

PART B: NARRATIVE PERFORMANCE INFORMATION

1. Implementation of State Leadership Activities

a. Required Uses of Funds:

The Colorado Community College System (CCCS) career and technical education (CTE) staff successfully performed all duties as normally required while also:

- facilitating the development of the Colorado Perkins five-year plan with multiple stakeholders;
- leading the implementation of plans of study;
- processing the re-engineering of state-level duties, functions, policies and procedures in three different segments of state CTE administrative roles;
- addressing new Perkins data requirements; and
- promoting the CTE and plans of study roles to support the Governor's Colorado Promise initiative.

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

- The Colorado Community College System (CCCS) is continuing career and technical education (CTE) process reviews and reengineering with each CCCS function related to career and technical education. During the Perkins reengineering, in the Colorado 2007-2008 program year, all Perkins functions were reassessed for complete alignment to all regulations and developed to become interactive web functions. By moving the submittal of local plans to a CTE Online Account system some parts of the assessments of local Perkins programs have become automated. For example, the system is programmed such that each recipient's Perkins Performance Metrics are linked to the local plans in three ways:
 - Logic is pre-programmed such that any recipient that falls below 90% of the state target for any one of the sub-indicators relevant to the recipient's level (secondary or postsecondary), will automatically be unable to submit their annual Perkins local plan without also completing a Perkins local improvement plan.
 - Logic is pre-programmed such that each funded project within a Perkins local plan must select at least one of the relevant sub-indicators as the objective of the funded project. Once a sub-indicator for the funded project is selected as the objective of the funded project, the web system automatically enters the recipient's most current percentage result of that sub-indicator. Programmed logic also forces the recipient to enter a goal of either maintaining the current result or improving the current result before they can proceed with the rest of the budget/funded project segment of their annual local plan and plan submittal.
 - The Perkins plans portion of the CTE Online account is designed so that either state staff reviewing the local plan or local staff writing the local plan can click on a link within the plan and immediately see the recipient's Perkins Performance Metrics. Another programmed feature of the system will force the local recipient to write an analysis of the outcomes of each funded project from the previous year and how the investments impacted the selected Performance Metric objective.

- Another task accompanying CTE process reengineering is the complete rebuilding of the CTE Administrators' Handbook. This document serves as the trusted source for policy and procedures. It is located on the website (http://www.coloradostateplan.com/admin_handbook.htm) and is a searchable document. To systematize the use of this document and to keep it current, CCCS staff representing internal audit, fiscal, compliance, CTE program management, and monitoring meet quarterly as the Administrators' Handbook Task Force. The Monitoring Manager chairs this group, maintains formal records of these meetings, and prepares the agenda. The group reviews any requests for changes to the Administrators' Handbook. No changes can be made to the documents without approval from this task force.
- In Colorado, each CTE program must meet program standards and be CCCS approved to qualify for receipt of any Perkins funds. (The CTE program approval process is also a web-based function and will be reviewed and reengineered in the next fiscal year.) CCCS Program Directors review CTE program course descriptions, program data, assurances and, now, plans of study. The new Plans of Study requirement was a major project since that process is not yet web-based. In preparation for this process, a review form was created to provide State Approval for the locally developed Plans of Study. Local recipients were asked to submit their plans by June 1. The plans were then reviewed by the appropriate program director and reviewed by the Dean of CTE for final approval. By June 30, 2008, 132 of the 198 Plans of Study were received and under review and 89 had successfully completed the review process and were approved. Program Directors designed the Plan of Study template, developed minimum criteria for a plan of study submittal, and provided workshops for 1400 teachers in eight different locations across the State. Colorado required at least one plan of study from every Perkins local recipient before they could receive approval of their Colorado fiscal year 2009 Perkins local plan, even one from each district in consortia. With both the CTE program approval being web-based and the advent of Perkins functions being web-based, CCCS anticipates the potential to build relational databases that allow the comparisons of Perkins dollar investments to Perkins Performance Metrics and CTE program renewal approval data.
- During the Colorado FY2007-2008, the Program Directors conducted three 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 125 secondary and postsecondary faculty and administrators participated in the trainings. Each workshop received an excellent approval rating by the participants.
- One of the most important assessment criteria for a quality CTE program is the capacity of the instructor. Based on this fact and the evolution of Colorado's CTE model to include the Clusters and Pathways approach, significant staff time and energy was devoted to developing and/or revising existing CTE teacher credentialing requirements. Over 400 hours of staff time invested resulted in an expansion from 16 to 32 secondary and postsecondary credential

areas. Each of the credentials was finalized with the right balance of education level and occupational experience appropriate for the cluster or pathway.

