2008-2012
California State Plan for Career Technical Education

A Guide for High-Quality Programs

A BRIDGE TO THE FUTURE

In Fulfillment of the Requirements of the
Carl D. Perkins Career and Technical Education Improvement Act of 2006 (P. L. 109-270)

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2008-2012
California State Plan
For
Career Technical Education

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Carl D. Perkins Career and Technical Education Improvement Act of 2006

P. L. 109-270

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PREFACE

This California State Plan for Career Technical Education, approved in March 2008 by both the State Board of Education and the Board of Governors of the California Community Colleges, establishes the vision, goals, and essential elements of a world-class career technical education system for the State of California.

The need for a comprehensive statewide career technical education (CTE) system continues to grow in response to California's changing workforce needs and the globalization of the world's economy. Elementary, middle and high school students must meet high academic standards, young adults are expected to have the essential knowledge and transferable skills to match rapidly shifting workplace requirements, and incumbent and re-entering workers must continuously update proficiencies to secure or retain employment. Given these imperatives, CTE — with its focus on rigorous and engaging curricula, supportive relationships, and demonstrated outcomes — has become critical to the preparation of all students for career and academic success, postsecondary education, and adult roles and responsibilities.

In crafting this plan, California presents a broad and bold vision for CTE, placing the requirements for federal Carl D. Perkins funding within this larger context. The view that education and career development are lifelong, and that CTE can begin as early as elementary school and span high school through postsecondary education and on-the-job training is infused throughout the plan. The notion that strong CTE improves academic learning, and, conversely, that infusing or reinforcing inherent academic content can strengthen CTE, girds the plan as well. Equally important is ensuring that the system is "demand-driven"; that is, continuously responsive to the ever-changing needs of a complex global workplace, as well as to the needs of increasingly diverse learners, and of a democratic society that requires all of its citizens to be critical thinkers and problem solvers. As one stakeholder commented, "nothing short of our democracy is at stake."

The body of this plan is presented in five main chapters, preceded by an introduction. Supportive information and required assurances and certifications are contained in the appendices. The Introduction describes the Perkins and state CTE priorities and the process used in developing the plan. Chapter One provides background information about the state's current CTE structure and enrollment status. Chapter Two is a brief overview of the state's demographic, economic, political, and educational contexts. A solid understanding of these contexts is essential to the development of a CTE plan that affects and is affected by state trends. Chapter Three describes the vision, mission, guiding principles, and goals of an ideal statewide CTE system, as well as the characteristics of an effective, high-quality CTE system. Embedded within the discussion of each of 11 "system elements" are additional details about current structures, practices, and initiatives.

Chapter Four contains the Perkins plan narrative and responses to the Perkins statutory requirements in seven key areas: planning, coordination and collaboration prior to state plan submission; program administration; provision of service to special populations; accountability and evaluation; Tech-Prep programs; financial requirements; and EDGAR certifications and other assurances. Chapter Five provides state policy on state education agency (SEA) and local education agency (LEA) administration and use of the Perkins IV Title I Part C funds.

Developing the new State Plan for CTE has been a massive undertaking. Without the knowledge, skills, vision, and commitment of many hundreds of students, educators, business and industry professionals, and policymakers, it would not have been possible. Thanks to all. Special acknowledgments are extended to some of the most critical and hard-working players. First, thanks go to California Governor Arnold Schwarzenegger, State Superintendent of Instruction Jack O'Connell, Interim Chancellor Diane Woodruff, and the members of the California State Board of Education and the Board of Governors of the California Community Colleges for their unwavering belief in the importance of high-quality CTE and their leadership in bringing it to the fore of statewide discussion. Very special thanks are extended to the 52 members of the CTE plan Resource Group, who brought valuable and essential views on how CTE could be strengthened in partnership with business and industry. Among these, 13 industry representatives shared their invaluable perspectives on the needs of the California workplace. A list of Resource Group members is provided in Appendix D.

Staff from both the California Department of Education (CDE) and the California Community College Chancellor's Office CCCCO) worked collaboratively and diligently, weaving together a plan to prepare students from all walks of life to succeed in K-12 classrooms, postsecondary institutions, and work, and to seek learning as a lifelong endeavor. From the CDE special thanks go to Patrick Ainsworth, Cindy Beck, Charlsey Cartwright, Mary Gallet, Corlene Goi, Jim Greco, Dennis Guido, Paul Gussman, Debra Jones, Lloyd McCabe, John Merris-Coots, David Militzer, Clay Mitchell, Cliff Moss, Lee Murdock, Karen Shores, Hilary Steinmetz, Russ Weikle, and Barbara Weiss. From the CCCCO special thanks go to Robin Harrington, Jose Millan, John Prentiss, Ron Selge, Dean Smith, Catherine Swenson, Chuck Wiseley, and Sharon Wong. In addition, a special thanks to Dennis Petrie, of Workforce Services with the California Employment Development Department, and Jeff Thompson, of Learning Programs and the Early College High School Initiative with the Foundation for California Community Colleges, for facilitating the Resource Group meetings.

Stephen Levy, Director and Senior Economist of the Center for Continuing Study of the California Economy (CCSCE) in Palo Alto provided both data and key insights regarding California's economic future.

WestEd was engaged to facilitate the development and writing of the plan, having completed the preceding Needs Assessment. Svetlana Darche directed both projects. BethAnn Berliner co-facilitated the Resource Group meetings and she and Kathy Reeves Bracco wrote key sections of the Plan. Nara Nayar provided critical input. Melissa Josue and Michal Clingman coordinated logistics for the convenings and edits to the plan. The WestEd Interactive staff created and updated the CTE Plan website used for public comment, and WestEd Communications provided editing, proofing, and graphic design support. Participating in the Needs Assessment were Kerry Sherman-Headington, Amy Schustack, Sean Slade, June Lee-Bayha, Jeff Polik, Jerry Bailey, Laura Kauth and Becca Hirschman. Thanks also to Sri Ananda for her guidance and contributions.

Finally, the biggest thanks are offered to the incredibly dedicated educators who work where the "rubber meets the road" — the CTE professionals who teach, mentor, and support students in classrooms, through career exploration and internships, and in actual job placements and career opportunities, so that today's students become California's world-class workforce of tomorrow.

INTRODUCTION

California is the most populous of the states, and, as the eighth largest economy in an increasingly complex and competitive world, has a unique responsibility — and opportunity — to reshape and revitalize the role of career technical education (CTE) as an engine of education reform and workforce and economic development for the state. Powerful and persistent demographic, economic, and educational trends have created a "perfect storm" for CTE. This, combined with a variety of California's recent strategic workforce development plans and programs, offers both new challenges and possibilities in preparing the state's workforce for the future. The development of this new state plan for CTE is a key part of the state's more wide-ranging effort to create a world-class CTE system that can strengthen the education and workforce preparation available to all Californians.

This plan is intended to serve as a catalyst to further discussion about the content and delivery of CTE and how it fits into the state's broader educational and workforce development contexts. Statewide, CTE is supported through numerous funding streams and implemented through diverse programs. Perkins funding represents only approximately 7 percent of funds invested in California CTE programs. Despite this relatively small percentage, Perkins funds serve as an important lever for improving secondary and postsecondary CTE to better engage students in learning and to meet critical workforce demands. It is anticipated that the development of this plan will not only meet the requirements of Perkins IV, but lay the foundation for a broader master plan that will weave these funding streams and programs together into a fully articulated and integrated CTE system.

This introduction discusses the new priorities of the state plan and the inclusive stakeholder process that contributed to its development.

Expanded Priorities

As in past years, the Perkins Act centers on the improvement of secondary and postsecondary courses and programs that are intended to build the knowledge, skills, attitudes, and experiences needed to enter and succeed in the world of work. More than in previous versions, the current Perkins Act moves the CTE system in some new directions, as specified in its expanded priorities. They are:[1]

- Developing challenging academic and technical standards and assisting students in meeting such standards, including preparation for high skill, high wage, or high demand occupations in current or emerging professions.

1 The Association of Career and Technical Education. Retrieved July 1, 2007, from http://acteonline.org

- Promoting the development of services and activities that integrate rigorous, challenging academic and career technical instruction, and link secondary education and postsecondary education for participating career and technical students.
- Increasing state and local flexibility in providing services and activities designed to develop, implement, and improve CTE, including Tech Prep education.
- Conducting and disseminating national research and disseminating information on best practices that improve CTE programs, services, and activities.
- Providing technical assistance that promotes leadership, initial preparation, and professional development at the state and local levels; and that improves the quality of CTE teachers, faculty, administrators, and counselors.
- Supporting partnerships among secondary schools, postsecondary institutions, baccalaureate degree granting institutions, area career and technical education schools, local workforce investment boards, business and industry, and intermediaries.
- Providing individuals with opportunities throughout their lifetimes to develop, in conjunction with other education and training programs, the knowledge and skills needed to keep the United States competitive.

Given the scope and breadth of this plan, and its responsiveness to the California context, the following additional state priorities set this plan apart from previous submissions:

- Ensuring that CTE is woven into the fabric of education in California, preparing all students for their future endeavors, rather than being seen as a separate system of education.
- Building a demand-driven CTE system by responding to real workforce development needs and state, regional, and local labor market realities and priorities, through strengthened curricula, professional development, data collection and use, and direct linkages with business and industry.
- Ensuring that all students have access to CTE courses, pathways and programs of interest; highly skilled instructors; and facilities and technologies that make all CTE options available regardless of location and enrollment limits.
- Realizing the concept of lifelong learning, spanning from early childhood through adulthood's many transitions, in ways that promote career awareness and management as appropriate throughout the continuum.
- Leveraging the current momentum of high school reform, with its renewed focus on rigor, relevance, relationships, and results, to promote CTE as a means to engage students, instill a passion for learning, and improve student outcomes.

- Viewing CTE systemically by taking a broad perspective in planning for how CTE from kindergarten through lifelong learning can contribute to California's economic future, rather than focusing on discrete secondary or postsecondary programs or specific funding streams.

- Promoting evidence-based continuous improvement of CTE services and impact through better alignment of standards, curricula, assessments, and professional development, and support for schools and colleges to achieve all of the state-established core indicator levels of performance for academic and technical skill attainment.

The Process for Developing the State Plan

Developing a CTE plan for a state as vast and diverse as California requires a broad range of expertise and knowledge, as well as access to data from a number of sources. Planning began even before the reauthorization of the Carl D. Perkins Career and Technical Education Improvement Act of 2006, when the California Department of Education (CDE) and the California Community College Chancellor's Office (CCCCO) jointly commissioned WestEd, a nonprofit educational research and development agency, to conduct a statewide needs assessment of California's CTE system. This 2006 study, which brought together current data from multiple published sources, surveys of CTE practitioners, and interviews with CTE stakeholders, including industry representatives and students, served as the point of departure for the next stage of formal input, which began in January 2007 with the creation of a CTE Resource Group.

California's CTE Resource Group, a broad-based group of representative stakeholders identified by CDE and CCCCO, provided structured input on the development of the state plan and created a shared and comprehensive vision of a statewide CTE system.[2] CDE and CCCCO commissioned a number of working papers to provide background for the Resource Group. Research-based information about the state's economy, workforce needs, CTE structure and status, and the requirements of the new Perkins Act laid the groundwork for this stage of the input process, which consisted of three two-day meetings held February 5-6, 2007, March 28-29, 2007, and May 30-31, 2007. The first meeting primarily focused on drafting a shared vision for the state's CTE system and developing an agreed upon mission statement and guiding principles for implementing CTE. At the second meeting, members of the Resource Group developed CTE system goals, and focused on strategies to improve equity and access, develop demand-driven programs, and strengthen CTE in the following eight areas: high-quality instructional programs, industry partnerships, career guidance, system alignment, student support services, faculty supply and quality, assessment and evaluation issues, and services to

2 A list of members of the Resource Group is included in Appendix D.

incumbent workers and lifelong learning. In the final meeting, the Resource Group addressed alignment and evaluation and accountability in greater depth and concluded with a discussion on the promotion of CTE to key target audiences.

Following the Resource Group meetings, members received summaries of their work and were given opportunities to make revisions. Recommendations from the Resource Group were conveyed to the Joint Advisory Committee for Career Technical Education (JACCTE) for approval. The JACCTE, comprising equal numbers of representatives of the State Board of Education and the Community College Board of Governors,[3] serves as the joint policy body that makes recommendations to the two boards regarding all aspects of coordinated delivery of CTE in the state. Approved JACCTE recommendations have been incorporated into the plan.

Additionally, public input to the plan was elicited through four on-site public hearings held on September 7, 14, 17, and 24, 2007, which were also available via Webcast, allowing for participation of stakeholders from their personal computers. The public was notified through established CDE and CCCCO networks and through more than 90 professional associations and CTE-related organizations comprising CTE and non-CTE educators, workforce and economic development professionals, industry representatives, parents and students. In August 2007, a draft of the state plan was posted on www.wested.org/cteplan for public review.

A summary of the comments and recommendations from these hearings is included in Appendix C. CDE and CCCCO staff considered all recommendations; the recommendations were then either integrated into drafts of the plan for consideration by the JACCTE or not included due to incompatibility with state goals or Perkins IV requirements.

Chapter One of the plan, which follows, describes California's current CTE delivery system and enrollment status. This chapter, together with Chapter Two, which discusses the demographic, economic, educational, and policy context for CTE in California, provides the backdrop for the vision, mission, goals, and strategies for strengthening the CTE system proposed in Chapter Three.

3 A list of members of the JACCTE is included in Appendix D.

CHAPTER ONE
CAREER TECHNICAL EDUCATION IN CALIFORNIA

California's public education system comprises K–12 schools, adult schools, community colleges, state universities, and the University of California. It is regulated by a complex Education Code and finance system that are largely controlled by the legislature and governor.

The state's massive and geographically dispersed K–12 school system delivers public education to more than 6.3 million students in more than 1,000 districts and 9,600 schools. Elementary and secondary schools are responsible for preparing students with both the academic knowledge and skills needed for further education, and the technical knowledge and skills needed for entry to the world of work. The preparation of "all students with the knowledge and skills to excel in college and careers"[4] is central to the system's stated mission and vision.

Career technical education is a primary mission of California's community colleges as well. As the world's largest public higher education system, serving 2.5 million students at 109 campuses and 64 educational centers, its stated mission includes fostering "lifelong learning for all students while simultaneously advancing the state's interests in a skilled workforce and an educated citizenry."[5] Together, the K–12, adult school, and community college systems, along with public and private sector workforce development programs, the California university system, and business and industry, make up the core of California's vast CTE infrastructure.

California's CTE infrastructure, from the earliest education experiences until students exit the K–12, adult school, or community college systems, is supported with funds from a broad range of resources. In addition to apportionment funds, which make up the majority of the funding, state-funded programs that support crucial aspects of CTE include: CalWORKS, Workability, California Partnership Academies, Specialized Secondary Programs, Agricultural Incentive Grants, grants for Career Technical Student Organizations (AB 8), the Governor's CTE Initiative (enacted as SB 70) entitled the Economic and Career Technical Education Reform Initiative, Proposition 1D for facilities, and the Supplemental School Counseling Program. Key federal resources include the Perkins Act, Workforce Investment Act (WIA), and the Smaller Learning Communities Program.

This chapter presents a broad overview of the current structure and enrollment status of CTE in California as a backdrop to the rest of the plan. A clear picture of the current

4 California Department of Education. Retrieved July 1, 2007, from http://www.cde.ca.gov

5 California Community Colleges Chancellor's Office. Retrieved July 1, 2007, from http://www.cccco.edu

system is essential in understanding the opportunities identified and system development strategies proposed in subsequent chapters. More detailed descriptions of some of the program activities and initiatives are embedded within the discussion of the system elements in Chapter Three.

The K–12 CTE Delivery Structure

CTE varies in focus, content, delivery, and intensity, beginning as early as elementary school and progressing throughout the middle grades, high school, and higher education. Elementary and middle grade programs primarily focus on career awareness and exploration, with the goal of awakening children's imaginations about future possibilities. These programs consist of projects, speakers, field trips, and later, job shadowing; they help students learn through experience, expose students to career options, and reinforce the development of knowledge and skills associated with success in future careers — and in life.

Once in high school, student opportunities for career preparation become more systematic. In the lower high school grades, CTE generally focuses on career orientation, which often includes beginning technical skill development, interdisciplinary activities involving essential workplace skills such as the SCANS skills,[6] and introductory work-based experiences such as job shadowing and service learning. In the upper grades, students can enroll in specific career preparation programs offered by their high school or by local Regional Occupational Centers and Programs (ROCPs) where they learn from educators with experience in business and industry. They can also then participate in internships and workplace experiences. Some high schools have committed to integrating CTE and academic coursework by restructuring their schools as career-focused magnets or charters, or by creating academies or smaller learning communities within comprehensive high schools. The K–12 system also supports apprenticeship opportunities through ROCPs and district adult school programs, providing on-the-job training in hundreds of occupations.

