. The mission of this council is to "facilitate the strategic use of Colorado Perkins distribution funds to enable student success in and through career and technical education."
- The Business and Marketing content teams spent the 2008-2009 program year working on the credentialing merge to the Colorado Department of Education (CDE.) They also

completed the approval of secondary courses in relation to Advanced Credit Pathways and the business and marketing standards crosswalk to academic standards.

- Agriculture utilized input from 38 secondary and postsecondary instructors along with university teacher education faculty and State staff through 10 regional and statewide meetings to review and revise the Agricultural Education content standards. Revised standards include performance outcomes at four levels of learning and are based upon the National AFNR Content Standards released by the National Council on Agriculture Education in 2008.
- The Colorado CTSOs continued to play a major role in building partnerships within Career and Technical Education. For example the FFA Proficiency judges included 15 business and industry representatives evaluating applications based upon current industry standards. The FFA Career Development Event judges were Colorado State University based, including 45 professors, graduate students, and undergraduate students. For the FFA Career Development Events judges at the State Convention another 15 business and industry representatives volunteered their time.

Serving individuals in State institutions

- CCCS continues to annually provide \$30,000 of State Leadership funds to the Division of Youth Services and an additional \$30,000 annually to the Colorado Department of Corrections (CDOC.) The State plan continues these set dollar amounts even if the State allocation is decreased. All CTE faculty and administrators at these institutions are included in relevant training and many of their CTE faculty and administrators are members of the CACTE/CACTA organization as well.
- In the 2008-2009 academic year, CCCS CTE continued to support the Department of Corrections Education Consortium as an innovative partnership between the Colorado Community College System Colleges and the Department of Corrections that allows a seamless transition from the highly successful CDOC GED program to community college career and technical certificate programs. Additional degree options will be available to students upon their release from a Colorado Correctional Facility. During the spring of 2009 CCCS and CDOC continued the program through Pueblo Community College (PCC). A cohort of 33 offenders enrolled in two PCC CTE programs at the Canon City Correctional Facility. Upon successful completion of the program, the offender/students earned a CTE certificate from PCC. The ultimate goal is to reduce Colorado's recidivism rate while preparing individuals to successfully join the Colorado workforce.

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

- CCCS continues to review, approve and provide technical assistance and Perkins funding for approved secondary Alternative Cooperative Education (ACE) programs (for at-risk and special needs students) and Work Experience Study (WES) programs (for severely disabled

students.) One-hundred ACE programs and an additional twenty-one WES programs enhance the educational opportunities for special needs youth, to maximize their abilities to live independently, and to reduce their risk of dropping out.

- CCCS partnered with Colorado Workforce to provide “Work Keys” national certification to all ACE programs in the State at no cost to the school districts.
- CCCS provided financial support for ACE conference speakers who addressed at risk and special needs students education strategies.
- The CCCS ACE Advisory Board developed the framework for an ACE Career and Technical Student Organization that will be offered locally per school district. Competitive events for ACE students were identified and an ACE Challenge handbook was presented at the 2009 Spring Annual ACE Conference. The first ACE Challenge Conference will occur in April of 2010.
- CCCS continues to monitor Perkins recipients for compliance with Title VI, Title IX, and Section 504 following the rules and requirements and the targeting plan approved for the State’s Method of Administration (MOA) processes.
- CCCS revised its Perkins Local Plans Approval Checklist by adding key items to note regarding the local uses of funds for supporting special populations as the Local Plans are reviewed. The added items include:
 - Are there any action steps that are a concern regarding addressing the needs of special populations?
 - Do any funded projects address special populations' self-advocacy, nontraditional careers marketing, career fairs with diversity, or special populations’ transition programs?