- The state Business and Marketing Content team reviewed the Specific Program Requirements and Quality Indicators and updated them as needed. This information has been turned in for update in the Administrators' Handbook. This Content Team continues to meet to review and make recommendations to the credentialing guidelines for business and marketing.
- The CCCS 25-member Perkins Field Council, consisting of volunteer local CTE administrators and representatives from business, industry and other agencies, reviewed Colorado FY2007-2008 state approved Perkins local plans and selected six as models of best/promising uses of Perkins funds. Council members visited each selected site and prepared summary reports of program highlights that were distributed at the Colorado Association of Career and Technical Administrators' annual conference.
- The Skilled Trades & Technical Sciences program staff began the process of acquiring standards for each pathway area. Standards will include both area content standards as well as knowledge and skill standards to individual cluster and pathway areas. The goal is to have these standards available as a resource to instructors, online, as a way to help them as they develop curriculum within their content areas. Content teams will be made up of both secondary and postsecondary instructors who will work to review and make recommendations on items relating to their content areas.
- Five Colorado agriculture education programs were selected to pilot the implementation of the National Quality Program Standards (NQPS.) Teachers from these five schools along with their administrators and chairs of their industry advisory committees met with staff from the National Council on Agricultural Education to learn about the standards and how to implement the improvement tool to identify program areas on which to focus efforts. Each team then completed the process, identified two areas which indicated needed improvement and developed an action plan on how to address these areas over the coming year. These five programs will continue to partner with the CCCS Agricultural Education Program Director to implement the NQPS improvement tool into all the CCCS approved agricultural education programs in Colorado.
- The CCCS Health/ACE/Public Safety Program Director facilitated Health, Alternative Cooperative Education (ACE), Criminal Justice and Massage Therapy Content teams that met several times last year for work on CTE program standards.
 - The Health Content Team cross-walked secondary health science technology content with postsecondary content for the Colorado Advanced Credit Pathways (ACP) course approval. The purpose of ACP is to provide college credit for equivalent learning at the secondary level in career and technical education that aligns with the criteria established in Perkins IV and the development of Plans of Study. (See <http://www.coloradostateplan.com/acp.htm>).
 - The Criminal Justice Content team was formed last spring and identified the scope of work for the coming year. The first initiative beginning in May was to review all

courses listed in the Colorado Community College Common Courses database for revisions that may be needed because of duplication or irrelevancy. This curriculum website includes courses taught by the community colleges in Colorado and will soon include courses taught by the 5 area technical schools. Courses with common content carry the same prefix, number, title, credits, description, competencies and outline. These commonly described courses facilitate transfer and articulation arrangements for Colorado's secondary and community college students and ensure curriculum quality across the colleges. (See <http://www.cccs.edu/ccns/ccnsindex.html>).

- The Alternative Cooperative Education (ACE) Content Team worked on CTE program standards and academic core standards cross-walks.
- The Massage Therapy Content Team developed a core curriculum for all CCCS approved Massage Therapy programs.

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 organization 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. Colorado FBLA-PBL and Colorado DECA have been the main focus of student and community participation. These student organizations have been able to widely distribute internet safety information and are now seeing interest from other schools and communities. This supports the joining of forces to assist with this mission in Colorado. State staff helped organize two Internet Safety Foundation Summits, attended by over **number** participants in Denver and Colorado Springs.
- Major revisions made to the look and organization of the Career and Tech Education website has supported use of the internet. CTE personnel from anywhere in the State can easily access more forms, more information, more web-enabled reporting functions and the new CTE Library. The Library allows sharing of important links, research reports, and policy reports that represent current practices and trends.
- The CCCS Program Director helped sponsor a CACTE ACE Division workshop that featured best practices for ACE Technology in the classroom for CACTE ACE Division conference participants.
- The Family and Consumer Sciences Program Director helped organize three days of technology information, designed to enhance technology techniques in the classroom. Web Research Tools and How to Develop Webquests were major topics.

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.

- To better serve and retain new CTE teachers and administrators, CCCS staff implemented a series of “survival camps” that provided local practitioners with overview information about Perkins, state vocational funding, CTE program approvals, data reporting, local Perkins five-year plans, and financial reporting. Any individual who completed all of the camps could apply for college credit. Some of the “camps” were repeated across the State training 1400 people in plans of study.
- CCCS initiated a counselor professional development system by presenting two Career Awareness and Readiness Expo (CARE) Conferences in two State locations. The day’s activities included training about the use of Plans of Study to advise students; the use of www.collegeincolorado.org and its multiple college and career planning tools; the youth and adult Department of Labor apprenticeship programs; the value of connecting high school counselors with community college advisors; and an expo of high wage, high skill, high demand career programs available at Colorado community colleges. These workshops were attended by more than 250 secondary counselors and postsecondary advisors and served as the first stepping stone toward extending counselors’ continued career awareness and career advising professional development. Fourteen counselors chose to participate in further CCCS funded trainings on clusters and pathways. This group will also assist in the development of a comprehensive career guidance handbook that will be released in Colorado Fiscal Year 2008-2009. The two CARE conferences also facilitated the re-installment of the counselors’ division in the Colorado Association of Career and Technical Education. That division membership is now designing extended training for more counselors.
- During the new teacher in-service in the fall of 2007 the Business and Marketing Program Director invited the new teachers to participate in the start of a mentoring program. Business and Marketing teachers that were interested 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.
- 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.