The career preparation process is supported by a counseling and career guidance system, which offers education and career planning, as well as social and emotional support.

Students in continuation, court, and community schools, and especially those incarcerated by the California Division of Juvenile Justice, are often disengaged from school and at high risk for not receiving preparation for postsecondary education and employment,

6 In 1990, the U.S. Department of Labor, Secretary's Commission on Achieving Necessary Skills (SCANS) compiled a list of three sets of "Foundation Skills" (basic skills, thinking skills, and personal qualities) and five sets of "Competencies" (resources, interpersonal, information, systems, and technology); see Appendix A for the complete list.

and therefore have the greatest need for CTE. However, the vast majority of schools in the state's large K–12 alternative education system do not have viable CTE programs. The needs of these students far surpass the resources available to serve them, and student mobility precludes delivery of CTE course sequences and sustained technical training. Nonetheless, some county offices of education and districts provide career exploration and internship opportunities to these students. In addition, the state's special schools for the deaf and blind and the Division of Juvenile Justice participate in the 1 percent of Perkins funds allowed for state institutions, including Corrections.

KEY SECONDARY AND CDE-SPONSORED ADULT PROGRAMS

District-Supported High School Programs. California's 1,100 comprehensive high schools offer nearly 34,000 CTE classes,[7] with the greatest concentration of enrollments in industrial and technology education; home economics; arts, media, and entertainment; and business education. High school CTE programs offer exposure to careers and essential workplace skills, technical skill training, and reinforcement of academic skills, and prepare students for both postsecondary education and careers. High school courses in the ninth and tenth grades serve as prerequisites to those offered in the higher grades.

Many high school CTE programs have integrated core academic content into their CTE classes. Similarly, many academic courses provide career-related context for their material. Two programs administered by the CDE foster this type of integration: California Partnership Academies, which require that programs have career themes, and Specialized Secondary Programs, which often have career themes but are not required to do so. Currently, there are 290 state-funded California Partnership Academies and 21 career-themed Specialized Secondary Programs. In recent years, school reform efforts such as the creation of federally funded "smaller learning communities" have further facilitated the development of integrated programs. In addition, many high schools develop academy and other integrated programs with internal resources, often in partnership with industry or other organizations.

In addition, high schools offer work-based learning through Work Experience Education (WEE), administered by school districts or other local education agencies (LEAs). WEE programs combine an on-the-job component with related classroom instruction designed to maximize the value of on-the-job experiences. WEE is intended to help students explore careers, develop essential workplace skills such as the SCANS skills, and prepare for full-time employment; it is important in exposing students to both the requirements of a specific occupation and to "all aspects of an industry" — this broad exposure being

7 These consist of 24,370 classes labeled as "vocational" in CBEDS and an additional 9,577 classes in Arts, Media, and Entertainment, classified as "academic" in CBEDS (2005–06 school year).

a fundamental tenet of career exploration as well as a requirement of the Perkins legislation.[8]

Regional Occupational Centers and Programs (ROCPs). ROCPs have been a major component of California's workforce preparation system for 40 years. Initiated in 1967 to extend and expand high school and adult CTE programs, ROCPs were established as regional programs or centers to allow students from multiple schools or districts to attend career technical training programs regardless of the geographic location of their residence in a county or region. Regionalization provides for efficient use of limited resources, while allowing student access to a broad array of training opportunities that often require expensive technical equipment and specially trained and experienced instructors. ROCPs fall under one of three distinct organizational structures: school districts participating in an ROCP operated by a county office of education, school districts participating under a joint powers agreement, or a single school district.

Like high school programs, the purpose of ROCP is to prepare students to both pursue advanced education and to enter the workforce with skills and competencies necessary to succeed. In addition, ROCPs provide opportunities for adults to upgrade existing skills and knowledge. The programs are limited to those occupational areas with employment opportunities, postsecondary articulation, and sufficient student interest. ROCP courses are open to all secondary and adult students with priority enrollment given to those ages 16–18 or in grades eleven and twelve.[9]

ROCP programs offer both paid and non-paid workplace experiences. ROCP instructors facilitate student placements in these workplace experiences and monitor the experiences through site visits in the field. Coordination and supervision of placements are integral aspects of an ROCP instructor's responsibilities, with paid time allotted for these tasks.

Statewide, there are now 74 ROCPs offering approximately 100 career pathways and programs, as well as career exploration, career counseling and guidance, and placement assistance. ROCPs work with industry or pathway-specific advisory groups to update curricula annually to address labor market needs. Courses with the highest enrollments are business/information technology and industrial technology.

Adult Schools. In an era of rapid technological, economic, and social change, the mission of adult education is to provide high-quality lifelong learning opportunities and services

8 Work Experience Education is classified in the Education Code as General, Exploratory, or Vocational. General work experience exposes students to the world of work; exploratory work experience allows students to experience a variety of careers; and vocational work experience allows students to explore a career interest in greater depth.

9 AB 2448, as described in the section, has modified the enrollment criteria.

to adults. Adult education schools are administered by school districts and funded through "apportionment funds" (average daily attendance) supplemented by federal Workforce Investment Act funds.

Adult schools serve diverse student populations, including:

- Adult immigrants
- Adults with disabilities
- Disadvantaged and homeless adults
- Incarcerated adults
- Older adults
- Single parents and "displaced homemakers" (unemployed or underemployed individuals who have been providing unpaid services to family members)

In 2005–06, classes were provided through 361 school districts with classrooms located in more than 1,000 sites, including school classrooms, community centers, storefronts, churches, businesses, jails, and migrant camps.

Adult schools provide short-term CTE courses in a variety of occupational areas, including many allied health, industrial technology, service, and business technology career fields. In particular, adult school health career training programs have strong collaborations with local medical facilities and health providers to address local employer demands. As mentioned below, adult schools also serve as the LEAs for apprenticeship programs. In addition, many adult education CTE programs include internships, particularly in medical/health training programs. These experiences are provided in partnership with local health/medical employers and are integral to the CTE students' certificated and/or licensed training programs.

In addition, adult schools provide adult basic education (ABE) (e.g., reading, writing, computation, problem solving, and interpersonal skills, enabling adults to read, write, and speak in English, acquire a high school diploma, and obtain employment); English as a second language (ESL); ESL-citizenship; adult secondary education leading to a high school diploma; General Educational Development (GED) qualifying students for a California High School Equivalency Certificate; classes for adults with disabilities; health and safety; home economics; parent education; and classes for older adults. School districts rely heavily on adult schools to support high school students' pursuit of a high school diploma and as a resource for those students who don't graduate with their class.

Adult education is also implemented through the California Community Colleges, designated as "noncredit instruction."

Apprenticeship. Apprenticeship is an on-the-job training and education delivery system that prepares individuals for employment opportunities in a wide variety of craft and trade professions. There are over 800 "apprenticeable" occupations in California. CDE supports apprenticeship by providing "related and supplementary instruction" (RSI) in 34 local adult education and ROCP agencies for over 200 apprenticeship programs, involving approximately 31,000 registered apprentices.

Programs in California are developed and conducted by program sponsors including individual employers, employer associations, or jointly sponsored labor/management associations. Local ROCP and adult schools individually contract with the program sponsors.

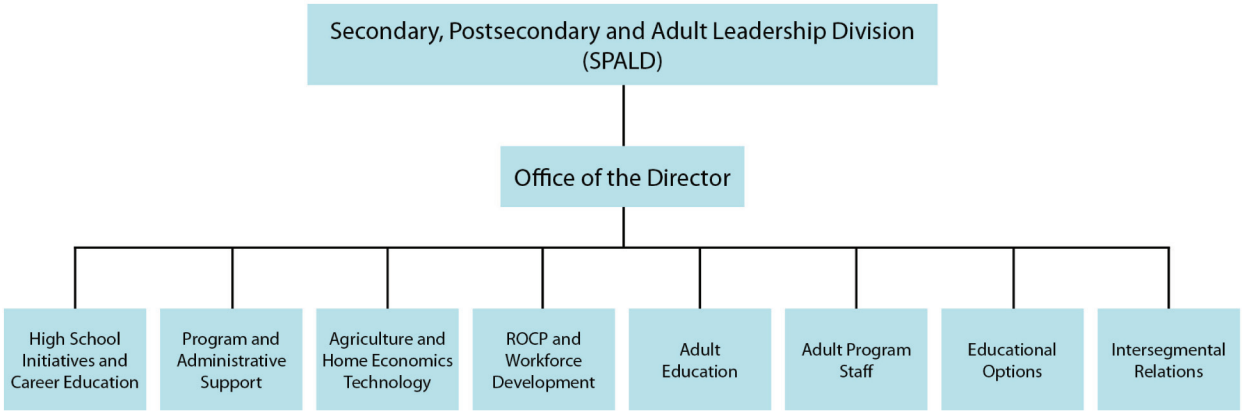
The Division of Apprenticeship Standards within the California Department of Industrial Relations administers California apprenticeship law and enforces apprenticeship standards for wages, hours, working conditions, and the specific skills required for state "journeyperson" certification.

Apprenticeship instruction is also offered through the California Community Colleges.

STATE-LEVEL ADMINISTRATIVE RESPONSIBILITY

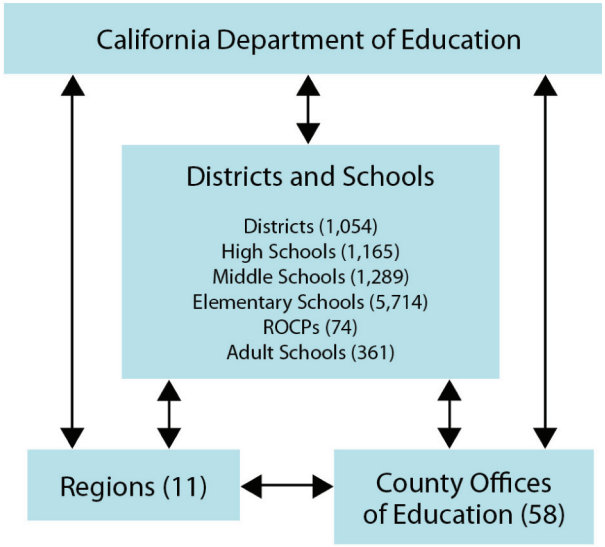
Within CDE, the major responsibility for CTE policy and program oversight resides in the Secondary, Postsecondary, and Adult Leadership Division (SPALD). Additionally, SPALD provides support and direction to LEAs regarding high school initiatives, educational options, ROCPs, adult education, postsecondary preparation, and workforce development. An organizational chart of SPALD and its eight offices is presented in Figure 1.

Figure 1. Organizational chart of CDE's secondary, postsecondary, and adult leadership division, 2007



County offices of education serve as the state's intermediary organizations, providing useful regionalized services and maintaining linkages between the state and local K–12 school districts. Given California's immense size, its 58 county offices are organized into 11 geographic regions to facilitate collaboration, communication, and administration of CTE funds across county and district boundaries. Figure 2 describes the flow of information among the various entities.

Figure 2. The flow of information among the local K–12 school districts and various state entities[10]



10 The number of high schools listed includes only comprehensive high schools; in addition, the state has over 1,300 alternative, continuation court, and special schools, including nine schools supported by the Department of Juvenile Justice, serving a total of approximately 190,000 students.

ORGANIZATION OF CAREER AREAS FOR CURRICULUM AND INSTRUCTION, PROFESSIONAL DEVELOPMENT, TECHNICAL ASSISTANCE, AND INDUSTRY INPUT

There is widespread agreement among business and industry, labor, educators, and policymakers that the CTE system must focus on the preparation of students for high skill, high wage, or high demand occupations. After considerable research, it was determined that CTE programs in California should be clustered around 15 industry sectors, reflecting the intersection of California's economic needs and the educational needs of its K–12, ROCP, and adult school students. In addition, within each sector, two to seven career pathways have been identified. The sectors are as follows:

1. Agriculture and Natural Resources
2. Arts, Media, and Entertainment
3. Building Trades and Construction
4. Education, Child Development, and Family Services
5. Energy and Utilities
6. Engineering and Design
7. Fashion and Interior Design
8. Finance and Business
9. Health Science and Medical Technology
10. Hospitality, Tourism, and Recreation
11. Information Technology
12. Manufacturing and Product Development
13. Marketing, Sales, and Service
14. Public Services
15. Transportation

For each sector, "model curriculum standards" have been developed in partnership with business and labor leaders, educators, and many other stakeholders. The California State Board of Education (SBE) adopted the California CTE Model Curriculum Standards, Grades Seven Through Twelve, as state policy in 2005. In January 2007, the SBE adopted the CTE Framework for California Public Schools, Grades Seven Through Twelve, as a blueprint for implementing the standards. The standards for each sector are divided into two

components: foundation standards and pathway standards. Foundation standards define the base knowledge that students must acquire to be successful across the entire industry sector; pathway standards describe the technical knowledge and skills students must acquire to enter postsecondary education or employment in that specific pathway.

These 15 industry sectors are clustered into six broad career areas that have traditionally served as an organizing structure for providing technical assistance, supporting CTE student leadership organizations, and facilitating professional development:

1. Agriculture Education
2. Business and Marketing Education
3. Health and Human Services Education
4. Home Economics Careers and Technology Education
5. Industrial and Technology Education
6. Arts, Media, and Entertainment Education

The matrix below reflects the six broad areas of CTE in relation to the 15 industry sectors.

Agriculture Education	Business & Marketing Education	Health & Human Services Education
Agriculture & Natural Resources	Finance & Business	Health Science, & Medical Technology
	Information Technology	Public Services
	Marketing, Sales, & Service	
Home Economics Careers & Technology Education	**Industrial & Technology Education**	**Arts, Media, & Entertainment Education**
Fashion & Interior Design	Building Trades & Construction	Arts, Media, & Entertainment
Hospitality, Tourism, & Recreation	Energy & Utilities	
Education, Child Development, & Family Services	Engineering & Design	
	Manufacturing & Product Development	
	Transportation	

Source: The California CTE Model Curriculum Standards.

In addition to facilitating high-quality, demand-driven CTE curricula, the 15 sectors will provide the framework for organizing technical assistance, professional development, industry engagement, and advisory committees in the years to come.

The Community College CTE Delivery Structure

In the community college system, CTE is responsive to the needs of new, incumbent, and transitional workers. It provides "open access" to career preparation through noncredit programs, for-credit certificate and degree programs leading directly to employment, "transfer" programs that prepare students for transition to four-year institutions, and programs to enhance skills of incumbent workers and for retraining of incumbent and re-entering workers. Across the system, it offers courses in more than 270 occupational program areas as well as work-based learning opportunities such as apprenticeships and "cooperative work experience education," which integrates academic and workplace competencies with supervised work experience.