Offering technical assistance for eligible recipients

- CCCS provided four regional meetings in November and December, taking CTE staff to the west, north and northeast, Denver Metro and southern regions of the State. Over 400 secondary and postsecondary CTE educators registered for the regional meetings with a 95% attendance rate. The theme was focused on securing local awareness and implementation of the strategies identified in the Colorado multi-year Perkins State Plan. Workshops and discussion groups focused on how each District or College could increase their effectiveness in delivering the outcomes defined in the 2006 Perkins Act. Participants were able to attend four different workshops in one day. Several CCCS CTE staff and other experts provided the following round-tables: Implementation of plans of study; Colorado standards; Integration of academics; Assessments; Business and industry partnerships; Perkins project based planning; Career and technical student organizations; and Accountability and data reporting. The day concluded with meetings by program area including: Administrators/Counselors; ACE, Health, Public Safety and Criminal Justice; Agriculture; Business/Marketing; Family and Consumer Sciences; Skilled Trades and Technical Sciences;

and STEM, Arts, Design and IT. The afternoon sessions provided a format which allowed attendees to brainstorm what their greatest challenges were, what their greatest successes were and in what areas do they believe they continue to need assistance.

- In order to assist new secondary and postsecondary instructors in the transition from the workplace into the education environment and to assist new trained educators, several CCCS CTE staff presented the New Instructor/Administrator Orientation in-service. The focus of the orientation was to connect program quality to student success. The 132 participants were connected to the resources needed to succeed in their first years of teaching. Topics included: Plans of Study, Program Approval, Five Year Trend Data and Advisory Committee requirements.
- CCCS staff provided technical assistance to the Community College of Denver in building an Aerospace Technician program to be implemented in 09-10 school year.
- CCCS Program Directors continued to provide onsite consultation to District and College teachers and administrators regarding how to implement quality CTE programs. For example, our new STEM, Arts and IT Program Director provided guidance to several districts about developing and implementing CTE STEM programs. Several CCCS CTE staff also attended consortia meetings and provided support for the development of consortium strategic planning per State regions rather than per district. Staff traveled to various locations in the State and facilitated Perkins spending strategic planning for secondary districts, consortia and Colleges. By re-engineering CCCS interactive online systems such as the web-based Perkins Local Plan and CTE Program Approvals, staff is more available for onsite assistance.
- The continued development of the online CTE Administrators' Handbook also allowed "just-in-time" technical assistance and freed up CCCS staff to be able to provide more onsite technical assistance by saving hours of telephone questions that are addressed in the searchable, online handbook.
- CCCS continued to work collaboratively with the Colorado Association for Career and Technical Education (CACTE) and the Colorado Association for Career and Technical Administrators (CACTA) in the development of their annual conference programs and presenters.
- The CCCS Perkins Director traveled onsite to facilitate Perkins strategic planning sessions with 16 different recipients during the 2008-2009 program year.
- CCCS continued to e-mail the free bi-monthly CTE Trends to hundreds of CTE teachers and administrators. This publication includes announcements, CTE related news, and technical information updates.
- The CACTE organization, in conjunction with CCCS CTE personnel, helped facilitate the "Excellence in Career and Technical Education Symposium." This awards luncheon, held in partnership with the Asian Pacific Center, recognized outstanding CTE programs and students

in Colorado. Keynote guests included Governor Ritter, speaking about the Colorado P-20 Initiative and assisting with the awards ceremony and Michelle Rhee, Chancellor of the Washington D.C. school district. Ms. Rhee focused on educational reform and the role of business and industry. She also hosted a morning symposium for secondary and postsecondary executive leaders.

Improving career guidance and academic counseling programs

- CCCS invested in the creation of a Comprehensive Career Guidance Handbook for secondary and postsecondary counselors throughout the State. The document highlights our belief that the career development process for students of any age includes: Awareness; Exploration; Concentration; Preparation and Life-Long Career Management. The purpose of the handbook is to provide the resources and tools necessary for Colorado's P-20 education system to expand guidance of all students through this process toward successful 21st Century careers. The Handbook also was reviewed to assure avoidance of gender-stereotyping in career guidance.
- The Business and Marketing Program Director, and the FBLA and DECA Assistant Program Directors worked with local area teachers in the development of a student game about careers. The goal was to develop classroom lesson plans to teach students how to prepare for the real world; how to get and keep a job; and to provide certification for employers to look at when hiring these students. The product has been published and is being distributed across the country.
- CCCS staff sponsored and hosted a CTE/CTSO Booth at the State's "STEMapalooza" event. More than 6,000 participants, including 2,500 students from elementary school to college level, attended at Denver's Colorado Convention Center. The activities supported connections across science, technology, engineering and math (STEM) and aimed to excite Colorado's students about careers in these fields.