- Family and Consumer Sciences (FACS) Education focused on continuing professional development training and workshops during June 2008. Eight days of targeted education and information were offered to FACS teachers throughout the state of Colorado. In addition to the technology workshops, a design day was held at Colorado State University, focusing on fashion design and interior design. FCCLA Adviser training, FACS CORE training, and a catering workshop at Pikes Peak Community College were coordinated by CCCS staff. A total of 223 teachers attended the free workshops.
- CCCS partnered with CACTE and in particular the CACTA division (CTE administrators) to initiate a five year plan of training and professional development.

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.

- Fifty-seven agricultural education teachers participated in a full day conference focused on implementing Geometry concepts into their agricultural construction courses. The intent of the workshop was to allow the instructors to identify where geometry concepts were imbedded in their courses and develop lesson materials that enabled the students to not only comprehend the application of the concept but to do so in a way that enhances the students understanding of the mathematical concept. This enables the student to be better equipped to apply the learning to their math classes and Colorado No Child Left Behind (CSAP) assessments. Attention was focused on use of proper geometry terminology and mathematical problem solving while teaching the application of the concept in the construction field.
- CCCS staff partnered with the CACTE Health Division to provide professional development for the integration of academics with the health science technology programs in order to receive academic credit for science and language arts.
- CCCS funded a team of four to travel to Louisville, KY to attend the Math-in-CTE train-the-trainer conference held May 12-15, 2008. The team included two local CTE administrators and two State Program Directors. The Math-in-CTE model is a curriculum integration model designed to enhance mathematics that is embedded in career and technical education content. It is a process that provides the opportunity for math and CTE teacher teams to work together in communities of practice and to identify where math intersects with CTE concepts and applications. This process leads to the creation of math-enhanced CTE lessons that follow a seven-element pedagogic framework. Premised on five core principles, the research-based Math-in-CTE model has been shown to have a significant positive impact on student learning in mathematics with no loss to career and technical area content. CCCS is continuing this investment by agreeing to commit substantial funding in partnership with local funds toward Math in CTE training for the 2008-2009 program year. This future support will support CTE instructors in the Business and Marketing and Construction/Welding areas to team with math instructors in a one year project to integrate math into CTE programs. Sixty instructors, (30 CTE and 30 Math) will work as teams during the 2008-2009 school years to use these research-based principles to integrate math into their CTE programs. Because of the CCCS

continuous advocacy for the Math-In-CTE model, many more Perkins recipients are delegating local Perkins funds to further exploration and training in this model.

- Get Real Resources for Business and Marketing Materials were developed by Business and English teachers from the Jefferson County School District. Their materials are used in a course where students receive language arts credit – while being co-taught by a Business and English teacher. These resource materials are now available by attending a workshop/course where graduate credit is offered through Adams State College. The CCCS Program Director for Business and Marketing has, in conjunction with advocating for increased academic rigor in CTE programs, integrated the introduction of this resource to teachers across the State.
- CCCS continues to build the www.coloradocte.com website that provides crosswalk guides aligning CTE standards to academic core content standards and workplace standards. The Family and Consumer Sciences program standards are now online.
- Two agricultural education teachers were sponsored by CCCS to attend a five day Delta: The Power of Change conference held at Tarleton State University in Texas. The focus of the conference was:
 - Enhancing the local teacher’s ability to engage all students in the learning process;
 - Improving the local teacher’s skill of integrating LifeKnowledge (21st Century Skills) and academic competencies into technical content; and
 - Helping the local teacher understand and develop his or her influence in the classroom, school and community.

Teachers participating in the conference join professional development groups of teachers across the country in which they continue to share ideas, concepts and thoughts on enhancing student learning in their classroom. The two teachers attending in 2008 will join seven other, past Colorado participants, to design and deliver the training to the remainder of agricultural education teachers in Colorado.

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, except that one-day or short-term workshops or conferences are not allowable.

- CCCS staff conducted a telephone conference with postsecondary recipients to discuss re-thinking our practices with the Non-Traditional Careers set-aside funds. Since 2001 the State Leadership funds for Non-Traditional Careers were allocated, through requests for proposals, as local grants to assist postsecondary institutions with recruitment and retention of underrepresented genders into Non-Traditional Career program areas. Six years of innovative and extensive local efforts have produced minimal results and extensive frustration. The teleconference was used to determine if the field would agree to an interim process of using the Non-Traditional Career leadership funds to research and develop a CCCS Non-Traditional Careers multi-year strategic plan in hopes of increasing and broadening the influence and leveraging of these funds. Representatives from five colleges agreed that a more centralized, state-wide, top down would be worth a try.

- A CCCS team of staff including the Perkins Director, the Program Director for Skilled Trades and Technical Sciences, the Dean of Enrollment Services, and the Director of Enrollment Services attended a two day workshop presented by the National Institute for Women in Trades, Technology & Science and began planning the role of this team in working with a consultant to develop a strategic plan. The team, which has more than doubled in membership, expects to introduce the strategic plan to the Colorado Association of Career and Technical Administrators (CACTA) in February, 2009.
- CCCS assured participation of various external special populations stakeholders by inviting and supporting representatives for this group to continue to participate with the design of the Colorado Perkins five-year plan. CCCS also funded a Community College Director of Support Services to accompany CCCS staff to the “From High School to College & Career” workshop. Her input also informed CCCS strategies to enhance opportunities for special populations CTE students to be successful.
- CCCS began funding a new staff position, Dean of Enrollment Services, with job description responsibilities that include serving special populations. This employee has duties that connect her with Student Life Directors, Registrars, student data management (Banner), College Advisors, and the Disability Services Council. She has held two initial meetings to discuss the possible use of Banner coding and tracking and the use of advising codes to provide better services to students in cohorts, including special populations. She also continues to meet with the Disability Services Council to discuss counselor needs to better serve the disabled students population; limitations of the current Banner setup; and development of wish list projects for improving services to students with disabilities.