Given the diversity of the California economy; the regionalization of industries such as agriculture, media, computer technology, and natural resources; and the state's geographic scope, the 109 community colleges have been divided into ten regions and organized into seven regional consortia to provide support for the coordination and improvement of CTE programs:

- North/Far North
- Bay/Interior Bay
- Central
- South Central
- Los Angeles/Orange County
- Desert
- San Diego/Imperial

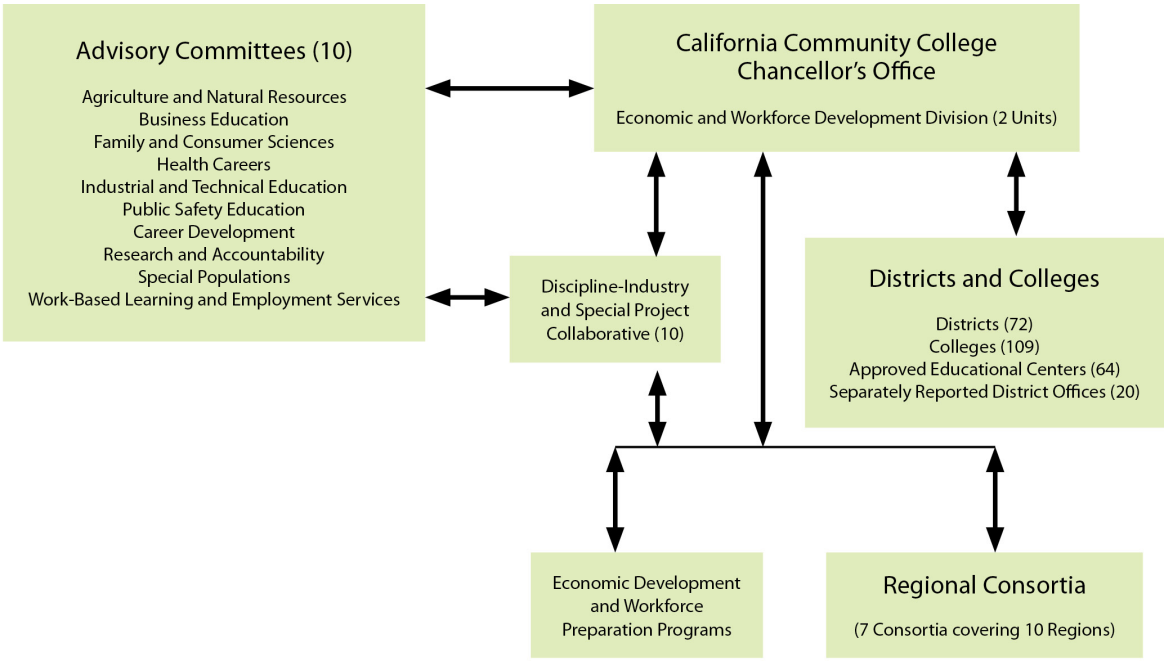
The regional consortia play an important role in identifying and meeting regional educational needs, providing training to local professionals and field-based information to state leaders, disseminating effective practices, recommending funding priorities, and supporting the achievement of statewide leadership goals and initiatives. They also play an important role in program approval, checking that labor demands and training facilities are sufficient to justify any new program.

To ensure a process for direct linkages between faculty and administrators with representatives from business, industry, and labor on a statewide basis, the CCCCO has established 10 advisory committees, comprising roughly 15 nominated stakeholders and practitioners each, to focus on either discipline-specific or cross-disciplinary issues. They are charged with advising the Chancellor's Office about the relevance of the curricula and responsiveness to industry standards, funding priorities, emerging industries and occupations, partnership development, and identification of effective practices and program development needs. The committees are:

- Agriculture and Natural Resources
- Business Education
- Family and Consumer Sciences
- Health Careers
- Industrial and Technical Education
- Public Safety Education
- Career Development
- Research and Accountability
- Special Populations
- Work-Based Learning and Employment Services

Recommendations from the advisory committees to the Chancellor's Office have evolved over time into ongoing statewide discipline-industry and special project "collaboratives" that mirror the advisory committee structure. The collaboratives are the workhorses of the advisory committees and the Chancellor's Office. The purpose of these collaboratives is to improve CTE programs and instruction in each of the 10 areas. Activities focus on developing models of effective practice for replication at the local level. Models are disseminated through both the regional consortia and the Economic and Workforce Development Programs (EWDP), as shown in Figure 3, which describes how information flows through the community college system.

Figure 3. The flow of information through the California community college system, 2007



The Economic and Workforce Development Programs (EWDPs) ensure that CTE programs are responsive to the workforce needs of business and industry. These programs aim to advance the state's economic growth and global competitiveness through quality education and services focused on continuous workforce development, technology deployment, entrepreneurship, and documentation of workforce needs and trends. The EWDPs provide the logistical, technical, and marketing infrastructure for the community college system's economic development efforts. They operate a network of 115 regional delivery centers, which work with CTE programs, and address industry-specific and other statewide strategic priorities, organized into 10 initiatives. These initiatives encompass such industries as biotechnologies, international trade, environmental health and safety, and homeland security. Other initiatives include business incubation, technology transfer, and workforce training.

KEY COMMUNITY COLLEGE PROGRAMS

CTE in the community colleges is offered through several types of programs. All of these types of programs try to offer easy access to education at convenient locations and times including evenings and weekends. Colleges maintain market-responsive CTE programs through the statewide and regional advisory and collaborative structures previously mentioned as well as through local college program-level business and industry program advisory committees.

Community College Credit-Bearing Occupational Programs. The community colleges offer college-level courses in more than 270 occupational program areas, ranging from accounting to World Wide Web administration, many of which lead to certificates or licenses based on industry standards. These programs range in length from a few courses to two full years of coursework. More than 5,744 credit CTE programs of 18 or more units (e.g., at least six three-unit courses) approved by the Chancellor's Office, along with thousands of short-term programs approved at the college level, are currently offered in the community colleges.

Many CTE programs are designed to facilitate a "career ladder" approach whereby multiple employment exit points are designed into the program, with certificates provided at each stage to serve as indicators of skill levels for employers and as milestones for students. These multiple exit points allow students to gain job skills and earn certificates for entry into, or advancement in, employment. Students can subsequently complete additional coursework to earn additional certificates that provide for further employment mobility by building on previous certificate coursework within the career ladder. That same coursework can then be applied in most cases to the requirements for the two-year degree and often articulates with coursework at four-year universities as well. Most of the programs are designed to lead directly to employment, but many also prepare students for further education in the university system.

Programs on most campuses are overseen by Vocational Deans or Deans of Vocational Education and Economic Development. All new CTE programs must be approved through the district curriculum committee process and demonstrate a sufficient labor market demand for graduates. Credit programs that require 12 or more credits and appear on students' transcripts must also be approved by the Chancellor's Office. In new or emerging areas, programs are also sent to the California Postsecondary Education Commission for review.

Beyond meeting college course and program standards, courses and programs must meet standards set forth in the *Program and Course Approval Handbook* published by the Chancellor's Office, Title 5 of the California Code of Regulations, and the California Education Code. Additionally, the regular and systematic review of instructional programs is mandated not only by Title 5 regulations and Education Code statutes, but also by the standards of the Accrediting Commission for Community and Junior Colleges of the Western Association of Schools and Colleges.

At a minimum, under Title 5 requirements, all CTE programs must demonstrate to the district governing board every two years that the program:

» Meets a documented labor market demand

- Does not represent unnecessary duplication of other manpower training programs in the area
- Is of demonstrated effectiveness as measured by the employment and completion success of its students

In addition, all of California's community colleges offer Cooperative Work Experience Education (Co-op), a form of work-based learning that integrates classroom knowledge with productive work experience in a business or industry setting, guided by a learning plan. Co-op programs are intended to help students clarify career goals; reinforce academic skills, workplace competencies, or occupation-specific technical skills; and assist in transitions to employment. Co-op courses are not restricted to students in occupational programs, however, and may be offered in association with nonoccupational academic programs or to students at large as a means to integrate classroom study with planned and supervised experiences in the workplace.

Community College Noncredit Instruction. The equivalent of adult schools in the community college is "noncredit instruction." Noncredit instructional programs at the community colleges provide high-quality lifelong learning opportunities and services to adults through curriculum and educational services in nine areas:

1. Parenting, including parent cooperative preschools, classes in child growth and development, and parent-child relationships
2. Elementary and secondary basic skills and other courses and classes such as remedial academic courses or classes in reading, mathematics, and language arts
3. English as a second language
4. Classes and courses for immigrants eligible for educational services in citizenship, English as a second language, and workforce preparation classes in the basic skills of speaking, listening, reading, writing, mathematics, decision-making and problem-solving skills, and other classes required for preparation to participate in job-specific technical training
5. Education programs for persons with substantial disabilities
6. Short-term vocational programs with high employment potential
7. Education programs for older adults
8. Education programs focusing on home economics
9. Health and safety education

Like adult schools administered by the CDE, noncredit instruction is offered in various locations. Noncredit CTE programs are often the first step on a career ladder for students with low levels of foundational skills and are usually aligned with and facilitate transition to credit programs. Funding for noncredit is provided on a positive attendance basis (hours of actual attendance). Noncredit curriculum approval procedures are much like credit CTE program approval processes, except that all noncredit courses and programs, regardless of length, are approved by the Chancellor's Office.

Community College-Based Apprenticeship. To provide apprenticeship training for their employees, many employers partner with the California Community Colleges as well as the CDE. The community colleges have more than 160 apprenticeship programs comprising 66 trades/crafts titles located on 39 campuses. Apprentices receive on-the-job training via their employers, and in the evening or on weekends receive employer-selected "related and supplemental instruction" (RSI). All RSI apprenticeship programs offered by the community colleges must be approved by the Chancellor of the California Community Colleges as well as by the Division of Apprenticeship Standards, within the California Department of Industrial Relations. Many of the RSI apprenticeship programs, which are typically three to five years in length, allow apprentices to earn a certificate or associate degree.

Tech Prep Programs. Tech Prep programs are designed to link high school and two-year college programs in specific technical fields and occupational areas. They are defined as planned sequences of study in technical fields beginning as early as grade nine and linked to two years of postsecondary occupational education or apprenticeship programs of at least two years following secondary instruction. The sequence culminates in an associate degree or a certificate. The program is also designed "to strengthen links between secondary and postsecondary schools."[11]

The Carl D. Perkins Act requires Tech Prep programs to include seven elements:[12]

1. An articulation agreement between secondary and postsecondary consortium participants
2. A 2+2, 3+2, or a 4+2 design with a common core of proficiency in math, science, communication, and technology
3. A specifically developed Tech Prep curriculum

11 Tech-Prep Education. (2006, Oct. 13). U.S. Department of Education. Retrieved August 1, 2007, from http://www.ed.gov/programs/techprep/index.html

12 Ibid.

4. Joint in-service training of secondary and postsecondary teachers to implement the Tech Prep curriculum effectively

5. Training of counselors to recruit students and to ensure program completion and appropriate employment

6. Equal access for special populations to the full range of Tech Prep programs

7. Preparatory services such as recruitment, career and personal counseling, and occupational assessment

In addition, states are required to give priority consideration to Tech Prep programs that do the following:

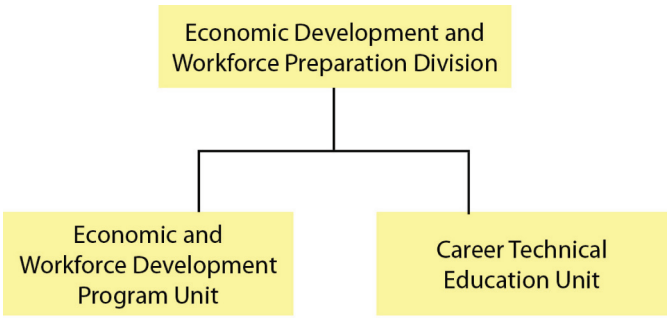
- Offer effective employment placement.
- Transfer to four-year baccalaureate programs.
- Are developed in consultation with business, industry, labor unions, and institutions of higher education that award baccalaureate degrees.
- Address dropout prevention and re-entry and the needs of special populations.

Contract Education. Beyond providing ongoing classes on their campuses, community colleges also offer "contract education" courses, which are developed specifically to serve the needs of a particular business or industry. These programs are often managed by Deans of Contract Education or Deans of Contract Education and Economic Development, depending on the campus. Overall, the community colleges have served more than 26,000 businesses through contract education services.

ADMINISTRATIVE RESPONSIBILITY

CTE in the community colleges is administered by the Economic Development and Workforce Preparation Division through the Economic and Workforce Development (EWD) program unit and Career Technical Education unit. Staff from both programs work with the regional consortia, the advisory committees, the Academic Senate of the community colleges, and directly with districts and colleges.

Figure 4. California Community College Chancellor's Office Economic Development and Workforce Preparation Division



Workforce Development, Business, and Community Partners

Beyond the secondary and postsecondary education systems, CTE is delivered through other public sector and community-based programs, and is supported by business and industry partnerships.

Within the public sector, a critically important partner in the workforce development system is the California Workforce Investment Board (WIB) and by extension, California's 50 local Workforce Investment Boards. The California WIB is mandated by the federal Workforce Investment Act (WIA); it determines strategic priorities, identifies high-growth industries, develops a workforce investment budget, and establishes local workforce investment areas across the state.[13]

Local workforce investment boards are made up of at least 50 percent business and industry representatives. In partnership with local elected officials, they plan and oversee the local workforce system. Local boards also designate "One Stop" operators that oversee and manage One Stop Career Centers to provide both "drop-in" and "case-managed" career services to the public, with a focus on individuals facing barriers to employment. In addition, the boards identify providers of training services, monitor system performance against established performance measures, negotiate local performance measures with the state board and the Governor, and review labor market information to guide their efforts. Further, local boards have Youth Councils that develop parts of the local plans relating to youth, recommend providers of youth services, and coordinate local youth programs and initiatives.[14]

13 The Public Workforce System. (2007, July 9). U.S. Department of Labor: Employment and Training Administration. Retrieved August 1, 2007, from http://www.doleta.gov/business/pws.cfm

14 Alexis M. Herman, et al., Workforce Investment Act of 1998. (1998, Aug. 7). U.S. Department of Labor: Employment and Training Administration. Retrieved August 1, 2007, from http://63.88.32.17/usworkforce/wia/Runningtext2.htm.

Postsecondary institutions with CTE programs assisted under Perkins IV are mandatory partners in the One Stop Career Center delivery system established by WIA. As partners, these institutions, primarily community colleges, both participate in the oversight of the One Stop Career Centers and facilitate access to their CTE services for One Stop clients.

To better connect the education and workforce system, in 2007 the Governor approved Senate Bill 293 (SB 293). SB 293 focuses on:

- Transforming current job training, job placement, and vocational education programs into an integrated, accessible, and accountable workforce investment system.
- Providing lifelong learning for all Californians, promoting self-sufficiency, linking education and training to economic development, and preparing California to successfully compete in the global economy.
- Ensuring that all programs are accessible to all Californians, including persons with economic, physical, or other barriers to employment.

SB 293 also requires coordinated state planning for workforce development, as described further in later chapters of this plan.

Community partners play important roles in California's K–12, adult school, and community college systems as well. In addition to serving on local workforce investment boards and Youth Councils, local nonprofit organizations, professional and trade associations, and youth development organizations such as the Boys' and Girls' Clubs, Junior Achievement, and 4-H often provide myriad career-related educational services.

Finally, as described in greater detail in Chapter Three, businesses not only participate on local workforce investment boards and CTE advisory committees and planning councils, they also provide direct services to students and faculty by offering career exploration opportunities, work-based learning placements, and teacher externships.

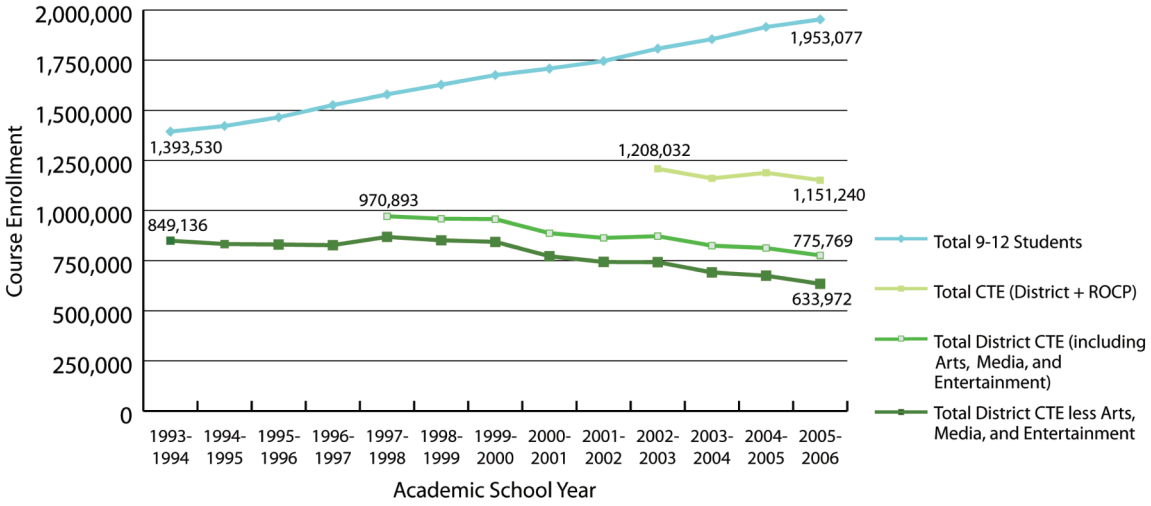
Secondary CTE Enrollment

As shown in Figure 5, secondary district-based CTE courses accounted for 775,769[15] enrollments, or 39.7 percent of the state's 1,953,077 enrollments in grades nine through

15 Includes both CTE in "traditional" career areas labeled "CTE" or, previously "vocational" in CBEDS, totaling 633,972, plus Arts, Media, and Entertainment CTE courses, totaling 141,797 which are currently classified as "academic" but that meet the criteria for CTE: curriculum is explicitly designed to prepare students for employment, whether after postsecondary education or training or directly after high school; over 50 percent of the curriculum content is career knowledge and skills; and curriculum is directly informed and validated by industry education or training or directly after high school; more than 50 percent of the curriculum content is career knowledge and skills; and curriculum is directly informed and validated by industry.

twelve in 2005–2006. Adding in secondary ROCPs for the years when data are available (2002–2006), the number of CTE enrollments reaches more than 1 million.