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

- The Business and Marketing Content Team, made up of secondary and postsecondary teachers, met during the 2008-2009 program year to undertake the review of the Advanced Credit Pathway (ACP) for Business and Marketing programs. The postsecondary competencies were reviewed by the team and then the secondary teachers reviewed their own program competencies to see if they could meet the requirements of the postsecondary programs. It was decided to accept the secondary program competencies if they could meet 100% of the postsecondary competencies. The content team recommended ten courses for approval.

- CCCS CTE Program Directors, under the leadership of the CCCS CTE Dean revised procedures in program renewals to require annual reviews and verification of validity of articulation agreements.

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

- Colorado State University is teaming up with the CCCS 13 system community colleges to offer internet courses leading to a Bachelor's or Master's degree. Community colleges will provide online education for the freshmen and sophomore years. The “CSU Global Campus” will provide online education for the junior and senior years, as well as for Master's programs. CCCS CTE staff also began conversations with CSU Global about accepting previously terminal Associates of Applied Sciences degrees as transfer credits, allowing the AAS degree holders to enter a baccalaureate program as a junior.
- In order to expand the transfer of our students from a two to four year program, CCCS pursued and was successful in finalizing a Memorandum of Understanding with Regis University creating the Associate's to Bachelor's Program. This program is specifically designed to acknowledge the strong academic foundation that the Colorado Community College System provides its students and the benefits that can be obtained from the extended pursuit of a Bachelors degree. It creates a close collaboration between CCCS and Regis University by providing a seamless path for students from an AAS to a BAS degree for ten degree areas.
- CCCS CTE staff established a Criminal Justice content team that included secondary, community college and four-year education institutions to develop and approve a core Criminal Justice curriculum for secondary programs that will allow students to earn concurrent enrollment credits. The team also established a statewide Criminal Justice postsecondary articulation agreement for matriculation from an associate degree to a bachelor degree.

Supporting career and technical student organizations

- CCCS CTSO staff (Assistant Program Directors) continued leadership roles to set the standards of excellence for local CTSO organizations. Several examples demonstrate the effectiveness of State staff leadership. CCCS staff for FCCLA supported the March of Dimes Corporate Kick-Off Breakfast. One District, inspired by that Kick-Off, implemented extensive, creative plans and projects and raised \$23,500 for the March of Dimes program.
- Colorado Family, Career and Community Leaders of America (FCCLA) chapters and districts fundraised \$5,695 for the national outreach project, Feed the Children. Feed the Children is a nonprofit organization that delivers trucks to neighborhoods where there is little to no resources for families in poverty. Each truck has 400 boxes of food, 400 personal care items, and 2 pallets of extra goods that go to poverty stricken areas.

- The Centauri High School FCCLA chapter was selected the 2008-09 National Families First Runner-Up Award Winner. Families First is a national peer education program through which youth gain a better understanding of how families work and learn skills to become strong family members.
- The CCCS TSA State Advisor worked tirelessly with the National TSA organization to provide assistance for the national conference which held in Denver, Colorado, June 29-July 2, 2009. More than 4,700 students from across the nation worked through various skill and leadership competency demonstrations.
- CCCS staff helped organize and co-sponsored a Bridge Building Contest with the Community College of Aurora. Nine high school students, 4 secondary teachers, and 4 engineers participated in this new activity.

Supporting public charter schools operating career and technical education programs

- CCCS was able to include a new District without borders, a charter school district, within the FY2009-2010 Perkins distribution allocations. Extensive technical assistance was provided by CCCS staff for improving this new district's understanding of Perkins Local Plans, and Plans of Study.
- CCCS continued to advise districts that they must also share Perkins funds with any charter schools that have approved CTE programs.