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.

- The design of Colorado’s Plans of Study was carefully devised to encourage partnerships throughout the education levels and into business and industry. This focus was reinforced at the training sessions to over 1,400 instructors and administrators. Local recipients were encouraged to build the plan with the participation of a secondary or postsecondary partner and through collaboration with the guidance staff at their institution. In addition, it was recommended that plans be reviewed and approved by local advisory (business and industry) committees.
- In order to assist local CTE administrators with achieving local support for the new initiatives resulting from the 2006 Perkins Act, CCCS developed and distributed a Bridges to Opportunity Resource Kit. The kit included a summary of our State Plan, a DVD highlighting and explaining the importance of the career clusters and career pathways movement and additional resources to facilitate a local understanding of the partnerships required for this evolution to occur.

- In addition to training those individuals already within the CTE family, CCCS invested significant time building partnerships with local education administrators through presentations at the CASE (Colorado Association of School Executives) and CASB (Colorado Association of School Boards) Conferences. The focus of the presentations was about CTE's new direction with Plans of Study and the advancements made by CTE programs in academic integration.
- Throughout the year Colorado DECA partners with Business and Industry to provide up to 7,000 student members the opportunity to participate in local, district, state and international Conferences. DECA actively involves over 1,500 individuals from Business and Industry to serve as judges, mentors and presenters to the DECA membership. All CCCS supported career and technical student organizations (CTSO) achieve similar partnerships with businesses as well as with parents. CCCS continues to fund CTSO State Advisor positions and redefined their roles to include assistant program directing. This additional role assures imbedded and seamless interaction of CTE programs and CTE student leadership development. CTSO is integrated locally as an intra-curricular function and adds academically rigorous activities to the student's experience as well as serves as an outreach mechanism for business, industry, parents and community.
- The CCCS work on development of a state multi-year strategic plan for non-traditional careers has prompted partnerships with the Colorado Department of Labor & Employment (CDLE) and the Colorado Coalition for Girls in Information Technology. A CDLE staff member and a representative from the University of Colorado has joined the CCCS core planning team.
- CCCS staff were leaders in promoting the involvement of Workforce Development staff at the annual CACTA conference which increased local administrators' awareness of multiple workforce related services, trends, and opportunities to collaborate at the local levels.
- CCCS continued meetings with Topic Teams as the development of the Perkins state plan continued. Memberships on the Topic Teams included representatives from the Colorado Department of Labor and Employment, Colorado State University, Colorado Department of Education, Colorado Department of Higher Education, and business and industry.
- 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. CCCS staff serve on the Governor's P-20 Council.

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 their CTE faculty and administrators are members of the CACTE/CACTA organization as well.

- The Department of Corrections Education Consortium is 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 are available to students upon their release from a Colorado Correctional Facility. CCCS and CDOC conducted a pilot program through Pueblo Community College (PCC) where a cohort of offenders enrolled in two PCC CTE programs at the Canon City Correctional Facility. Upon successful completion of the program, the offender/students earned a certificate. Twenty-five offenders completed the certificates. The pilot was so successful that they are planning to increase from two to ten programs with an estimated 150 students participating in 2008-2009.

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

- The Annual Spring ACE Conference was supported by CCCS by financing the costs for a keynote speaker. Also, the CCCS CTE Dean presented on career clusters, pathways and ACE program plans of study.
- CCCS continues to review, approve and provide technical assistance for secondary ACE programs (for at-risk and disadvantaged students) and Work Experience Study (WES) programs (for special needs 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 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.
- During the Counselors' CARE Conference, CCCS used a keynote luncheon event to stimulate the input and collection of attendees' perceptions about men and women working in non-traditional careers for their gender and the counselors' challenges and opportunities for advising students to these careers. This collection of concepts from seventy eight counselors will be used to help direct our strategic planning. The CCCS Perkins Director initiated the formation of a Non-Traditional Careers Practitioners' Council to also connect the strategic planning and the plan implementation to the business and industry network.
- CCCS funded a keynote luncheon for the Colorado Community Colleges' Communications Council to solicit their support and input regarding marketing and recruiting underrepresented genders into non-traditional careers for their gender. Comments, suggestions, and ideas were collected from ten different Colleges and the CCCS Manager for Communications as well as the CCCS Director of Media and Legislative Communications joined the CCCS Non-Traditional Careers Strategic Planning core team.

Offering technical assistance for eligible recipients.