Figure 5. CTE course enrollment compared to total high school enrollment, 1993–2005[16]



Although these data indicate that many high school students enroll in CTE, there has been a steady decrease in high school-based CTE enrollments between 1993 and 2006. There has also been a decrease in the unduplicated count of students taking at least one CTE class; in 1993, based on the CBEDS vocational course counts, 596,923 students took at least one high school-based CTE course; in 2005, this number dropped to 531,331 students, or 27 percent of the total high school population. At the same time, overall secondary enrollments have been increasing. As a percentage of overall secondary enrollments, CTE enrollments dropped from 61 percent to 31 percent — a difference of 30 percent, as shown in Figure 6. The percentage of students who took at least one CTE class dropped from 43 percent to 27 percent, a difference of 16 percent. This suggests that a decrease in the number of CTE courses taken by each student, in addition to the number of students enrolling in CTE, contributes to the decrease in CTE enrollments.

As described, ROCP enrollments bring the percentage of CTE enrollments to 59 percent in 2005–06, indicating that some of the decrease in high school-based CTE is due to students' participation in ROCPs. Several additional explanations have been provided for the decreasing trend in high school-based programs. These include students' lack of information about course options and program content; competing course requirements,

16 CBEDS 2005–06; ROCP 2002–05.

including non-CTE "a-g" college preparation courses[17] and courses to assist students in passing the California High School Exit Exam; and an overall focus on high-stakes testing and remediation that impacts the master schedules of schools.

Figure 6. CTE enrollment as a percentage of overall enrollments at the secondary level, 1993–2005[18]

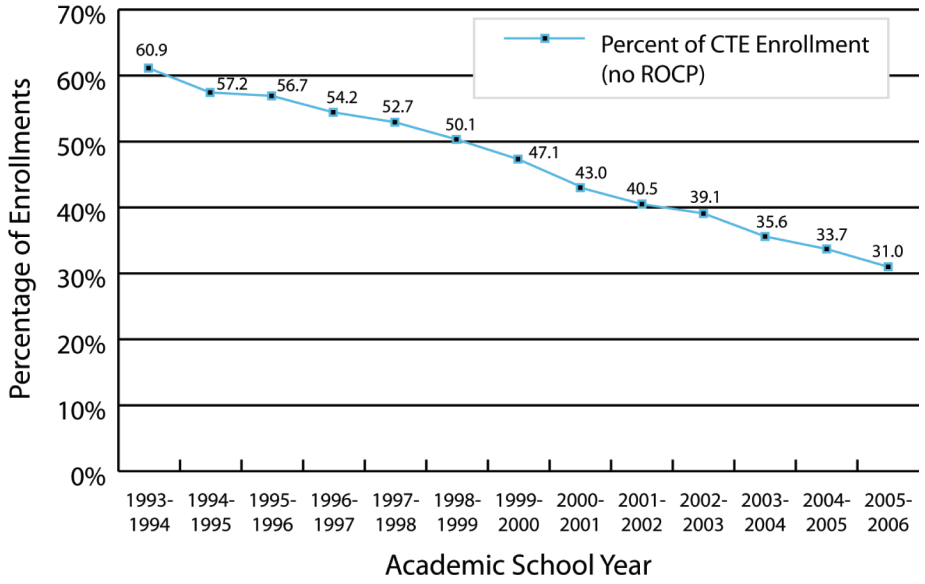


Table 1 shows the breakdown of enrollments by CTE program area.[19] CTE course taking at the secondary level is concentrated in four career areas: industrial and technology education; home economics; arts, media, and entertainment; and business education, together accounting for nearly 87 percent of the enrollments.

17 The "a-g" subject requirements are a list of courses approved by the University of California that California high school students must take in order to qualify for admission to the University of California or the California State University systems.

18 CBEDS 1993–2005 for "vocational" courses, excluding Arts, Media, and Entertainment CTE.

19 The areas correspond to the six broad K–12 CTE career areas, plus Work Experience Education, which is classified as a "vocational course" in CBEDS.

Table 1. Secondary CTE enrollment by career area, 2005–2006[20]

	Career Areas	Number of Enrollments	Percent of Enrollments
1.	Industrial and Technology Education[a]	241,697	31.16
2.	Home Economics	151,772	19.56
3.	Arts, Media, and Entertainment[b]	141,797	18.28
4.	Business Education	137,826	17.77
5.	Agriculture	56,685	7.31
6.	Health Careers	12,716	1.64
7.	Work Experience and Other CTE[c]	33,276	4.29
Total[d]		775,769	100.00

a Includes Industrial Technology (227,409 enrollments) plus Applied CTE (14,288 enrollments).
b Arts, Media, and Entertainment is currently not classified as a CTE course in CBEDS.
c Work Experience Education (29,012 enrollments) plus "Other CTE."
d Courses labeled as CTE in CBEDS totaling 633,972 plus Arts, Media, and Entertainment, totaling 141,797.

Table 2 displays the secondary enrollment distribution by gender and ethnicity. The data show somewhat higher proportions of males in CTE than in high schools overall, and slightly higher proportions of white students enrolled in CTE courses given their overall enrollment, though, overall, the distribution of students in CTE by ethnicity appears consistent with the ethnic distribution of high school students throughout the state.

20 CBEDS 2005–06; does not include ROCP data.

Table 2. Gender and ethnicity of students enrolled in high school academic and CTE courses, 2006–2007[21]

STUDENTS	High School Enrollment (Percent)	CTE Enrollment (Percent)
Gender		
• Female	49.3	44.6
• Male	50.7	55.4
Ethnicity		
• African American	7.8	7.0
• American Indian	0.8	0.9
• Asian	9.1	7.5
• Filipino and Pacific Islander	3.5	3.4
• Hispanic	43.4	43.2
• White	32.9	36.0
• Multiple	2.4	1.9

Postsecondary CTE Enrollment

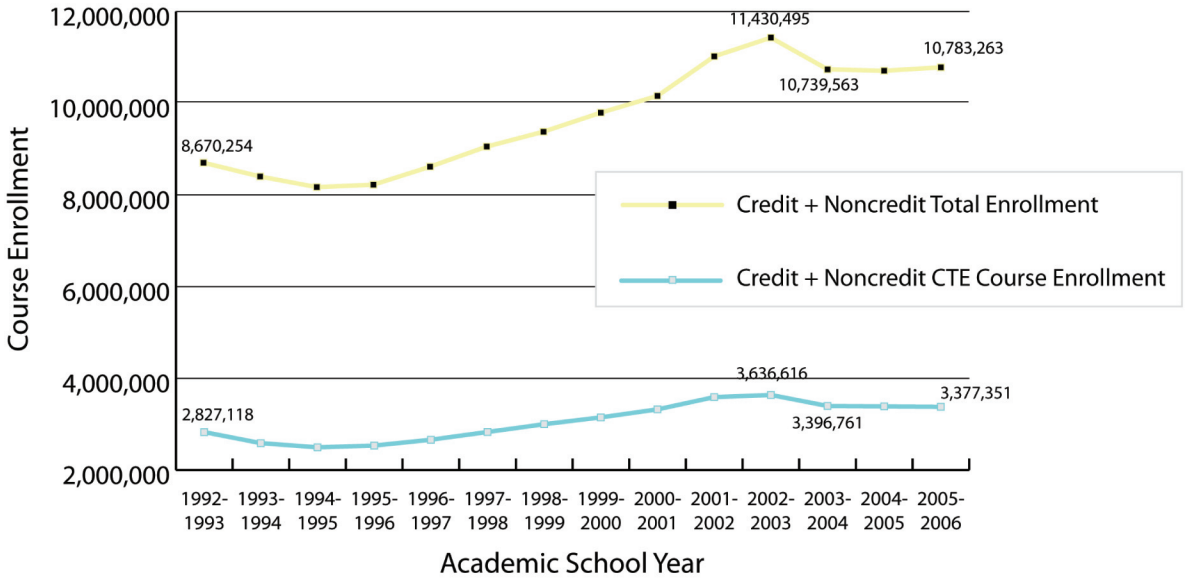
CTE course enrollments at the California Community Colleges constitute a significant proportion of overall community college enrollments, accounting for roughly 1.4 million students in CTE programs, or about 56 percent of the 2.5 million students enrolled in the community college system.[22]

Figure 7 shows the postsecondary CTE credit and noncredit (including community college adult education) course enrollment trend from 1992–2005, compared to overall enrollments. CTE enrollments have roughly paralleled total community college enrollments over the last 14 years, remaining at just over 30 percent of the total. CTE enrollments steadily climbed to a high of 3,636,616 in 2002, and then began to decline due to budget cuts that resulted in fewer course offerings. The demand for CTE courses surpasses actual course offerings due to limited resources and the system's "enrollment caps," which limit enrollments to what state and local funds can support and result in waiting lists. At some campuses, this has been temporarily mitigated by increasing the enrollment caps through additional categorical state funds or contracted fee-based services.

21 CBEDS 2006–07; does not include ROCP data.

22 CCCCO MIS data. Retrieved October 2006.

Figure 7. Postsecondary CTE course enrollment compared to total course enrollment, 1992–2005[23]



Course enrollment varies by career area, with students concentrated most heavily in business education (34 percent), followed by agriculture and natural resources (18 percent), industrial and technical education (13 percent), family and consumer sciences (13 percent), public safety education (12 percent), and health occupations (10 percent).[24]

With their commitment to lifelong learning, the community colleges enroll students across a broad age span. Just over one half of all students enrolled in the 2005–06 academic year were age 24 or younger (50.5 percent), with nearly one-fourth of all students age 19 or younger (24.1 percent),[25] while nearly half (49.5 percent) were age 25 or older, with 22.3 percent 40 or older.

Table 3 displays the community college enrollment distribution by gender and ethnicity, showing slightly higher proportions of African American, Asian, and White students enrolled in CTE courses given their overall enrollment. Overall, White and Hispanic students constitute roughly two-thirds of the CTE enrollments (65.7 percent).

23 CCCCO MIS data. Retrieved July 2007.

24 TOPS Pro; includes Tech-Prep and adult education.

25 CCCCO MIS data. Retrieved August 2007.

Table 3. Gender and ethnicity of students enrolled in community college academic and CTE courses, spring 2006[26]

STUDENTS	Community Colleges Enrollment (Percent)	CTE Enrollment (Percent)
Gender		
• Female	55.1	51.8
• Male	43.8	47.1
• Unknown	1.1	1.2
Ethnicity		
• African American	7.2	7.8
• American Indian/Alaskan Native	0.9	1.0
• Asian and Pacific Islander	16.0	14.5
• Hispanic	28.8	27.0
• White/Non-Hispanic	36.8	39.0
• Unknown or Other	10.3	10.8

Adult CTE Enrollment in Adult Schools and ROCP

Additionally, the total number of adult enrollments in CTE programs administered by ROCPs and adult school courses was 332,072 for the 2005–06 school year. More than half were enrolled in either business and administrative services (41.9 percent) and health services (16.9 percent).[27]

Special Populations CTE Enrollment

The state's K–12, adult school, and community college systems are committed to ensuring equal access to CTE programs and support activities and services for all its students, particularly members of identified special population groups, defined in Perkins IV as "individuals with disabilities; individuals from economically disadvantaged families, including foster children; single parents, including single pregnant women; displaced homemakers; individuals with limited English proficiency; and individuals preparing for nontraditional fields." Table 4 shows the 2004–05 enrollments of secondary, postsecondary, and adult special population groups enrolled in CTE courses. Despite data reported as duplicated counts, since many students reported being members of more than one special population category, there are roughly 1 million students who identified as nontraditional enrollees and almost as many who identified as economically disadvantaged, as well as more than 300,000 students reporting limited English proficiency.

26 CCCCO MIS data. Retrieved October 2006; Perkins CAR Basic Grant Student Enrollment Report, 2005–2006.

27 Carl D. Perkins Data System. Retrieved December 2006.

Table 4. Secondary, postsecondary, and adult special population enrollments in CTE, 2004–05[28]

Special Populations Category	Secondary (N=1,345,615)		Postsecondary (N=1,408,036)		Adult (N=345,616)		Combined (N=3,099,267)	
	Enrollment	Percent	Enrollment	Percent	Enrollment	Percent	Enrollment	Percent
Individuals with Disabilities	95,997	7.1	134,352	9.5	19,967	5.8	250,316	8.1
Economically Disadvantaged	373,274	27.7	481,323	34.2	138,530	40.1	993,127	32.0
Nontraditional Enrollees	582,719	43.3	348,845	24.8	207,679	60.0	1,139,243	36.8
Single Parents	5,544	0.4	63,372	4.5	27,848	8.0	96,764	3.1
Displaced Homemakers	1,393	0.1	20,558	1.5	7,109	2.0	29,060	0.9
Limited English Proficient	204,171	15.2	97,656	6.9	26,496	7.7	328,323	10.6
Other Educational Barriers	70,832	5.2	0	0	30,853	8.9	101,685	3.3

These data reveal that CTE programs serve students of all ages with diverse needs, facing multiple challenges. CTE takes its responsibility to serve these populations very seriously, not only to comply with federal regulations, but because of its commitment to ensure that all students succeed. Further, this responsibility extends beyond these students to the businesses and organizations relying on the human resources all future employees have to offer. Finally, CTE is responsible to the communities in which these students reside, ensuring that students complete programs with the education and skills necessary to contribute positively to their communities' economic and social well-being.

Chapter Two discusses the demographic, economic, educational, and policy context for CTE. Chapter Three provides the vision, mission, goals, and principles proposed by stakeholders for CTE, and gives further detail on current CTE practice, along with strategies in each of 11 "system elements" to strengthen CTE in the years to come.

28 Carl D. Perkins Vocational-Technical Educational Basic Grant Student Enrollment Report, 2004–2005; note these data are duplicated counts.

CHAPTER TWO
THE CONTEXT FOR CAREER TECHNICAL EDUCATION IN CALIFORNIA

The development of the state CTE plan must take into account the demographic, economic, educational, and political contexts shaping the state's workforce demands. Shifts in population, economic growth, and regional recessions, emerging and declining industries, educational reforms, and state political priorities all present opportunities and challenges for the delivery of CTE.

Demographic Context

TOTAL STATE POPULATION GROWTH

Developing a state CTE plan that meets workforce demands requires an understanding of trends in the size and composition of California's population. Statewide, the population is 37.7 million people, roughly 12.5 percent of the total U.S. population. The state's population increased by approximately 1.3 percent (470,000 people) in 2006, and has increased by 3.8 million people (11.2 percent) since the most recent (2000) U.S. Census.[29]

Population growth during the next decade is expected to be somewhat slower, with a projected 1.3 percent per year increase between 2005–2015, down from the 1.6 percent annual population growth during the previous decade.[30] Some of this decline is attributed to the aging of the state's population.

POPULATION GROWTH BY AGE GROUP

While the state's overall population is expected to grow, there are some notable differences projected for the various age groups. The average age of Californians is increasing as the aging of the baby boomers leads to substantial growth in the 55 and older cohort. At the same time, the elementary and secondary school age population is expected to experience slower growth, due in part to declines in birth rates, lower in-migration, and the aging of the children of the baby boomers.[31] Consistent with the latter, the 20-34-year-old cohort is increasing more rapidly than it did in the previous

29 E-1 Population Estimates for Cities, Counties and the State with Annual Percent Change — January 1, 2006 and 2007. (2007, May). Department of Finance. Sacramento, CA. Retrieved June 1, 2007, from http://www.dof.ca.gov/HTML/DEMOGRAP/ReportsPapers/Estimates/E1/E-1text.asp

30 Center for Continuing Study of the California Economy. (2006). *Opportunities and Challenges for the California Economy: California Economic Growth Chapter 2*. Palo Alto, CA.