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

- The School-based Enterprise Certification Program was developed to provide recognition for outstanding achievement by school-based enterprises and to motivate SBEs to strive for excellence and to grow. The program provides SBEs with standards for model school store operation and provides recognition for school-based enterprises at three levels: bronze, silver and gold. The number and type of activities a school-based enterprise completes in each of the twelve sections will determine the level of certification awarded.
- CCCS staff facilitate the availability of "Get Ahead for Business," a two year curriculum which is provided free of charge to any CTE program that is interested in teaching entrepreneurship. It provides students with hands on activities.

Supporting family and consumer sciences programs

- Over the past year, the Family and Consumer Sciences (FACS) Program Director attended multiple meetings, school visits, and worked with post-secondary faculty to create

articulation agreements that are specific to FACS pathways. Creation for a FACS Google Group has opened more lines of communication between the FACS Program Director and the teachers in the field. Along with the Google Group, the FACS Program Director maintains a website dedicated to Colorado FACS updates. On this site, teachers can access the Colorado FACS logo, standards information, professional development information, articulation agreements, quarterly newsletters, scholarship announcements and much more. FACS continued to work on their media relations and had the opportunity for two newspaper articles, one of which was published on males entering the FACS Teaching role. FACS promoted many Colorado CTE initiatives at the annual Colorado Association Teachers of Family and Consume Sciences (CATFACS) conference in January 2009. Many of the workshops discussed CTE Credentialing, Plans of Study, Program Director updates, and FCCLA Advisor Training. For the sixth year in a row the FACS Program Director supported the FACS Professional Development Workshop Series which included 118 teachers attending over twelve different workshops related to Family and Consumer Sciences Education.

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

- CCCS staff helped implement the “High School for Business” program at Monarch High School (Boulder Valley School District) as a Business Education based high school pilot for Colorado. The program, developed by the MBA Research Curriculum Consortium in Ohio is being partially sponsored by a local business to assist with the purchasing of curriculum and teacher training. Information from MBA Research is shared with the business and marketing programs through emails and fliers at professional and student organization conferences.
- CCCS staff worked with the Colorado Geographic Alliance and ESRI, a Geographic Information Systems software company, to plan and host a Geospatial Technology Awareness/Training scheduled for the Fall of the next school year.
- CCCS staff worked with the Young Americans Center for Financial Education to host two mid-winter in-services for the free “Get aHead for Business” (GaFB) high school entrepreneurship program that is sponsored by Oppenheimer Funds. Starting a Business 101 and Running a Business 201 were featured. Existing GaFB teachers received the new economics supplement book, new assessments per unit, the crosswalk with business and marketing standards and information on how students can gain 3 community college credits in Entrepreneurial Operations. GaFB is also being implemented in Catering and ProStart programs. Even non-GaFB teachers, were invited to join the training to learn more about it.

Developing valid and reliable assessments of technical skills

- The FBLA and DECA staff are tracking student success from participation in district and state CTSO events. DECA is tracking the success gains of many college bound students in relation to other DECA members across the United States. Yearly reports will be provided.
- CCCS staff served on the new Colorado Postsecondary and Workforce Readiness Council.

Developing or enhancing data systems to collect and analyze data on secondary and postsecondary academic and employment outcomes

- The CCCS Accountability Director continued to serve on a P-20 accountability sub-committee. She also worked closely with Colorado Department of Education staff to improve our interactions regarding EDEN reporting and built relationships with CDE EDEN personnel. CCCS staff also worked with the CDE EDEN personnel to provide the State's Perkins GEPA reports via the EDEN system.