- In addition to the continuous technical assistance provided by all System CTE staff, via either on-site, phone or email assistance to local recipients on an as needed basis, CCCS staff made it a priority to offer technical assistance in the 2007-2008 year. This extra assistance was coordinated with the seven regional meetings which allowed for a statewide distribution. Through this initiative on-site technical assistance was provided by Program Director team on-site visits to eleven secondary school districts and three postsecondary institutions.
- Perkins mini-workshops were offered beginning in March, 2008 to provide hands-on computer lab training with the use of the new Perkins local plans online system. The workshop attendance was limited to six or fewer people so that training could be specific and customized to both the strategic planning needs and the new technology needs. The CCCS Perkins Director provided, by June 30, 2008, nineteen workshops to approximately 70 administrators and their assistants. These were rated as excellent and determined to be the fields' favorite method of Perkins training.
- The CCCS Accountability Director also provided six data reporting related workshops and a Perkins financial reporting workshop was also offered by CCCS staff.

b. Permissible Activities:

Improving career guidance and academic counseling programs.

- Knowing that the Career Cluster/Pathway movement would need the support of counselors, CCCS hosted our first CARE (Career Awareness and Readiness Expo) for over 250 secondary guidance counselors and postsecondary advisors. The event provided them training on the Career Cluster movement and how to assist in the development of Plans of Study. The conference was so well received that a second session was added to serve counselors in the western part of the State. Counselors and advisors are also beginning to attend CTE Regional Meetings.
- CCCS staff developed and posted on our website 86 example plans of study for local agencies to use in the development of their plans. These examples were vetted through both secondary and higher education instructors.
- CCCS has also partnered with College in Colorado, a sister state agency that provides free college and career planning resources. Through the partnership they have included links to approved plans of study on their website and are organizing around the cluster/pathway model. Currently over 200,000 middle and high school students are registered on the site and have access to create a personalized plan of study based on their high school's academic and career planning requirements.

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

- CCCS staff organized and facilitated the opportunity for instructors from four community colleges, Colorado State University, and secondary instructors from Colorado agricultural education programs to collaboratively discuss development of the Agriculture and Natural Resource career cluster for the state. Topics of discussion focused on the concern, opportunities and marketing needs to move the Agriculture, Food and Natural Resources cluster forward. Recommendations from the day's work included the development of hybrid on-line courses to enhance the opportunities for students to take college level advanced topic courses while completing their high school degree; recreate content teams to focus on standards and curriculum development; and the inclusion of business and industry in the process.
- The Health Content Team received CCCS approval for eleven Advanced Credit Pathway courses. The team developed a sample template to be used by all secondary CTE programs who wish to apply for ACP credit. This template incorporates a cross-walk showing the secondary health science technology course content match with the selected postsecondary course content that is listed on the CCCCC database. The process for obtaining ACP approval that was developed by the health content team was used as one of two procedures for CCCS ACP approval and included in the CCCS ACP resource guide. Other CTE programs have implemented similar activities.

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

- 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.
- Several Criminal Justice (CRJ) community college programs sought new articulation agreements with Metro State. The CRJ content team has identified a statewide articulation agreement as one of the team's goals for the year 2008-2009 scope of work.

Supporting career and technical student organizations.

- For the new FY2008-2009, the Career and Technical Student Organization (CTSO) state advisor position descriptions were modified in both title and substance to "Assistant Program Director." This aligns with our Career Clusters goal of continuing to provide content specialist expertise in each of our six Industry Sector areas. Colorado has a strong belief in the importance of Career and Technical Student Organizations and the capacity they provide to develop 21st Century skills in students. We support CTSO's are integral to the success of a CTE program.

- This year, one of the Agriculture Education students concluded her year of serving as a National Officer to the National FFA Organization. Colorado then had another of our Agriculture Education students elected to serve as a National Officer. This is the first time in our 80 year history that we have had the privilege of having 2 consecutive National Officers come from Colorado. This experience has gained the Colorado FFA and Agricultural Education national recognition.
- Colorado Governor, Bill Ritter, Jr., proclaimed March 13 as Career and Technical Student Organizations (CTSO) Day in Colorado. On March 13 Rhonda Bentz, Colorado Community College System Director of Public Information and Legislative Coordinator, shared with State Officers an overview of how bills get passed and what to expect at the Capitol. Once at the Capitol, Senator Jim Isgar, chairman of the Agriculture Committee invited the officers to attend the Agriculture meeting and encouraged them to introduce themselves and their organizations to the committee. The students then heard discussion on a bill in front of the committee. The following CTSOs were represented at this Legislative Day: DECA, FBLA (Future Business Leaders of America), FCCLA (Family, Career and Community Leaders of America), FFA, HOSA (Health Occupations Students of America), PBL (Phi Beta Lambda – college level FBLA), and SkillsUSA.
- Kelly Van Workeum from the Loveland High School DECA organization in Loveland, Colorado, was elected as the 2007-08 International DECA President. Kelly has served to represent Colorado and International DECA in a variety of settings. Kelly has met with students, business people and legislators to represent the role of DECA as a co-curricular component of Marketing Education.

Supporting public charter schools operating career and technical education programs.

- CCCS has always supported approving CTE programs for District charter and alternative schools. In FY2008-2009, CCCS staff provided technical assistance and is conducting research on how a new, open-boundary, charter school district can be included in the Perkins formula funding.

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.