31 *Cal Facts: California's Economy and Budget in Perspectiv*e. (2006). California Legislative Analyst's Office. Retrieved June 1, 2007, from http://www.lao.ca.gov/2006/cal_facts/calfacts_economy_2006.pdf

decade. Overall, population changes for different age groups are anticipated to look quite different over the next decade compared to the previous decade:[32]

- The 14–19-year-old cohort is projected to experience much slower growth than in the previous decade, with a very small increase (approximately 36,000) between 2005–2015 compared to an increase of more than 650,000 the previous decade.
- Between 2005 and 2015, the state projects an increase of approximately 1.5 million residents in the 20-34-year-old age group, up from an increase of 250,000 in the previous decade.
- The 35-54-year-old cohort is expected to remain steady at 10.9 million residents between 2005–2015, after an increase of 2.2 million residents the previous decade.
- The 55 and older age group is projected to increase by 2.7 million (a 37 percent increase), with the retirement of the baby boomers becoming a factor in the California labor market after 2010.

STATEWIDE POPULATION BY ETHNIC GROUP

The population trends associated with the changing ethnic makeup of the state for the past decade are expected to continue. The biggest overall shift is the projection that by 2015, the Hispanic population will have grown to be the single largest ethnic group in the state. The Hispanic population will likely grow by 4.1 million people between 2000 and 2010, and by an additional 3.7 million between 2010 and 2020. Overall, the Hispanic population is expected to increase by 70 percent between 2000 and 2020. By contrast, the White population is expected to decline by approximately 670,000 between 2000 and 2010, and decline by an additional 621,000 between 2010 and 2020. These projections suggest an 8 percent decline in the White population between 2000 and 2020, making it the only ethnic group to experience a decline in population between 2000 and 2020.[33]

Consideration of population changes by both age and ethnicity reveals additional important information for CTE planning. Between 2010 and 2020, the population of Hispanics in the 20-34-year-old age group (the people who will be entering the workforce and/or pursuing postsecondary education) will likely increase by more than 1 million.[34]

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32 Race/Ethnic Population with Age and Sex Detail, 2000–2050. (2007, July). California Department of Finance. Previous decade data is from Center for Continuing Study of the California Economy, op. cit. Retrieved on July 16, 2007, from http://www.dof.ca.gov/html/DEMOGRAP/Data/RaceEthnic/Population-00-50/RaceData_2000–2050.asp

33 Population Projections for California and Its Counties 2000–2050. (2007, July). California Department of Finance. Retrieved on July 16, 2007, from http://www.dof.ca.gov/HTML/DEMOGRAP/ReportsPapers/Projections/P1/P1.asp

34 Ibid.

This increase accounts for more than two-thirds of the total projected population growth for this age group.

REGIONAL DIFFERENCES

Given the vast physical size and geographic diversity of California, different regions of the state experience population growth and decline at varying rates. Notably, the five southern California counties of Los Angeles, Orange, Riverside, San Bernardino, and San Diego accounted for 55 percent of the state's total population in 2006, and 58 percent of the population increased between 2001–2006.[35] Southern California counties are expected to continue to see the greatest increase in numbers of people through the year 2020. Los Angeles (1.3 million new people), Riverside (1.1 million new people), and San Diego (801,000 new people) are the three counties projected to experience the greatest numeric population change between 2000 and 2020.

The highest percentage growth rates have been in the Central Valley and Foothill counties, as well as in Riverside and San Bernardino counties in southern California. These regions are projected to continue to experience population growth through 2020. Counties projected to experience the largest percentage of increases in population between 2000 and 2020 include Placer (83 percent), San Joaquin (74 percent), and Riverside (72 percent).

ECONOMIC DISADVANTAGE AND IMMIGRATION

Poverty rate data indicate that 13 percent of the state's overall population is poor.[36] In addition, increasingly, California's poor are the working poor, with 31 percent of families in poverty having at least one member working full time and 39 percent having at least one member working part time.

The poverty rate is much higher for Hispanics and African Americans (20 percent) than it is for Asians (12 percent) or Whites (8 percent). Children are particularly hard hit by poverty. Poverty rates for children under 18 are much higher (19 percent) than for adults 18-64 (12 percent) or for seniors over 65 (8 percent). Poverty rates are especially high for children living in single mother families (42 percent).[37] Another proxy for childhood poverty is student enrollment in the public school's free and reduced price meal programs. In California, more than 3.1 million students ages 5–17 are enrolled in the federal free

35 California Legislative Analyst's Office, op. cit.

36 *Just the Facts: Poverty in California.* (2006, Nov.). Public Policy Institute of California. Retrieved on July 16, 2007, from http://www.ppic.org/content/pubs/jtf/JTF_PovertyJTF.pdf

37 Ibid.

or reduced price meal program, representing more than 50 percent of public K–12 enrollments in the state.[38]

Of particular importance is the role that immigration is expected to play in the future workforce. Most of the growth in California's workforce over the next 25 years is projected to come from immigrants (39 percent) and the children of immigrants (60 percent). The state will need to ensure that CTE addresses the unique needs of these families as they enter into the state's education system and workforce.

The unique challenge in meeting the needs of immigrants is the lack of English language proficiency. Currently, one out of every five Californians, more than 6 million individuals, is "limited English proficient."[39] There are 1.6 million students in California's K–12 education system identified as "English learners." These students collectively speak more than 50 different languages, with 1.3 million (85 percent) speaking Spanish as their native language.

IMPLICATIONS FOR CTE

Understanding these complex demographic features, and particularly the implications of immigration, the aging workforce, and economic disadvantage among young people, remains important for the CTE planning process. Given California's current and expected population shifts, CTE plans must continue to meet the educational and technical skill needs of a new and diverse group of students, many of whom are not proficient in English or may be the first in their families to attend college. The impending retirements of the baby boom generation, coupled with a reduced growth rate in the 35-54-year-old-cohort and growth in the 20-34-year-old cohort, underscore the importance of making sure workforce-age residents are equipped to enter and energize the economy. As reported in the National Center on Education and the Economy's report, *Tough Choices, Tough Times: The Report of the New Commission on the Skills of the American Workforce*, the fact that "most of the people we will have in our workforce in 20 years are already in the workforce now,"[40] suggests that the education and workforce systems must provide ongoing opportunities for adults to upgrade their skills. CTE must also target economically disadvantaged students and workers so they can receive the education and training needed to move into higher wage and high demand jobs. Finally, population growth in

38 Selected Statewide Data for the Year 2006–07. (2006). California Department of Education. Educational Demographics Unit. Retrieved on July 16, 2007, from http://data1.cde.ca.gov/dataquest

39 California County Profiles: Limited English Proficient Population. (2006, June). California Endowment. Retrieved on June 15, 2007, from http://www.calendow.org/reference/publications/pdf/cultural/CA%20County%20ProfilesALL.pdf

40 The National Center on Education and the Economy. (2007). *Tough Choices, Tough Times: The Report of the New Commission on the Skills of the American Workforce*. Washington, D.C.

rural counties suggests the need for innovative delivery strategies, including greater use of distance education.

Economic Context

Information about California's economic context and regional economies, as well as the projected labor market, employment, and earnings trends, is critical to the CTE planning process. Specifically, these data help identify occupations that are in high demand, employ a large percentage of the workforce, and reflect new and emerging fields of work. Strong economic data can also help educators supply current and relevant workforce information to students, facilitating their career decision-making processes.[41]

California's gross state product is more than $1.6 trillion, accounting for more than 13 percent of U.S. gross national product. California has the eighth largest economy in the world,[42] 40 percent greater than that of Texas, which has the next largest state economy. In addition, California has the largest labor market in the country with more than 15 million nonfarm jobs in 2006, representing 11 percent of nonfarm jobs in the United States.[43]

THE 21ST CENTURY ECONOMY — CHALLENGES AND CHANGES

The 21st century economy is characterized by new industries and new technologies as well as by an unprecedented globalization of the workforce. The nation's education and training systems were built for a different era and now must adapt to this global economy. California is at the center of many of the changes that are occurring in the current economy. The state's economic base is concentrated in industry sectors with above average growth potential both nationally and worldwide. California is at the center of innovation in areas such as stem cell research, alternative energy, and the Internet, and has the nation's largest entertainment and tourism sectors. In addition, small businesses, defined as employer firms with fewer than 500 employees, represent more than 99 percent of the employers in the state and employ more than 50 percent of the state's nonfarm private sector workforce; firms with fewer than 100 employees represent more

41 B. L. Brown. (2006). Connecting CTE to Labor Market Information. *Practice Application Brief No. 28*. Ohio State University. Columbus, Ohio: ERIC Clearinghouse on Adult, Career and Vocational Education. Sandra Kerka. (Ed). *What Works: Occupational Skill Training*. (2006). Columbus, OH: The Ohio State University Learning Work Connection.

42 California Legislative Analyst's Office, op. cit.

43 California Workforce Investment Board. (2007). *California's Strategic Two-Year Plan for Title I of the Workforce Investment Act of 1998 and the Wagner-Peyser Act.* Sacramento: Cal WIA. As revised for the period of July 1, 2007 – June 30, 2009.

than 97 percent of the employer businesses in the state and employ nearly 40 percent of the state's nonfarm private sector workforce.[44]

While much attention is paid to new jobs that will be created in emerging industries, national and state analyses indicate that there will be many more job openings from replacement jobs (due to retirements and job changes) than newly recreated jobs. Nationally, it is projected that 19 million new jobs will be created in the next decade, and that there will be 36 million job openings due to the need to replace workers.[45] Because a strong economy depends on both "population-serving" industries like health care and education and industry sectors with the potential for rapid growth, both types of industries are important to the future of the state. The California Employment Development Department identifies the following industries as most critical for the California economy in the near future: automotive, biotechnology, construction, energy, financial services, geospatial, health care, hospitality, information technology, manufacturing, retail, transportation, agriculture, arts, media, and entertainment. Agriculture is especially vital to the state's economic strength, providing nearly one in ten jobs and more than $100 billion in related economic activity.[46]

ECONOMIC REGIONS OF THE STATE

In a state as large and complex as California, regional characteristics can vary widely and are critical factors in ensuring a match between training opportunities and regional workforce needs. To meet educational and occupational training needs throughout the state, the CTE plan must take into account differences in industry needs, economic structure, and availability of training resources in the various regions. One measure that varies greatly by region, for example, is unemployment rate: Unemployment rates in different parts of the state ranged from annual average unemployment rates of less than 4 percent in 2006 to unemployment rates of more than 12.5 percent.[47]

Projections of industry growth vary by region as well. For example, in Santa Clara County, the industries expected to see the most growth in employment between 2004–2014 are information (including publishing and Internet-related occupations) and construction. By contrast, in San Joaquin County, education, health services, and government are projected

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44 Office of Advocacy Small Business Profile: California. (2006). U.S. Small Business Administration. Retrieved on August 7, 2007, from http://www.sba.gov/advo/research/profiles/06ca.pdf

45 California Workforce Investment Board. (2007). *California's Strategic Two-Year Plan for Title I of the Workforce Investment Act of 1998 and the Wagner-Peyser Act.* Sacramento: Cal WIA. As revised for the period of July 1, 2007 – June 30, 2009, p. 2–10.

46 California Department of Food and Agriculture. (2006).

47 Ibid.

to see the most job growth.[48] Consideration of differences in regional economies is critical because "the most effective way to provide a real future for people who need jobs is to provide training that is related to the economic future of the region those people live in."[49]

STATEWIDE EMPLOYMENT GROWTH BY INDUSTRY

Short-term and long-term employment growth information is important to CTE planning for the education system to be responsive to and meet the demands of high growth industries. The most recent short-term projections (2005–2007) estimate the state's annual job growth rate to be approximately 1.3 percent, with about 400,000 new jobs added during this time. Almost 30 percent of this job growth is estimated to be in professional and business services area. Long-term projections (2004–2014) follow the short-term trends. More than 90 percent of the industries expected to experience employment growth over the next decade are "service industries." The state's 50 largest growing occupations are expected to generate approximately 3.2 million job openings (1.4 million new jobs and 1.8 million replacement jobs).[50]

LARGEST PERCENTAGE (EMPLOYMENT) CHANGES BY INDUSTRY

The top 10 fastest growing industries in the state account for nearly 60 percent of the projected increase in new jobs in California between 2004–2014. Top growth industries include administrative services, health care, retail, hospitality management and food services, and professional, scientific, and technical services.

Currently, the fastest growing occupations in the state are in the computer, education, and health care industries. Specifically, the top five fastest growing occupations projected between 2004–2014 are network systems and data communications analysts, home health aides, computer software engineers (both applications and systems software), and network and computer systems administrators.[51] Each of these occupations is expected to increase its number of available jobs by more than 40 percent during this time period, an increase of anywhere from 12,000 to 39,000 jobs.

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48 Projections of Employment by Industry and Occupation. (2006). Labor Market Information Division. California Employment Development Department. Retrieved on June 15, 2007, from http://www.labormarketinfo.edd.ca.gov/cgi/databrowsing/?PageID=145

49 National Center on Education and the Economy. (2007). *Tough Choices or Tough Times: The Report for the New Commission on the Skills of the American Workforce San Francisco*. Washington, DC. (pp. xxx-xxxi).

50 CAL WIA, op.cit. (pp. 25).

51 Projections of Employment by Industry and Occupation. (2007). California Employment Development Department. Retrieved on June 25, 2007, from http://www.labormarketinfo.edd.ca.gov/cgi/databrowsing/?PageID=145

LARGEST ABSOLUTE (EMPLOYMENT) CHANGES BY INDUSTRY

The professional and business service industries will add the most new jobs in the next decade, with an additional 597,900 jobs between 2004–2014. Industries such as government (375,800), health care and social assistance (316,900), retail trade (276,400), and accommodation and food services (217,800) will also add large numbers of new jobs in the next decade.[52]

Occupations projected to have the largest number of job openings between 2004–2014 include retail sales, cashiers, waiters and waitresses, laborers, and office clerks. The retail sales area is projected to see the largest number of job openings, with 288,000 new and replacement jobs in that decade.

While many of the occupations with the largest number of job openings are in lower wage and lower skill areas, there are higher wage occupations that will see a large number of job openings as well. Registered nursing is projected to gain about 109,000 new jobs between 2004–2014, 60,900 due to new jobs and 48,200 replacement openings. General and occupational management and elementary school teaching are both expected to have over 80,000 new job openings between 2004 and 2014.[53]

IMPLICATIONS FOR CTE

The opportunities and challenges created by the state's complex, diverse economy are important considerations in developing the CTE plan. California has a long history of economic growth based on innovation, creativity, opportunity, and entrepreneurship. Growth in the next decade is likely to come from traditional industries (e.g., construction, manufacturing, professional services), as well as emerging industries (e.g., biotechnology, nanotechnology). CTE must be ready to prepare students for jobs in both emerging and traditional industries while meeting the needs of regional economies. CTE has particular relevance for existing adult workers whose skills must be upgraded in order to help meet the state's economic potential. The high percentage of small businesses also has implications for how CTE engages its employer communities and suggests the need for employees to develop entrepreneurial and career management skills among other workplace and technical skills.

52 Cal WIA, op. cit. (p. 143).

53 Projections of Employment by Industry and Occupation. (2007). California Employment Development Department. Retrieved on June 15, 2007, from http://www.labormarketinfo.edd.ca.gov/cgi/databrowsing/?PageID=145

Educational Context

The state CTE plan is being developed at a time when secondary school reform is at the top of many educational policy agendas and when community colleges are increasingly required to address students' needs for basic literacy and math skills. High dropout rates and the poor academic achievement of high school graduates have led policymakers, business leaders, philanthropists, and educators to seek new ways to "fix" high schools. Many of the school reform efforts currently viewed as ways to help our failing schools (e.g., smaller learning communities, academies, multiple pathways) emphasize the new four R's: rigor, relevance, relationships, and results. CTE addresses many of the components of these various reform efforts. Specifically, CTE:

- Raises rigor by aligning or integrating strong technical content with academic content, thus providing students with the knowledge and skills necessary for success in both the workforce and in higher education.
- Increases relevance by promoting the integration of career themes and project-based strategies into academic coursework and developing programs that are responsive to the changing needs of the workforce, both in terms of skill requirements and labor market trends.
- Promotes supportive relationships and individualized attention for students, and provides industry mentors and role models for both students and educators.
- Strengthens relationships among the K–12, adult school, and community college segments, and between education and industry.
- Produces positive results — promotes engagement, persistence, academic achievement, technical skill attainment, self-knowledge, workplace and career management skills, employment, lifelong learning, and long-term career success.