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

- Move of credentialing to CDE
- Teacher Cadet continues to be a premier teacher recruitment tool in Colorado. Family and Consumer Sciences Education was especially excited to hear that there is interest in having Teacher Cadet become the main teacher recruitment program in high schools across the State (Governor Ritter's Colorado Promise). The Teacher Cadet program articulates to all CO Community Colleges that have an Education pathway, along with five four year universities. Students that pass the Teacher Cadet course with a C or better can receive credit for the first post-secondary education course, typically called Foundations of Education.
- CCCS piloted a mentoring program for new Business and Marketing Education instructors throughout the State. This program will provide new teachers (up to three years of teaching) with a mentor to assist and provide them support when needed. Teacher workshops and one on one work sessions were planned for implementation in the next program year. Topics include: Plans of Study, Program Approvals, Five Year Trend data, Five Year CTE Program Plans, Management of Student Organizations, professional organization participation, curriculum, standards, credentialing and licensure.

Supporting occupational and employment information resources

- CCCS has purchased a site license for CC Benefits, an EMSI product. This allows access to real-time labor and employment data organized around the 16 National Career Clusters. In addition, CCCS has collaborated with the Colorado Department of Labor and Employment to provide training to CTE instructors and administrators on current labor market trends. This

has resulted in new program development around, specifically, the renewable energy and photonics sectors.

- Perkins Strategic Planning guidelines and training emphasizes the need to review regional labor market data and includes the webpage link along with instructions on how to locate county specific labor related data.

2. Progress in Developing and Implementing Technical Skill Assessments

(1) Program Areas in which Colorado has Technical Skill Assessments:

In the 2008-2009 Perkins program year, CCCS expanded our technical assessment work within the secondary Health Science Technology programs. We moved from four (4) to eight (8) programs offering the assessments which expanded the number of students from 100 to 160. Of the concentrators that took the exam, 42% passed.

In addition, we have selected Business and Marketing programs as the pilot for the current year to review applicability of online testing systems for administration of the assessment and collection of the assessment data.

(2) Estimated percentage of Colorado Students would be reported in the State's calculation of CTE concentrators who took assessments

To determine an estimate of our secondary and postsecondary students meeting the definition of concentrator that were completing valid and reliable technical skill assessments based on industry standards we used our VE 135 follow-up data collection system.

The survey reported that 995 of our over 53,000 secondary 2008 concentrators, or 1.8% were reported to have taken an industry based technical skills assessment. Of those, 870, or 87%, were reported to have passed.

At the postsecondary level, programs reported that 3,463 of the nearly 22,000 concentrators in 2008 or 15.8% had taken a technical skill assessment. Interestingly, 67.5% of these concentrators were within the Health Sciences cluster. Of those who had taken an assessment, it was reported that 92% had passed.

While this is neither valid nor reliable data, it provided us with an estimate of the current level of assessments being taken. In addition, it provided direction for our next steps in the form of potential assessment use by cluster.

(3) Colorado's Plan and Timeframe for increasing the coverage of programs and students reported in the future:

As noted in our State Plan, Colorado is working toward collecting student achievement data on technical assessments that are aligned with industry-recognized standards where available and appropriate. To expand our capacity to report this data, CCCS staff has and will continue to progress

through the strategies and processes that underpin the development of valid and reliable academic and technical assessments relevant to high school level competencies.

In the last eighteen months, CCCS staff members have completed the first two of ten essential steps to the construction of valid and reliable assessments according to the Ohio State University College of Education and Human Ecology steps:

- Step 1 – Determination of Test Purpose
 - Purpose – Assessment of Content Mastery by Student for Advanced Placement in continuing education or industry certification.
- Step 2 – Define Content Domain
 - Secondary occupational standards and outcomes have been established in alignment with the Career Cluster and Pathway model for all areas with approved programs. In addition, these standards have been aligned with the recently updated Colorado academic model content standards for math, science and language arts. They are available at http://www.coloradostateplan.com/content_standards.htm

In addition, during the current and coming year, we will:

- Provide instructor level training on new standards and outcomes
- Develop an on-line, interactive portal for instructors to access standards and outcomes as they develop their instructional scope and sequence.
- Collaborate with the state licensing board in Health to determine if, how and when per-student test results might be provided to CCCS directly or how and when per-student test results might be provided through postsecondary faculty.
- Research assessment instruments and best practices

3. Implementation of State Program Improvement Plans

Due to incomplete postsecondary data caused by errors with the implementation of the new CCCS Banner student data system, the narrative currently only can address secondary performance improvement plans. The postsecondary portion of this report will be submitted by January 29, 2010.