- Each year DECA sponsors a night with the Denver Nuggets NBA basketball team. In addition to the game, students receive information from the Nuggets' staff about related careers in the sports industry. DECA also works with the Denver University Pioneers hockey and basketball programs on hockey and basketball nights and is currently working with the Colorado Rapids to include soccer.
- Due in part to the process re-engineering for Perkins local plans, Colorado Perkins recipients must now address how they will provide understanding of all aspects of industry in their five-year local strategic Perkins plan and CCCS staff is requiring that this be addressed per the following definition: "Provide students with strong experience in and understanding of the

following aspects of the industry: planning, management, finance, technical and production skills, underlying principles of technology, labor, community issues, and health, safety, and environmental issues. It includes work-based learning experiences (internships, labs, clinicals, field trips, job-shadowing, etc.) and leadership skills, soft skills, SCANS skills, transferable skills.” This extra focus in the local plans reinforces program approval assurances that:

- Opportunities exist for students to participate in Work-Site Based Learning;
- Leadership training for all students is integrated in the classroom; and
- That courses include core standards of general and advanced skills and general occupational skills.

Supporting family and consumer sciences programs.

- CCCS continues to support the Colorado Family and Consumer Sciences Core programs as approved CTE programs so that students have the opportunity to learn to be a whole member of the Colorado workforce. By continuing to fund FACS Core programs, students learn human relations skills, nutrition and wellness skills, personal financial management skills, etc. These attributes provide employees that can adequately manage their careers because they also know how to proficiently manage their homes and personal lives.

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

- This is an ongoing process in the development of new content team members to participate from business and industry.
- There has been a partnership developed through the Internet Safety Foundation and Colorado FBLA-PBL and DECA.
- Colorado CTSO activities engage hundreds of parents, business and industry representatives in a myriad of student supporting activities. For example, the Family, Career and Community Leaders of America's (FCCLA) Spring Leadership Conference was held in April 2008. More than 1,100 students, advisers and guests from 79 Chapters attended. Eighteen workshops were presented. Workshop presenters included community members, business partners, and student leaders. In conjunction with the leadership conference, culinary events and workshops were held on the Johnson & Wales Denver campus. Business partners and institutions of higher education supported these efforts with booths and scholarship donations. Additionally, nearly 200 individuals (including parents and industry partners) served as competitive event judges.
- The vast majority of Colorado community college faculty are adjunct faculty who currently work in industry.

Providing activities to support entrepreneurship education and training.

- CCCS staff support and help publicize a new annual conference hosted by one of the Colorado district community colleges on entrepreneurship education.

Providing assistance to individuals who have participated in Perkins-assisted services and activities in continuing their education or training or finding appropriate jobs.

- CCCS continues to partner with the Colorado Department of Labor and Employment on the development of the Colorado E-Portal that allows students to post resumes and to connect with employers who are posting job openings.

Developing valid and reliable assessments of technical skills.

- CCCS staff is exploring the latest pedagogy trends about students' formative assessments, students' summative assessments, programs' formative evaluations and programs' summative evaluations. Workshops on "Understanding By Design" introduced staff to backward engineering of curriculum development, starting with "big ideas" and determining assessment strategies before outlining curriculum content details. More training is scheduled for the following fiscal year for more staff.
- CCCS staff serves on the new Colorado P-20 Council.
- CCCS staff serves 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 serves on a P-20 accountability sub-committee. She also implemented the interagency partnerships and MOU's to provide access to both No Child Left Behind data and Unemployment Insurance data.

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.

- As mentioned earlier in this document, significant changes were made in the credentialing process for both secondary and postsecondary instructors. One of the key priorities was to remove barriers that were keeping potential business and industry candidates from being credentialed instructors. This included educational requirements and occupational experience levels being adjusted to reflect the needs of each industry instead of keeping our prior general requirements. Also, postsecondary credential course requirements can be met on the community college campus, allowing industry experts to begin teaching while conveniently having access to classroom management and pedagogy skills coursework.
- In an effort to increase the enrollment into agricultural education from our community college transfer to university degree program, CCCS, CSU Agriculture Education and Colorado agriculture education teachers designed and conducted two activities held during

the State FFA convention. A future teacher luncheon was held for 30 high school students (targeted at juniors) where participants had the opportunity to listen to speakers who, were currently or had in the past, been high school teachers of agricultural education. The message they presented dealt with the benefits and opportunities a career in agricultural education provides. This activity was supported by a presentation on the convention stage to over 1500 members about careers in agricultural education and the CSU program. This was the second year of this program and while the students targeted have yet to graduate from high school, the exposure of the agricultural education career opportunities and the CSU agriculture education degree program has resulted in increased numbers of enrolling freshmen and transfer students declaring an agriculture education major.

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.

2. Progress in Developing and Implementing Technical Skill Assessments

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

We have progressed in this area since the submission of our state plan. At that time, Colorado had no program areas for which the state had approved technical skill assessments. By the end of Fiscal Year 2007-2008 CCCS identified and piloted a technical skill assessment for the Health Science Technology Secondary Programs with 4 programs and nearly 100 students. In addition, we surveyed local programs and found that a number of programs are using various industry assessments (included in table at end of this section). However, per student data is not yet accessible from the testing companies.