STUDENT PREPARATION

Though projections for student population growth will continue to increase (an estimated 2.5 percent growth in K–12 enrollments between 2005–2015 and 22 percent growth projected in community college enrollments[54]), there is evidence that many of the state's high school and college students are not being adequately prepared for the workforce. This is evidenced by high school dropout rates, generally low academic performance, low secondary-to-postsecondary transition rates for certain populations, and the need for college remediation. According to a 2005 national survey of high school graduates,

54 California Public K–12 Enrollment and High School Graduate Projections by County, 2006 Series. (2006, October). California Department of Finance; and California Public Postsecondary Enrollment Projections, 2006 Series. (2006, December). California Department of Finance.

college instructors, and employers, as many as 40 percent of American public high school graduates are unprepared for both college and work.[55]

Between one-fourth and one-third of all students fail to graduate from public high schools in California,[56] and African American and Hispanic students, who make up more than half of the state's student population, are at higher risk of noncompletion than their peers.[57] Close to 1 million Californians in the 18-24-year-old cohort do not have a high school diploma.[58] Further, a large percentage of students drops out as early as ninth grade. The eighth to ninth grade transition year is considered to be a particularly vulnerable time for students.[59] In addition, even those who do not drop out until eleventh or twelfth grade lose interest well before then. In one study, 71 percent of the students who dropped out said they had lost interest in school in the ninth and tenth grades. Nationally, much of the dropping out of school has shifted from the last two years of high school, typical three decades ago, to between ninth and tenth grades today.[60]

This tragedy affects all levels of society, as high school dropouts are twice as likely as their graduating classmates to slip into poverty and experience unemployment, underemployment, incarceration, and poor health.[61] In 2004, nearly three-fourths of all high school dropouts did not have jobs. Research shows that CTE can help to reduce the likelihood that a student will drop out of school by offering a student a broader array of experiences with clear relevance to life after school. CTE offers students more

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55 Rising to the Challenge: *Are High School Graduates Prepared for College and Work?* (2005). Peter D. Hart Research Associates & Public Opinion Strategies. Retrieved on April 21, 2006, from http://www.achieve.org/dstore.nsf/Lookup/pollreport/$file/pollreport.pdf

56 The statistic varies depending on the way that dropout rates are calculated. The basic completion ratio graduation rate, which compares ninth grade enrollment to the number of students who graduated, found that only 70.7 percent of California students from the class of 2004 graduated from high school. This basic completion method yields a high school dropout rate of nearly 30 percent.

57 P.S. de Cos, *High school Dropouts, Enrollment, and Graduation Rates in California*. (2005). *California Performance Review*. Sacramento: California Research Bureau. (2004). Retrieved on February 13, 2006, from http://cpr.ca.gov/report/cprrpt.issrec/etv.chap3sum.htm.

58 *Environmental Scan: A Summary of Key Issues Facing California Community Colleges Pertinent to the Strategic Planning Process.* (2005, July). Center for Student Success of the Research and Planning Group for California Community Colleges. Retrieved on June 15, 2007, from http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/28/07/e9.pdf

59 B. Berliner and E. Brodie. *The Drop Out Challenge*. (2007). REL West, WestEd. San Francisco, CA.

60 John M. Bridgeland, et al. *The Silent Epidemic: Perspectives of High School Dropouts*. (2006, March). Civic Enterprises in association with Peter D. Hart Research Associates for the Bill & Melinda Gates Foundation. Washington, DC.

61 Ibid.

individualized instruction, mentoring, and service or work-based learning opportunities, all of which are shown to help increase the likelihood that a student will stay in school.[62]

Of the students completing high school, close to 70 percent go on to either two-year or four-year colleges. But, of those who continue on to postsecondary education, only half earn a degree within six years,[63] and only 15 percent of high school graduates earn a four-year college diploma within ten years after high school.[64] Taking into account a 30 percent dropout rate, this means that only 25 percent of entering high school freshmen complete any kind of postsecondary degree and only 11 percent eventually earn a bachelor's degree.

One reason for the low completion rates may be that many students are entering postsecondary education unprepared for college-level work. A survey of placement test results in California indicates that 70 percent of community college students place in remedial-level mathematics and 42 percent place in remedial-level English.[65] The most recent (Fall 2006) results of California State University's (CSU) Early Assessment Program (EAP) indicate that even students eligible for the CSU are in need of remediation, as only 62.5 percent of entering freshmen were proficient in mathematics, and 54.7 percent were proficient in English.[66]

THE NEED FOR WORKPLACE SKILLS

Increasing the number of students who graduate from high school and are prepared for college-level work is only part of the challenge for California.

It is projected that 60 percent of future jobs will require training that only 20 percent of today's workers possess.[67] Other projections suggest that by the year 2020, 36 percent of

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62 *The Challenge Facing our Nation.* (2006). Bill and Melinda Gates Foundation. Retrieved on November 20, 2007, from http://www.gatesfoundation.org/UnitedStates/Education/TransformingHighSchools/RelatedInfo/TheChallenge.htm

63 R. Kazis, J. Vargas & N. Hoffman (Eds.) M. Tucker. High School and Beyond: The System is the Problem – and the Solution. National Center on Education and the Economy. Double the Numbers. (2004, November). Retrieved November 1, 2006 from http://colosus.ncee.org/pdf/acsd/global/promo/gates_paper.pdf

64 Hill, E. California Legislative Analyst's Office. (2005). *Improving High School: A Strategic Approach.* Sacramento, CA.

65 Center for Student Success, op. cit.

66 *Proficiency Reports of Students Entering the California State University System.* (2007). California State University, Analytic Studies. Retrieved on July 15, 2007, from http://www.asd.calstate.edu/performance/proficiency.shtml

67 *Building a Nation of Learners: The Need for Changes in Teaching and Learning to Meet Global Challenges.* (2003). Business-Higher Education Forum. Retrieved on July 15, 2007, from http://www.bhef.com/includes/pdf/2003_build_nation.pdf

jobs will require "some college," and an additional 39 percent of jobs will require a college degree. If current trends persist, the population supply will not meet the demand since only 28 percent of the population is expected to have "some college" and 33 percent will likely obtain a college degree.

As the nation continues to shift from an industrial to a knowledge-based economy, individuals with no postsecondary education or training will find it difficult to move beyond subsistence-level jobs.[68] Adults age 18 and older with only a high school diploma earned only $29,448 per year, according to tabulations released in 2006 by the U.S. Census Bureau. And those adults without a high school diploma earned an average of only $19,915. By contrast, graduates with a technical certificate or associate degree earned $37,990 and those with a bachelor's degree earned an average of $54,689 in 2005.[69]

Beyond the need for high levels of education, the workplace is seeking essential new skills that are not currently being stressed in schools and colleges. Completing programs or taking rigorous courses may not be enough. There continue to be "wide gaps between the skills that businesses value and the skills most graduates actually have."[70] A recent survey of employers found that the future U.S. workforce is "woefully ill-prepared" for the demands of tomorrow's (and today's) workplace. Employers emphasize such skills as professionalism, teamwork, and communication as the most important skills for success in the workplace, and note deficiencies in key skills from workforce entrants coming in from every education level.[71] Further, the New Commission on Skills for the American Workforce argues that creativity and innovation, as well as flexibility to respond to changes in the labor market, will be particularly critical skills as new workers try to compete in a global economy where high-skilled jobs are being outsourced to other countries.[72]

IMPLICATIONS FOR CTE

The educational context for CTE suggests that better strategies are needed to support students' academic achievement and persistence at the K–12 level, adult schools, and in community colleges and universities, and that all students will need a variety of workplace skills that are currently not taught in traditional academic programs. A strengthened system of career technical education can respond to these needs. CTE can

68 Jenkins, D. Workforce Strategy Center. (2006). *Career Pathways: Aligning Public Resources to Support Individual and Regional Economic Advancement in the Knowledge Economy*. Brooklyn, NY.

69 U.S. Census Bureau. (2007, March). *Annual Social and Economic Supplement, Current Population Survey 2006.* Washington, DC.

70 The Conference Board. (2006). *Are They Really Ready to Work? Employers' Perspectives on the Basic Knowledge and Applied Skills of New Entrants to the 21st Century Workforce*. New York, NY.

71 Ibid.

72 National Center on Education and the Economy, op. cit.

engage and motivate students who are at risk of dropping out of high school, as well as support and enhance learning for all students. It is important not only for older high school students who may be at risk of dropping out in the eleventh and twelfth grades, or for those preparing for graduation and postsecondary education, training, or work, but also for younger high school students who are at risk of dropping out during their transitional ninth grade year, as they seek to find their place and feel competent in larger schools, with new sets of peers and with increasing academic pressures. It can prepare all students for entry to postsecondary education and careers, laying a foundation that allows students multiple options, with paths directly to work, to the community college system, or directly to four-year institutions — all as stepping stones to lifelong learning and ongoing career development. It can promote success and persistence in community college and university by providing focus, motivation, support, tangible skills, academic competencies, and critical thinking skills. Lastly, CTE offers opportunities to develop the full range of workplace skills that adults need to succeed over their lifetimes.

Policy Context

The policy context for this plan is shaped by a number of key workforce development and educational initiatives implemented by the federal government, as well as by state initiatives designed to meet the particular needs of California.

KEY FEDERAL POLICIES

Federal initiatives pertinent to this plan include the U.S. Department of Education Carl D. Perkins Career and Technical Education Improvement Act of 2006 (Perkins), the U.S. Department of Labor Workforce Investment Act (WIA), and the U.S. Department of Education No Child Left Behind Act (NCLB).

THE CARL D. PERKINS CAREER AND TECHNICAL EDUCATION IMPROVEMENT ACT OF 2006

The federal **Carl D. Perkins Career and Technical Education Improvement Act of 2006 (Perkins IV)**, reauthorizing the Carl D. Perkins Vocational and Technical Education Act of 1998 (Perkins III), provides approximately $140 million annually in funding to improve California's career technical education programs, integrate academic and career technical instruction, and serve special populations. The new act is intended to provide increased focus on the academic achievement of CTE students, strengthen the connections between secondary and postsecondary education, and improve state and local accountability.[73] In order to gain eligibility for federal funding under the Act, states are required to submit

73 U.S. Department of Education, Office of Vocational and Adult Education. Retrieved November 30, 2007 from http://www.ed.gov/about/offices/list/ovae/pi/reauth/perkins.html

state plans, which are intended to describe all of their CTE activities and how the Perkins funding will enhance these efforts.

WORKFORCE INVESTMENT ACT

The federal Workforce Investment Act (WIA), enacted in 1998, requires states to carry out a range of workforce development activities, such as training and tutoring, through statewide and local "Workforce Investment Boards," to benefit job seekers and dislocated workers, as well as youth, veterans, persons with disabilities, and employers. The purpose of these activities is to increase the employment, retention, and earnings of participants. WIA programs are intended to increase occupational skills attainment by participants, and, as a result, improve the quality of the workforce, reduce welfare dependency, and enhance the productivity and competitiveness of the nation.[74]

NO CHILD LEFT BEHIND

The No Child Left Behind Act of 2001 (NCLB) reauthorized the Elementary and Secondary Education Act (ESEA), which aims to improve the performance of primary and secondary schools, and is based on four principles: accountability for results, more choices for parents, greater local control and flexibility, and an emphasis on doing what works based on scientific research. NCLB requires that teachers be "highly qualified" as defined by the law, that progress of all students be measured annually for math and reading, that teaching strategies are based on scientifically based research, and that schools identified as "needing improvement" will offer eligible students supplemental educational services or allow them to transfer to better performing schools.[75]

Perkins-funded activities must be aligned with both WIA, for the purpose of leveraging workforce development resources, and with NCLB, for the purpose of promoting the academic rigor of CTE programs. Alignment with WIA occurs through coordination of planning and implementation efforts; alignment with NCLB occurs through the implementation of the same accountability measures for academic achievement in Perkins as is used to measure states' "adequate yearly progress" — in California, proficiency on the California High School Exit Exam.

74 Workforce Investment Act. http://waysandmeans.house.gov/media/pdf/greenbook2003/WIA.pdf

75 Introduction, Overview, No Child Left Behind. (2007). U.S. Department of Educatio*n.* Retrieved on July 15, 2007, from http://www.ed.gov/nclb/overview/intro/edpicks.jhtml?src=ln

KEY STATE POLICIES

Workforce development and educational initiatives in California are inextricably linked — both working toward the common goal of ensuring individuals' economic security and career fulfillment.

WORKFORCE DEVELOPMENT INITIATIVES

State-level initiatives have paralleled federal initiatives. In 1993, legislation was passed in California to promote economic development strategic planning. A bipartisan California Economic Strategy Panel was created to develop an overall economic vision and strategy to guide public policy in shaping a prosperous future for California. The panel examined regional patterns of employment as well as opportunities for growth and expansion in specific industry sectors. In its 1996 report, *Collaborating to Compete in the New Economy, An Economic Strategy for California,* the Panel articulated its primary recommendation for sustaining the new economy: Improve the preparation of the workforce. Doing so required "…the development and implementation of a new policy framework for a competitive and coherent workforce preparation system that is consistent with the new economy and that supports emerging clusters."

Regional Workforce Preparation and Economic Development Act (RWPEDA). One of the outcomes of the Panel's report was the enactment in 1998 of the Regional Workforce Preparation and Economic Development Act (RWPEDA), for the primary purpose of forging a collaboration among K–12, postsecondary, health and human services, and trade and commerce agencies to create a coherent system of workforce preparation, linking education and training with economic development. This work resulted in the recommended policy framework for workforce development, *California Workforce Development: A Policy Framework for Economic Growth*, which laid the foundation for ongoing collaborative efforts.

California Regional Economies Project. More recently, the California Economic Strategies Panel spearheaded the California Regional Economies Project to better understand regional differences, gain insight into how the various regions and economic sectors interrelate with each other, and, most critically, identify regional "clusters of opportunity"[76] for potential economic and workforce growth. The project also monitors how change in one region affects other regions and the state as a whole. This is

76 "Clusters of opportunity" are sectors of the economy identified by growth in one or more areas: value, jobs or wages. California Regional Economies Project Clusters of Opportunity User Guide October 2006, retrieved November 30, 2007 from http://www.labor.ca.gov/panel/pdf/Clusters%20of%20Opportunity%20Methodology%20Guide.pdf

particularly important given the size and diversity of the state, its resources, population variables, transportation corridors, and rate of change.

This research-focused project is sponsored by the California Workforce Investment Board of the Labor and Workforce Development Agency. Other partners include the Labor Market Information Division of the California Employment Development Department, which provides the employment and occupational data used by the Project, and the California Community College Chancellor's Office, which sponsors training workshops.

Senate Bill (SB) 293: Workforce Training Act. Beyond laying the groundwork for needed research and monitoring of regional economies and industry-specific developments, RWPEDA and the policy framework laid the groundwork for ongoing collaboration in the implementation of workforce development efforts. In September 2006, the Governor signed Senate Bill (SB) 293: Workforce Training Act, replacing the Family Economic Security Act in the California Unemployment Insurance Code with provisions that generally implement the Workforce Investment Act (WIA) of 1998 in California. SB 293 took effect on January 1, 2007. A majority of the provisions in SB 293 are taken from the federal WIA, but the act also includes new, unique California provisions, which will require substantive changes in the workforce system. One of these is the requirement that the California Workforce Investment Board create a strategic workforce plan for the state. The state plan is described in SB 293 as a strategic plan for the entire workforce system, and is intended to serve as a framework for the Strategic Two-Year Plan for the WIA. It will also serve as a framework for the development of workforce policy and fiscal investment, and for the operation of California's labor exchange, workforce education, and training programs.[77]

CAREER TECHNICAL EDUCATIONAL INITIATIVES

Consistent with workforce development policies aimed at strengthening California's labor force and economy, policymakers in California have renewed their commitment to CTE. In the educational arena, particularly at the K–12 level, the focus of recent policy initiatives is not only on ensuring a highly qualified workforce for existing and emerging industries, but ensuring also that students have the academic, employability, and career management skills they will need to realize their personal goals. Through legislation and budget initiatives, policymakers are addressing such issues as the need for high standards in CTE, the need for state-of-the-art facilities, the need for seamless pathways from secondary to postsecondary education, and the shortage of qualified CTE teachers and counselors, among others. Below is a brief synopsis of a few key initiatives.

77 California Work Force Investment Board, SB 293. (2007). California Community Colleges Chancellor's Office. Retrieved on July 31, 2007, from http://www.calwia.org/sb293/index.cfm

Assembly Bill 1412 and Senate Bill 1934: The California Career Technical Education Model Curriculum Standards and Framework, Grades Seven Through Twelve. The 2002 Assembly Bill 1412 and Senate Bill 1934 mandated that a Career and Technical Education (CTE) Advisory Group oversee development of the CTE Model Curriculum Standards and Framework, as had previously been developed for the core academic subject areas and the arts. Adopted by the State Board of Education in May 2005, the resulting California Career Technical Education Model Curriculum Standards, Grades Seven Through Twelve, integrate California's academic content standards with industry-specific knowledge and skills in order to prepare students both for direct entry into the workplace and for postsecondary education. The standards emphasize 21st century labor market realities, flexibility and adaptability to local CTE conditions, and increased rigor in the CTE system.