Colorado met or exceeded 90% of the State adjusted levels of performance for 7 of the 8 Perkins secondary Core Indicators of Performance. The disaggregated categories of the one deficient Core Indicator show insignificant variability except by gender. The female subpopulation is significantly lower in actual level of performance on this indicator. The State's Program Improvement Plans action steps for the indicator that is deficient is as follows:

6S2: Secondary Nontraditional Completion

- Colorado discovered the deficiency of the Nontraditional Completion when we developed a data report to identify CTE programs that were most in need of technical assistance. That report revealed that every Colorado Perkins recipient except one failed to meet 90%

of the State target for secondary Nontraditional Completion. This skewed deficiency was alarming and staff research discovered that averaging the total of all recipients' previous year's Nontraditional Completion rates versus averaging each recipient's previous year's Nontraditional Completion rates and then finding the average of those averages produced significantly different results. The total average is skewed by a small number of districts with large populations. Therefore Colorado proposes to renegotiate our secondary Nontraditional Completion rate adjusted Level of Performance target in April, 2010. Since 99% of the local recipients did not meet 90% of the State target, it is reasonable to conclude that the State Target is invalid. (Staff members responsible: CTE Dean, CTE Accountability Director, Perkins Director)

- The Perkins Director is currently developing comprehensive data training workshops for delivery in Spring, 2010. Past results from Perkins III data training workshops were disappointing. Attendance was minimal and teachers continued to misunderstand and not use the data reports. Therefore, a careful construction of a training plan is underway implementing the following elements:
 - Survey CTE Administrators about the usefulness of the Local Perkins Performance Metrics Report and their preferences for the style of data training.
 - Refer to the What Works Clearinghouse webinar "Using Student Achievement Data to Support Instructional Decision Making" as guidance for training design.
 - Refer to the National Research Center for Career and Technical Education for guidance about designing training related to the use of performance data.
 - Apply the complete systematic instructional design steps described in Dick, W., Carey, L. & Carey, J.O. (2005). *The systematic design of instruction*. Boston: Pearson to the data training development.
- Colorado's implementation of the new multi-year strategic plan for nontraditional careers (Workplace Balance Project) began in the 2009-2010 program year. Colorado added a part-time staff member to serve as the Colorado Workplace Balance multi-year strategic plan project coordinator. Beginning in the 2010-2011 program year, Colorado will add the following question to our newly implemented Workplace Balance Project "request-for-proposals" form used to award postsecondary nontraditional career mini-grants: "How will you engage secondary CTE programs to help boost gender balance in your postsecondary CTE programs?" (Staff members responsible: Perkins Director, Workplace Balance Project Coordinator)
- The CCCS Career and Technical Education Dean will prepare an annual "Perkins Data State of the State" report for presentation at the annual conference for career and technical administrators.
- IN the Spring, 2009, CCCS purchased and distributed over 1500 Women in Engineering and Women in Tech/Trades "Think Women Can't..." posters (offered from IWITTS) to CTE administrators, CTE teachers, secondary school counselors and postsecondary advisors.