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

We estimate that less than 5% of secondary and postsecondary students meeting the definition of concentrator are completing a valid and reliable technical skills assessment that is based on industry standards.

(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 beyond the estimated 5% we have:

- Redesigned our postsecondary follow-up surveys to query program completers regarding what industry-based assessments they completed and their results.
- Identified targeted testing service and industry assessment providers to determine how and when test results might be provided to the State directly or how and when test results might be provided by postsecondary faculty.

CCCS staff has and will continue to research strategies and processes that will allow the development of valid and reliable academic and technical assessments relevant to high school level competencies. In the past six months, CCCS staff members have completed the following:

- Ohio State University College of Education and Human Ecology “Test Construction Workshop” designed to enable them to assess the validity and reliability of existing assessments relative to our programs and provide a framework for developing assessments in areas where an appropriate assessment is not available.
- Ohio State University College of Education and Human Ecology “DACUM Analysis Workshop” designed to guide CCCS in the development of standards and competencies for areas where they do not yet exist.

In addition, Program Directors are

- Researching assessment instruments and best practices
- Updating technical content standards and competencies in preparation for assessment creation.

Also Colorado will also expand the Health Science Technology assessment pilot in the 2008-2009 fiscal year from 4 to 13 programs and from 91 to over 400 students. In addition, one additional program area will be selected for a Spring, 2009 pilot.

3. Implementation of State Program Improvement Plans

Colorado has met or exceeded the State adjusted levels of performance for the three NCLB related Perkins Performance indicators as required for the Perkins IV Transition Year.

However, there are some points in our data that Colorado intends to further explore:

- We are pleased to find CTE enrolled Individuals with Disabilities exceeding both the 90% of target and the State average in the Reading/Language Arts performance indicator. However, we wish to further examine this population not meeting the 90% of target in the Mathematics performance indicator. This CTE population did exceed the State average for Students with Disabilities in the Mathematics measure. The data does not reveal specific disabilities and it does include the Colorado CSAP-A results. This inclusion of results for special tests administered to students with severe learning disabilities may explain some of the variance. However, CCCS will continue to focus on strategies that help assure that the population of Students with Disabilities attains the mathematical skills needed for the 21st Century workforce.
- We are pleased that CTE enrolled Limited English Proficiency students exceeded the 90% of the targets for the NCLB assessments performance indicators. However, we are

curious about how this population fell below the State average in Reading/Language Arts assessments yet exceeded the State average in Mathematics assessments. CCCS would like to explore how CTE could enhance Reading/Language Arts competencies for our Limited English Proficiency students. Several of our local recipients are piloting the application of the Math in CTE research model to a Language Arts in CTE approach.

- Our analysis of the NCLB assessments data reveals a large variance between the success of CTE enrolled Migrant students compared to State average results for Migrant students. These 30 and 40% variances may be indications of possible data definition differences so we will continue conversations with the Colorado Department of Education to assure that this data is valid and reliable.
- On the CAR enrollment workbook, it is important that States are very cautious when entering numbers for females and males between the two spreadsheets. The participants worksheet lists males then females. The concentrators by clusters worksheet lists females then males. The other problem is that neither enrollment worksheet has a place for gender unknown. Colorado has approximately 170 gender unknown postsecondary participants that therefore do not show up under the gender category, but they are included in the other subpopulation counts. For the concentrator by cluster worksheet, the unknowns do not show up at all.

4. Implementation of Local Program Improvement Plans

The Colorado Target for 1S1, Academic Attainment – Reading/Language Arts in Year One (July 1, 2007 to June 30, 2008) is 65% and 90 percent of that agreed upon adjusted level of performance is 59%. Every eligible secondary Perkins recipient exceeded 59%.

The Colorado Target for 1S2, Academic Attainment – Mathematics in Year One (July 1, 2007 to June 30, 2008) is 25.7% and 90 percent of that agreed upon adjusted level of performance is 23.13%. One eligible secondary Perkins recipient did not meet the 23.13%. This recipient is a small district with only one CTE program, Alternative Cooperative Education for At-Risk students (ACE). This district elected to be waived from consortium membership several years ago when an existing consortium could no longer locate anyone to do the administrative work. The denominator at this district for this Indicator is only equal to two students and neither student met the partially proficient, proficient or advanced level on the Statewide 10th grade assessment, resulting in a 0% performance for this indicator. The small number of the denominator will be taken into consideration when CCCS staff reviews the Local Improvement Plan that this district will be required to submit with their Colorado Fiscal Year 2009-2010 annual Local Plan.

In Colorado, an unavoidable time gap between data collection/reporting and the due date of the annual local plan submittals forces a Local Improvement Plan process in which the State holds the local recipient accountable toward meeting the next fiscal year's targets during the same year that the data addressing the targets is being collected. Thus, the Year One data will be entered into each secondary recipient's Perkins Local Plan account but it will be matched to the Year Two targets. Thus, each recipient that does not meet the Year Two targets with the Year One

data must submit and implement a Local Improvement Plan as part of their Year Two annual Local Perkins Plan. Since Colorado annual Local Perkins Plans are now web-enabled, the logic is automatically programmed so that the Local Improvement Plan will be automatically added to Local Plan required submittals for each recipient that does not reach 90% of the agreed upon adjusted level of performance. For these recipients, the programming logic prevents a local plan submittal until the Local Improvement Plan is also prepared and submitted.