The CTE Curriculum Standards are organized into 15 industry sectors, or groupings, of interrelated occupations and broad industries. Each sector has two or more career pathways, which are a coherent sequence of rigorous academic and technical courses that allow students to apply academics and develop technical skills in a curricular area. Career pathways are intended to prepare students for successful completion of state academic and technical standards and more advanced postsecondary coursework related to the career in which they are interested. Identified with industry input, the 15 industry sectors are:

1. Agriculture and Natural Resources
2. Arts, Media, and Entertainment
3. Building Trades and Construction
4. Education, Child Development, and Family Services
5. Energy and Utilities
6. Engineering and Design
7. Fashion and Interior Design
8. Finance and Business
9. Health Science and Medical Technology
10. Hospitality, Tourism, and Recreation
11. Information Technology
12. Manufacturing and Product Development
13. Marketing, Sales, and Service
14. Public Services
15. Transportation

The CTE Curriculum Framework for California Public Schools, Grades Seven Through Twelve, provides guidance for implementing the CTE Model Curriculum Standards. It provides context for the content laid out in the standards, and discussion of best practices and important issues in implementation. The Framework was approved in January 2007.

Proposition 1D: Kindergarten–University Public Education Facilities Bond Act of 2006. In November 2006, the voters of the State of California passed a $10.4 billion school facilities bond that for the first time included a significant share of funds ($500 million) for building or modernizing Career Technical Education facilities located within comprehensive high schools. It also allowed for the purchase of CTE equipment.

The Governor's CTE Initiative/Senate Bill 70: The Economic Development and Career Technical Education Reform Initiative. Governor Arnold Schwarzenegger has brought increased visibility to CTE over the past year through budget initiatives and statewide policy discussions. In the May revision of the Governor's 2008 budget, the Governor proposed "substantial ongoing and new support for the expansion of CTE and teachers and counselors to ensure that the many students who directly enter the workforce are educated and prepared to succeed."[78] In March 2007, the Governor hosted the state's first ever CTE summit, bringing together education, business, labor, foundation, and political leaders in an effort to "strategize how CTE can maintain California's competitive edge in the global marketplace." In his remarks opening the summit, the Governor called this the beginning of a dialogue that would expand CTE, with a goal of moving to a place where CTE is seen as an equal option to a four-year college degree.[79]

Consistent with his commitment, the Governor's 2005–06 budget called for expanded CTE opportunities and improved linkages between public schools and community colleges. Enacted as Senate Bill 70: The Economic Development and Career Technical Education Reform Initiative, the overall goal of these funds is to strengthen California's workforce development efforts by linking the state's investment in economic development with its investment in public education and other services.[80] Through Senate Bill 70, funding will therefore be used for:

- "Quick Start" Partnerships, which will enhance linkages and pathways between secondary schools and selected economic and workforce development initiatives in community colleges.
- Projects that will grow program capacity and infrastructure.
- Projects that will strengthen Career Technical Education sectors at secondary schools.

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78 California Office of the Governor. (2007, May). *Revised Budget Summary, K–12 Education, Program Enhancements and Other Budget Adjustments.* Sacramento, CA.

79 Governor's Remarks at CTE Summit. (2007, March). Office of the Governor. Retrieved on March 13, 2007, from http://gov.ca.gov/index.php?/print-version/speech/5622/

80 Economic Development and Career Technical Education Reform Implementation Strategy for Senate Bill 70 (Scott) (2005, October). California Community Colleges Chancellor's Office. Retrieved on August 2, 2007, from http://www.cccco.edu/divisions/esed/sb70/implementation.doc

Portions of the funds will be used for community and regional consortium-based projects that bring together economic development initiatives and consortia composed of community colleges, high schools, and ROCPs. Twenty percent of the funds ($4 million) will be used to develop regional articulation councils with the charge of aligning seamless, nonredundant education and training in California. Another 12.5 percent of the funds ($2.5 million) are targeted for strengthening existing CTE sectors. Middle school career exploration projects are allocating 7.5 percent of the funding ($1.5 million). The remaining 6 percent of the funds ($1.2 million) are targeted at critical professional development and capacity-building needs.[81]

Assembly Bill 2448 (Hancock): Regional Occupational Centers and Programs. AB 2448, signed by the Governor on September 28, 2006, redefines the role of ROCPs in the CTE delivery system. The bill sets average daily attendance (ADA) limits on services to adult learners through ROCPs, implements several recommendations by the Legislative Analyst's Office to refocus ROCP services on high school students and ensure that courses are part of occupational course sequences, and makes various modifications to ROCPs.[82]

Assembly Bill 1802: The Middle and High School Supplemental Counseling Program. Among its provisions, this education finance bill establishes the Supplemental School Counseling Program ($200 million) and requires the governing board of a school district that maintains any of grades seven through twelve to adopt a counseling program that includes a provision for a counselor to meet with each student to review the student's academic and deportment records and explain his or her educational options, the coursework and academic progress needed for satisfactory completion of middle or high school, and the availability of career guidance activities. The educational options explained at the meeting may include CTE programs, including ROCPs.[83]

Senate Bill 52: Teacher Credentialing: Career Technical Education. A very important component in the efforts to rebuild and expand CTE opportunities is ensuring pupils have qualified instructors teaching CTE courses. Signed by the Governor in October 2007, SB 52 renames the designated subjects vocational education teaching credential the designated subjects preliminary career technical education teaching credential, streamlines and aligns the "designated subjects" to the 15 industry sectors established in the California CTE Model Curriculum Standards and Framework, and limits the barriers to part-time

81 Chancellor's Office California Community Colleges. (2005). *Request for Applications of New Grant Awards Instructions, Specification, Terms and Conditions Technical Assistance Center for Career Pathways and Work-Based Learning FY 2005–06*. Sacramento, CA.

82 AB 2448. (2006). California Legislative Council. Retrieved on September 17, 2006, from http://www.leginfo.ca.gov/pub/bill/asm/ab_2401-2450/ab_2448_bill_20060915_enrolled.pdf

83 AB 1802. (2006). California Legislative Council. Retrieved on September 17, 2006, from http://www.leginfo.ca.gov/pub/05-06/bill/asm/ab_1801-1850/ab_1802_bill_20060706_enrolled.pdf

service, thus facilitating the recruitment of interested individuals, such as industry representatives, as part-time instructors.

IMPLICATIONS FOR CTE

This CTE plan builds on a broad and deep foundation of both federal and state policies that, over the last ten years, have all increasingly emphasized the alignment of efforts toward the common goal of ensuring both individual success and economic vitality.

The current plan, with its vision for a statewide CTE system and its focus on the Carl D. Perkins funding, comes at a time of great interest in CTE — a time of tremendous opportunity. California and the nation are facing a "perfect storm" as economic, demographic, and educational forces create a potential shortage of skills that threaten both the state's economy and individuals' economic security.[84] Global markets and international competition are creating pressure to develop a highly skilled "knowledge" workforce. In addition, many "unexportable" well-paying technical jobs are going unfilled. With the imminent retirement of baby boomers, and lower levels of education and skills in prospective replacement workers, industry and policymakers are calling for significant improvements in education and CTE — including close alignment of education with workforce and economic development efforts — to maintain global competitiveness and individual economic stability.[85] California's Governor and Legislature are looking to CTE to help the state address these issues by keeping students engaged in secondary and postsecondary education and preparing students at all stages for ongoing education, employment, and long-term career success.

Given these heightened expectations, resources must be allocated and targeted to the K–12, adult school, and community college systems in ways that meet the priorities of the state and economy. Specifically, support for strategic planning, leadership, and implementation is necessary for CTE to rise to California's challenges and seize the opportunities offered.

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84 Educational Testing Service. (2007). *America's Perfect Storm: Three Forces Changing Our Nation's Future*. Princeton, NJ.

85 *Global Engagement: How Americans Can Win and Prosper in the Worldwide Economy.* (2006). U.S. Chamber of Commerce. Retrieved on July 15, 2007, from http://www.uschamber.com/NR/rdonlyres/e37qbxb3vp6opk4h7br5a5dthq37ou4xd6p55hzxerdmmy7byta5ggw6a4c3jz2gadlaabbiyskvn4vlfdu3 fxg2csa/Global+Engagement_rdc.pdf

CHAPTER THREE
BUILDING A HIGH-QUALITY CTE SYSTEM: A VISION FOR THE FUTURE

California is at an important crossroads as it continues to strengthen and expand the delivery of CTE and the skills of the California workforce. New demands from the 21st century workplace and rapid globalization, shifts in the state's demographics including immigration and baby boom retirements, and pressures to improve outcomes for K–12, adult school, and community college students, are creating a new urgency for increasing the pace of CTE reform begun in previous decades. Education must keep pace with the realities of a changing world.

Many new priorities are reflected in the new Carl D. Perkins Career and Technical Education Improvement Act of 2006, as described in the introduction to this document. In California, given vast regional differences and powerful economic and demographic forces, completion of high school and ongoing training or education has become essential to individuals' economic security and quality of life. With support from the current governor and many other policymakers, California intends to leverage Perkins-funded efforts to improve the entire CTE system — to move toward a more coherent, world-class delivery system that serves as the primary engine for the state's workforce and economic development, and as a key vehicle to engage students in learning.

The state's shifting economy has created a need for new knowledge, skills, and attitudes in the workplace. Employers view skills such as communication, critical thinking, problem solving, and teamwork as essential prerequisites for work. They also want employees with basic academic knowledge and skills, a high school or college degree, and appropriate levels of training or certification in their respective industries. Equally important, individuals must be self-motivated and able to continuously learn and manage their careers in response to ongoing and rapid change.

These skills are essential to success for all working adults, be they artists, scientists, nurses, or carpenters. They are, further, essential to society in addressing the challenges posed not only by a changing economy, but a changing world. CTE can therefore no longer continue to exist as a separate educational alternative; it must be woven into the very fabric of our educational delivery system. CTE — with its focus on rigorous and relevant content, hands-on learning, supportive relationships, and demonstrated outcomes — can set the standard for the kind of challenging, engaging, student-centered instruction that we know is required for students of all ages to succeed. Integrated thoughtfully with the arts, humanities, and sciences, and guided by basic principles of youth and adult development, CTE can complement and enhance learning in all disciplines, reinforcing rather than

compromising the tenets of a liberal arts education, while preparing students for their future endeavors.

In this spirit, the Resource Group used the development of the California Perkins Plan as a point of departure to envision an overall statewide CTE system that can engage and prepare students of all ages for fulfilling careers and lifelong learning, while addressing the workforce needs of the new economy. Policymakers and other stakeholders from across the state, including representatives from K–12, adult school, and postsecondary education as well as business and industry, developed a conceptual framework for moving toward this ideal CTE system. The framework — including a vision, mission statement, set of guiding principles, goals and needed actions — provides both the scaffolding for the state Perkins plan and a blueprint for strengthening CTE overall.

Vision

The vision for California's CTE system describes where the state wants to be in the future, sets the stage for building a new system, and inspires action.

CTE will engage every student in high-quality, rigorous, and relevant educational pathways and programs, developed in partnership with business and industry, promoting creativity, innovation, leadership, community service, and lifelong learning, and allowing students to turn their "passions into paychecks" — their dreams into careers.

Mission

The mission statement defines the role of CTE in propelling the state toward its vision.

The mission of CTE is to provide industry-linked programs and services that enable all individuals to reach their career goals in order to achieve economic self-sufficiency, compete in the global marketplace, and contribute to California's economic prosperity.

Guiding Principles

The guiding principles provide direction for CTE planning and implementation aligned to the vision and mission:

1. CTE is designed to increase education and career options for all students through career awareness, exploration, and occupational training programs.
2. CTE is deliberately intended to be available and accessible to all students, including students seeking immediate employment and those seeking higher education, students learning English, and students facing diverse challenges to economic success.

3. CTE is uniquely linked to the world of work, and requires the direct participation of, and partnership with, business, industry, and labor to maximize program quality and work-based learning opportunities for all students.

4. CTE programs are based on locally validated industry standards and curricular content, are responsive to labor market conditions, and provide all students with transferable skills necessary for success in future occupations.

5. CTE integrates academic and technical skills to maximize all students' educational and career outcomes.

6. CTE provides opportunities for applied, contextual learning that increases student engagement and supports improved achievement for all students.

7. CTE offers integrated curricula through sequenced courses, in multiple pathways, that bridge educational segments and prepare all students for both further education and career entry.

8. CTE programs develop student leadership, career management, and entrepreneurial skills.

9. CTE is dependent on comprehensive career guidance systems (K–16 and beyond) that inform and connect all students with the best possible career technical education opportunities.

10. CTE provides students, including incumbent workers, with instructional programs for employment and success in postsecondary education, as well as lifelong learning opportunities to maintain or upgrade their technical knowledge and skills.

11. CTE requires highly prepared instructors, administrators, and staff who are supported by sustained, high-quality, and relevant professional learning, including preservice, inservice, and ongoing professional development.

12. CTE is sustained through ongoing state, federal, and local investments, based on student participation and proven labor market and local workforce needs, that provide funds and resources to ensure CTE programs have modern industry standard facilities, equipment, instructional materials, and competitively paid CTE instructors.

13. CTE is accountable by means of measuring and reporting student course participation, completion of CTE courses and pathways, student and program certification, transition to postsecondary education, completion of postsecondary certificates and degree programs, short-term and long-term employment outcomes, and other measures necessary to ensure program quality.

Career Technical Education System Goals

Consistent with the vision, mission, and guiding principles presented above, the CTE Resource Group developed the following system goals that will guide CTE in California through 2013–14. The following goals provide direction for establishing objectives that are realistic, attainable, timely, and measurable:

1. All students completing high school will be prepared for success in postsecondary education — including community college, four-year college, apprenticeship, adult school, trade school, military, or other education and training — *and* for employment and long-term careers.

2. Adults in California will be prepared with the skills and knowledge needed to reach their career goals and maintain economic self-sufficiency, through access to information, guidance, support services, and educational opportunities offered in adult schools, ROCP, and community college programs.

3. Every student will have the opportunity to complete a rigorous CTE course or pathway prior to graduating from high school.

4. Age-appropriate career guidance information and experiences will engage all students throughout their K–14 educational experience in exploring, planning, managing, and reaching their educational and career goals.

5. All CTE courses and programs will be based on industry-endorsed standards, and designed to assist students in acquiring employment readiness and career success skills.

6. All CTE courses and programs will meet documented labor demands, including those of new and emerging occupations.

7. Statewide programs of study, dual enrollment, articulation of coursework, and related processes will be established to facilitate smooth student transitions from middle school to high school, and beyond, to postsecondary education and training.

8. Business, industry, and labor participation will be incorporated into all components of the CTE system at the local, regional, and state levels.

9. CTE teacher preparation programs and sustained professional development will be substantially expanded to ensure an adequate supply of highly prepared instructors. Teachers in all industry sectors and at all educational levels will have the skills necessary to provide rigorous and relevant instruction designed to meet diverse student needs.

10. Comprehensive data collection systems will be developed and coordinated to support ongoing program improvement, program accountability, measurement of system outcomes, and research.

Achieving these goals requires focused attention and strategic investments in both the CTE system overall and its component parts, at the state, regional, and local level.

The 11 Elements of a High-Quality CTE System

High-quality CTE encompasses 11 key elements, identified through the CTE needs assessment and Resource Group meetings:

- Leadership at all levels
- High-quality curriculum and instruction
- Career exploration and guidance
- Student support and student leadership development
- Industry partnerships
- System alignment and coherence
- Effective organizational design
- System responsiveness to changing economic demands
- Skilled faculty and professional development
- Evaluation, accountability, and continuous improvement
- CTE promotion, outreach, and communication

In addition, as mentioned in the introduction, key themes are infused throughout the elements:

- Building a demand-driven CTE system by responding to real workforce development needs and state, regional, and local labor market realities and priorities, through strengthened curricula, professional development, data collection and use, and direct linkages with business and industry
- Ensuring access for all students to CTE courses, pathways, and programs of interest; to highly skilled instructors; and to facilities and technologies that make all CTE options available regardless of location and enrollment limits
- Realizing the concept of lifelong learning, spanning from early childhood through adulthood's many transitions, in ways that promote career awareness and management as appropriate throughout the continuum

- Leveraging the current momentum of high school reform, with its renewed focus on rigor, relevance, relationships, and results, to promote CTE as a means to engage students, instill a passion for learning, and improve student outcomes

- Viewing CTE systemically by taking a broad perspective in planning for how CTE from kindergarten through lifelong learning can contribute to California's economic future, rather than focusing on discrete secondary or postsecondary programs or specific funding streams

- Promoting the continuous improvement of CTE services and impact through the alignment of standards, curricula, assessments, and professional development, as well as through support for local agencies in achieving performance goals for students' academic and technical skill attainment

The 11 elements are intentionally aligned with the principles developed by the CTE Resource Group, and also feature prominently in Perkins IV. All must be present to ensure that California can realize its goals of preparing all students for the future and ensuring a strong economy. In addition, these components define high-quality CTE at the regional and local level and are further mirrored in individual "programs of study" as defined by Perkins IV, or career pathways that may be implemented in specific schools and colleges. In other words, CTE is a system that requires leadership, high-quality practice, coherence, skilled practitioners, and accountability at all levels.