- CCCS contracted with a professional marketing company for the development of Workplace Balance Project posters and brochures that will be ready for distribution by Spring, 2010. These products will also be available as a template to allow customization of the posters and brochures to promote a specific college and/or CTE program. CCCS College recruiters have agreed to help distribute these brochures to high school students. This campaign is related to the “Colorado Career and Technical Education for Real!” marketing so each message supports the other message and multiplies the impact. The gender balance focused materials are titled “Real Choices for Career Success.”
- The Workplace Balance Project Coordinator will develop two CTE teacher’s gender balance checklists. One for secondary instructors and one for postsecondary faculty. These are being designed to be user-friendly resource guides to allow implementation of immediate, low-cost, and simple strategies that boost gender balance participation and completion in CTE programs. These will be completed by Spring, 2010 to initially be used during targeted technical assistance visits. They will also be distributed at the annual career and technical educators’ conference; posted in the CTE web-based library; and can easily be e-mailed to any person asking for strategies.
- CCCS staff distributed a gender balance oriented training survey to teachers at the last annual career and technical educators’ conference. The results will be analyzed to help define training curriculum related to gender balanced CTE programs. This training can be incorporated into the data training described above and ready by Spring, 2010. (CCCS Staff members responsible: Perkins Director, Workplace Balance Project Coordinator)
- CCCS has added a full-time Program Director responsible for STEM related CTE programs. She continues to partner with the Perkins Director and the Workplace Balance Project Coordinator with several gender balanced related initiatives including the design of the next Workplace Balance Project Bidders’ Conference being held in June, 2010. This team has also provided input on local initiatives, i.e., continuing the Military Wives in IT project and the development of a new Camp for Girls in Gaming IT project.

4. Implementation of Local Program Improvement Plans

Colorado CCCS staff will produce Local Perkins Performance Metrics Reports in May, 2010 for the 2008-2009 data. The new CTE Online Account system that is now used by eligible recipients for the submittal of each year’s Perkins Local Plan includes, for internal staff usage, the function of preparing a report that lists all recipients that are required to complete a Local Improvement Plan as part of the Local Plan. The report also indicates the core indicator in which the recipient was deficient. That report currently lists each eligible recipient that did not reach 90% of the Transition Year Performance Indicators (3 NCLB indicators), showing 8 eligible recipients that were required to prepare Local Improvement Plans for the 2009-2010 program year. Trends are not yet available since second year data per recipient reports will not be available until May, 2010.

Because there is a lag between the data year and the Local Plan year, recipients are required to write local improvement plans if the previous year’s data did not reach 90% of the next year’s

target. For example, the program year 2010-2011 Perkins Local Plans will include a Local Improvement Plan requirement if the 2008-2009 data does not meet or exceed 90% of the 2011 State targets.

In the 2009-2010 program year, only eight secondary recipients were required to include a Local Improvement Plan as part of their Local Plan since they did not meet 90% of the State target for one of the three NCLB core indicators of the transition year requirements. (No recipient was deficient in more than one NCLB indicator). Four recipients were below 90% of the State target in the 1S2 Core indicator and four recipients were below 90% in the 4S1 indicator. In May, 2010 we can compare reports to determine if any recipients are continuing to miss the State targets in consecutive years.

We were able to identify that 99% of the secondary recipients did not meet 6S2 core indicator. This indicates a problem with the State target. However, each recipient will be required to prepare a Local Improvement Plan as part of their 2010-2011 program year even if the issue is the State target because a new State target would not be systematized into the Online Accounts until the 2011-2012 program year.

Although recipients did not have to do a formal Local Improvement Plan for five of the eight core indicators for the 2009-2010 program year, each recipient had their Perkins Performance Metrics report posted into their CTE Online Account and in fact, could not begin preparing their Local Plan until the recipient's Performance Metric report was posted. Perkins Local Plan preparers were instructed to review the Performance Metric report before preparing the plan. In the FY2009-2010 Local Plans, the 2007-2008 data results were reported. Although data of five of the eight core indicators represented benchmark data, the Perkins Director returned Local Plans for editing if they did not include any mention of addressing even benchmark data that was "in the red." (The local performance metrics reports showed actual results that are below 90% of the State Target in red numbers.)

This helped bring attention to the need to address the data results prior to the formal implementation of the Local Improvement Plans that will next be linked to all core indicators. But later in the 2009-2010 program year when we looked at all core indicators as a whole, we discovered that every secondary recipient except one was 90% below target on the 6S2 core indicator. And since 99% of the Local Plans for Program Year 2010-2011 will include Local Improvement Plans, the importance of attention to Perkins Performance Metrics reports and data will be strongly driven home!