Therefore, Colorado reviewed the Year One data for each eligible secondary recipient compared to the Year Two targets.

The Colorado Target for 1S1, Academic Attainment – Reading/Language Arts in Year Two (July 1, 2008 to June 30, 2009) is 85% and 90 percent of that agreed upon adjusted level of performance is 77%. One eligible secondary Perkins recipient did not meet the 77%. That district, although an urban district, is moving away from offering any CTE programs and in fact, asked to be de-obligated from receipt of any Colorado Fiscal Year 2008-2009 funds in May, 2008. The District no longer has any approved career and technical education programs. If the District were to return to offering career and technical education programs and were to choose to return to the Perkins formula for Colorado Fiscal Year 2009-2010 they would be required to complete a Local Improvement Plan as part of their annual Local Plan and begin implementation of the Local Plan during the 2009-2010 school year. The actual counts for this district are 10 students in the denominator and 6 students in the numerator. Again, the actual counts are so small that the relative percentage, as a stand alone number, is misleading. The small number of the denominator will be taken into consideration when CCCS staff reviews the Local Improvement Plan if this district chooses to participate in the Colorado Fiscal Year 2009-2010 formula.

The Colorado Target for 1S2, Academic Attainment – Mathematics in Year Two (July 1, 2008 to June 30, 2009) is 60% and 90 percent of that agreed upon adjusted level of performance is 54%. Six eligible secondary Perkins recipients did not meet the 54% target and will be required to submit and implement Local Improvement Plans in addition to their Colorado Fiscal Year 2009-2010 Local Perkins Plan. One of the six is the district described above that no longer offers any approved career and technical education programs. One of the six is the exempted-from-consortium district described above with only one ACE program and only two students in the denominator. One of the recipients, another small, exempt-from-consortium membership district, requested to be de-obligated from Perkins in the Colorado Fiscal Year 2007-2008 allocation and did not participate in the Colorado Fiscal Year 2008-2009 formula. This small district also has a denominator of only two students with one student in the numerator. The other three districts are urban districts that will be required to complete a Local Improvement Plan for Colorado Fiscal Year 2009-2010 allocations. One of these three Districts has been investing heavily in the Math in CTE research based model over the last two years. Another one of these Districts has completely reorganized career and technical education, beginning with the current school year, into the academies model.

Since the number of recipients who will be required to submit and implement Local Improvement Plans during the 2009-2010 school year is a small number, CCCS staff will contact each district in January, 2009 to advise them that they will be mandated to implement Local

Improvement Plans in the next school year. This early awareness should provide their personnel with more time to plan their strategies.

CCCS analysis notes the following trends.

- When data is disaggregated to extremely small numbers (i.e., denominators less than 30), percentages do not accurately portray student attainment. For example, if the denominator is only four students, only one student missing the assessment cut-point for partially proficient forces a small, consortium-exempt district into writing and implementing a Local Improvement Plan, although three of the four students were successful. CCCS is working to find fiscal agents who might offer to serve more of the small, consortium exempt districts. CCCS staff believe that percentage results when the denominator is less than 30 students provide limited information regarding the quality of the program.
- Improvement strategies are not reflected by the data. One of the Districts that will be required to implement a Local Improvement Plan is one of the first Districts in the State to invest very heavily into the Math in CTE researched methods and is finding so much success with this strategy that they continue to expand it every year. The Math in CTE strategies are implemented in CTE programs where mostly 11th and 12th graders are enrolled. However, the data measures assessments of 10th graders. Hopefully, as more Mathematics teachers employ contextual methodologies, math skills will improve for younger age students. There will be some lag time between date of implementation and date of improved data results. CCCS staff believe that lack of immediate data increases is not necessarily an indication of lack of quality in improvement strategies.
- Two of the recipients with legitimate denominator counts that need to improve in 1S2 are from the same county, a county with a larger demographic of economically disadvantaged individuals. Perhaps teachers with contact to pre-tenth grade level students need professional development regarding safe learning environments, increasing parental involvement, implementing plans of study at middle school levels, and maintaining high expectations for all students. Most of the teachers impacting students prior to tenth grade are not CTE teachers. CCCS may need to consider how we can use Perkins funds to support younger student activities (i.e., career and technical student organizations) that link to high school career and technical education programs.
- Although the actual level of performances for Colorado 1S1 and 1S2 performance indicators appear very high, CCCS will continue to emphasize rigorous academic strategies among CTE programs because:
 - Colorado's computation of Adequate Yearly Progress (AYP), as we noted in our State plan (Section IV, Statutory Requirement 5, p. 53), uses three levels of scores: partially proficient, proficient and advanced. The inclusion of partially proficient scores may skew results to a higher number in the numerator.
 - Colorado does not believe that the 10th grade academic assessments offered under the No Child Left Behind Act will provide an accurate assessment of academic learning provided by CTE programs Section IV, Statutory Requirement 5, p. 53).