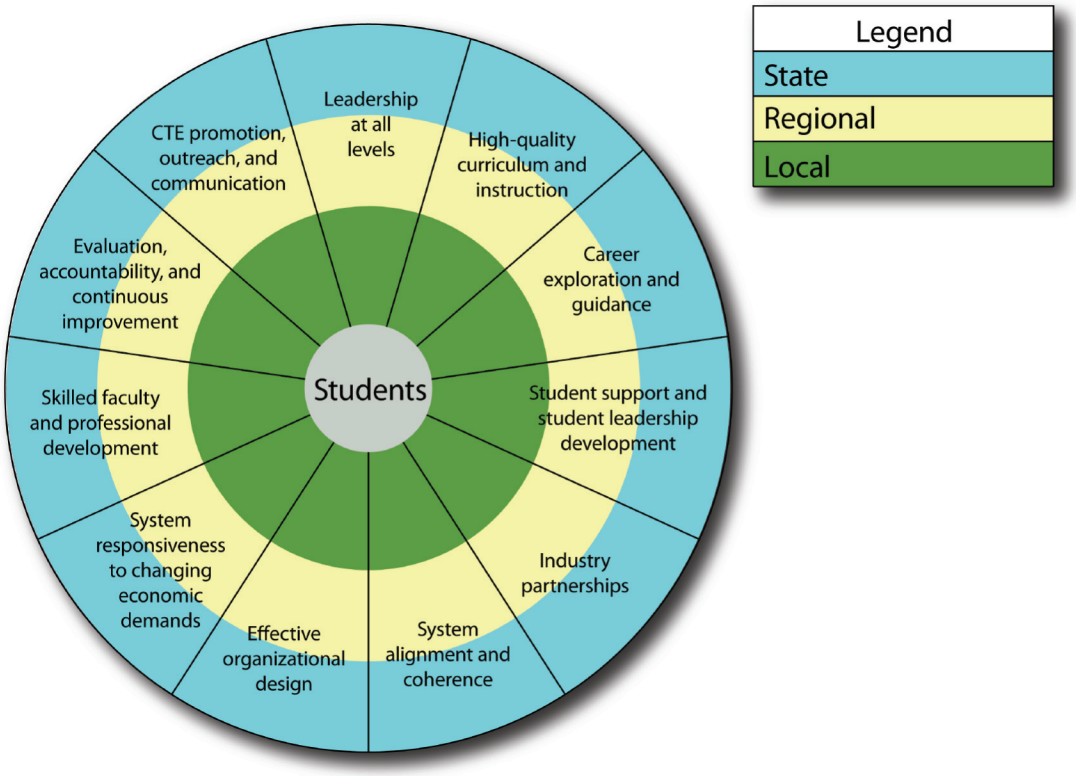
Implicit in the concept of levels of activity is the issue of division of responsibility among state, regional, and local agencies. Given that California, historically and by design, is a "local control state," in all of the areas of CTE activity there exists a dynamic tension or interplay between the need for local control and the need for state involvement and regional structures. Local control can foster timely responsiveness to local communities and promote innovation. Concurrently, state involvement is needed to develop policies, provide oversight, monitor the attainment of statewide goals and program effectiveness, and at the same time can promote economies of scale, the spread of effective practices, and more streamlined processes for students, faculty, and industry across the state. Additionally, in large part because of the size of California, a regional approach is often the most appropriate; it addresses the need for responsiveness, on the one hand, and coordination, on the other. This interplay across levels is evident in each of the 11 areas of activity and must be addressed at each stage of system development to ensure the most effective, equitable, and efficient use of resources.

In addition, to achieve the CTE goals stated above, not only must the specific responsibilities appropriate to each level be clearly delineated, but resources must be designated accordingly. Local and regional activities are supported through state apportionment and grant dollars, including Perkins funds and SB 70 funds. At the state

level, the CDE and the CCCCO must also be supported to exercise the leadership required to further develop and expand CTE for the benefit of all students.

Figure 8 below depicts CTE as a system that nests local activity within regional and state-level work, with each of the system elements operating at each level.

Figure 8. **CTE as a system that nests local activity within regional and state-level work**



What follows is a description of each of the system elements. Each description includes a definition of the element, a brief overview of current key activities, and a discussion of critical strategies required to move the system forward in that area. As with any system, the elements are interrelated. Therefore, while every attempt has been made to define each element as a discrete category of activity, in some cases, the associated strategies appear in several categories.

Leadership at All Levels

Institutional commitment and leadership at every level, including the institutions' governing boards, are vital to sustaining and expanding CTE. As in any system, effective

leadership is needed to articulate and spotlight the need for CTE, galvanize support and resources, ensure sound management and coordination, and facilitate continuous improvement.

DEFINITION AND SIGNIFICANCE

Leadership structures for CTE have changed significantly over the last 20 years, due to changing educational policies and enrollment levels. In addition, the K–12, adult school, and community college systems have differing leadership structures, reflecting each system's unique mission, requirements, and cultures. As stakeholders seek to build a more unified workforce development system, including seamless pathways that prepare all students for further education and careers, better alignment and coordination are paramount. This suggests that leadership structures in both systems may also need further support and alignment.

CURRENT KEY ACTIVITIES AND INITIATIVES

Leadership for CTE resides at all levels — state, regional, and local — in the K–12, adult school, and community college systems. Aligning efforts across systems to create seamless pathways requires a chain of leadership from the state to the classroom.

STATE-LEVEL LEADERSHIP

Currently, as described in Chapter One, CTE is overseen at the state level by the Joint Advisory Committee for CTE, consisting of three representatives each from the State Board of Education, representing the K–12 system and adult schools, and from the Board of Governors, representing the California Community Colleges. In recent years, the Governor, the State Superintendent of Public Instruction, and the Chancellor of the California Community Colleges have shown renewed interest in CTE, in recognition of the importance of career preparation and workforce development and of the role that CTE can play in student engagement and academic achievement.

Within CDE, the major responsibility for CTE resides in the Secondary, Postsecondary, and Adult Leadership Division (SPALD). The Director of SPALD also serves as the State Director for CTE. SPALD provides support and direction to LEAs regarding high school initiatives, educational options, ROCPs, adult schools, postsecondary preparation, and workforce development.

Additionally, division staff — called "subject matter specialists" — provide support and technical assistance to local agencies in the six major career areas that encompass all of the 15 industry sectors currently delineated in the California CTE Model Curriculum Standards, described in greater detail in Chapter One.

Leadership and support from CDE has enabled CTE faculty to develop standards-based integrated curricula, including "a-g" approved courses, and to implement model practices. The foundations laid with this technical assistance have also facilitated the creation of related career academies and other integrated programs in many high schools. CDE leadership in the career areas has also supported development of career technical student organizations (CTSOs). Leadership and technical assistance to the field are considered particularly important in CTE because CTE curricula must be updated frequently to respond to the changing needs of industry, limiting CTE instructors' ability to rely on textbooks or standardized materials in their classrooms.

In the community colleges, leadership for CTE resides with the Vice Chancellor for Economic Development and Workforce Preparation. The Vice Chancellor oversees the Economic and Workforce Development (EWD) unit and the Career Technical Education unit, each of which is led by a dean.

The Economic Development and Workforce Preparation Division (EDWPD) of CCCCO provides leadership and technical assistance to enhance the capacity of the community colleges in the areas of career education and workforce and economic development, including implementation of the California CTE State Plan.

The role of the EWD unit is to coordinate efforts in the community colleges to fulfill the needs of business and industry for a skilled workforce. The unit facilitates the community colleges' work with employers, advisory committees, and agency partners to identify — on a region-by-region basis — workforce education and training needs, including the needs of small businesses, and then to meet those needs in the most cost-effective and timely manner.

The Career Technical Education unit of the EDWPD focuses on program coordination, advocacy, and policy development with the K–18 workforce preparation and CTE systems. The CTE Unit is responsible for the community colleges' implementation of the Perkins Act, as well as for the development, dissemination, and implementation, with CDE, of the California CTE State Plan, and the preparation of annual performance reports.

The California Community Colleges' Academic Senate, within which CTE is fully represented, also plays a vital role in all statewide and local academic and professional matters. It develops, promotes, and acts upon policies responding to statewide concerns and serves as the official voice of the faculty of California Community Colleges in academic and professional matters. The Academic Senate strengthens and supports the local senates of all California community colleges.

The CCCCO has established 10 advisory committees, focusing on either discipline-specific (also called "subject"-specific) or cross-disciplinary issues, to ensure a process for direct linkages between faculty and administrators with representatives from business, industry, and labor on a statewide basis, as described in Chapter One. Recommendations from the advisory committees to the CCCCO have evolved over time into ongoing statewide discipline-industry and special project collaboratives that mirror the advisory committee structure.

Despite the recognition at all levels that subject matter specialists are vitally important and needed to ensure effective linkages and technical support with field practitioners, state operation funds are not sufficient in either the CDE or the CCCCO to make this a reality. In the past, such leadership was supported by Perkins funds, but reduced funding allocations for state operations have restricted the support available.

REGIONAL-LEVEL LEADERSHIP

A variety of K–12 programs and initiatives as well as professional development offerings are delivered statewide using the 11 regional divisions of the California County Superintendents Educational Services Association (CCSESA). In recent years, CDE has worked with the CCSESA Curriculum and Instruction Steering Committee and the high school subcommittee to implement regional projects, including high school reform efforts incorporating CTE, campaigns promoting the integration of CTE and academic instruction, and support for the creation of networks of schools engaged in improving instruction.

Regional approaches are also used in the delivery of CTE technical assistance and services to LEAs. For example, Agriculture Education is organized in six regions, and ROCP services are divided into five regions. Home Economics Careers and Technology is arranged in six regions and adult schools serve 13 regions. Each of these has evolved to serve LEAs based on the numbers of programs and students, the needs and dimensions of the programs, and the number of CDE staff available to support the regions. The Career Technical Student Organizations (CTSOs) are likewise divided into regions, with each having regional officers and competitions at the local, regional, and state levels. In addition, CDE works with other state agencies in delivering regional services, including the Employment Development Department, the Department of Health, the Department of Developmental Services, and the California Community College Chancellor's Office. These various regional structures have proven to be effective in supporting the large numbers of CTE programs and constituencies throughout California.

The community college system has a strong regional structure as well. Given the diversity of California's economy, the regionalization of industries such as agriculture, media, computer technology, and natural resources, and the state's geographic scope, the 109

community colleges have been divided into 10 regions and organized into 7 regional consortia. The consortia members "lead from the middle" by providing leadership to the colleges as well as contributing to statewide policymaking.

Each regional consortium serves as a network of education and training programs and services that bring CTE and economic development staff together for information sharing and problem solving. Supported with Perkins IV State Leadership funds, the regional consortia facilitate coordination and improvement of CTE programs and are a particularly effective and efficient structure for bringing statewide initiatives to the regional and local level through informational meetings, communication, training, and field-based feedback on an ongoing basis. Additionally, consortia services include, but are not limited to, ongoing assessment and regional/sub-regional planning, marketing, dissemination of information, collaborative exchanges, and coordination. The regional consortium is in a key position to promote collaborative partnerships and joint ventures among a wide range of business and industry partners.

LOCAL-LEVEL LEADERSHIP

K–12 leadership in CTE at the local level generally resides with district directors of CTE, ROCP directors and administrators, and/or adult school directors and administrators. In earlier years, the size and scope of the CTE programs in the larger districts were sufficient to justify the appointment of CTE-qualified staff members to CTE director and program specialist positions at the district level and program department chair positions at the school level. In recent years, shifting priorities have impacted funding for these positions or resulted in realignment of resources. In addition, retirements of CTE instructors and the absence of new recruits to CTE faculty or administrator positions are creating "leadership vacuums" in some programs.

At the community college level, individual community college districts, colleges, and their respective academic senates exercise leadership in their local communities. Occupational deans manage CTE in each college, and many deans participate in regional consortia, statewide advisory, and discipline-industry collaborative meetings along with faculty leaders from individual program areas. The deans lead by working collaboratively with college and individual program advisory committees that include local business and community leaders, occupational faculty, and staff. Together they develop strategies and workplans to address the local priorities for CTE program and/or staff development and improvement.

Partners, including industry representatives, members of the business community, and colleagues in other sectors, also provide leadership in CTE — in both segments and at

all levels — through advisory functions, advocacy activities, and their own strategic initiatives.

In looking at the K–12 and community college segments side-by-side, the K–12 system has tended to exercise leadership primarily through a centralized structure, paralleling the overall approach of the CDE. The community colleges, by contrast, rely more heavily on a regional approach and local control, resulting in a form of shared governance, supported by a state-level advisory structure. The common use of the "system office" to refer to the Chancellor's Office reflects this strategy.

With increased emphasis on CTE and program improvement, investment in all levels of leadership is paramount. Further, given the importance of aligning the K–12, adult school, and community college systems, useful leadership structures from each segment can inform development in the other.

NEEDED ACTIONS

The following strategies have been identified as critical to enhancing the leadership and development of CTE:

- Create a statewide CTE advisory committee for the K–12 system that meets and confers annually with the State Superintendent of Public Instruction to keep the Superintendent apprised of developments in CTE.
- Invest in statewide leadership development strategies that employ optimal combinations of staffing, advisory committees, and peer-to-peer learning opportunities to maximize each segment's capacity to provide high-quality leadership as well as support and technical assistance to the field.
- Allocate resources specifically to qualified "subject-matter" (career area) specialists at both the California Department of Education and the California Community College Chancellor's Office to provide leadership, facilitate communication, and coordinate peer-to-peer learning, professional development, advocacy, and industry engagement efforts within their career area; to conduct and coordinate review processes for accountability purposes; and to provide subject-matter technical assistance directly to the field when necessary to strengthen program area instruction.
- Establish agreements with higher education to ensure that leadership in CTE is included within the courses of study required for administrative credentials.
- Strengthen regional structures for the K–12 system, aligned with the existing community college regional consortia.

- Invest in the professional development of administrators at all levels regarding the benefits of CTE and the management of CTE programs within the larger context of educational improvement to serve all students.
- Invest in support for CTE leadership at the local level to ensure that CTE administrators, coordinators, and counseling and instructional leaders have sufficient time and resources to implement system improvements and work with their counterparts in other programs.
- Develop and engage leadership at all levels of partner organizations to encourage bottom-up as well as top-down participation.

High-Quality Curriculum and Instruction

CTE is a unique curricular area in education. It offers rigorous integrated technical and academic content, focused on careers that are intrinsically interesting to students, and is delivered through applied, performance- and project-based teaching strategies that facilitate understanding and mastery. It also instills essential transferable workplace and career management skills that students can draw upon over a lifetime of learning and career development. In addition, CTE is, by necessity, often taught in personalized learning environments — small classes, learning communities, student organizations, and worksites — that further augment the benefits of these programs. Finally, CTE programs are dynamic; curricula need to stay current with rapid changes in the workplace, requiring ongoing updates and learning on the part of CTE faculty.

High-quality curriculum and instruction in CTE includes the intentional reinforcement of the cognitive, academic, and technical rigor inherent in CTE[86] and the alignment of CTE with academic and industry standards. It also includes the integration of CTE and academic content through a variety of strategies that foster complementary approaches to teaching and learning — strategies that draw on the best of what both CTE and non-CTE disciplines have to offer.

DEFINITION AND SIGNIFICANCE

The importance of explicitly linking academic and CTE teaching and learning in ways that "increase student academic and career and technical achievement" is incontrovertible in Perkins IV. Explicit reinforcement of the academics embedded in CTE, and alignment of CTE with standards, can occur within a single CTE course. Integration of content across disciplines, by contrast, can take many forms and occurs most effectively through cross-disciplinary collaboration. It includes both the infusion of academic content and

86 Mike Rose. Institute for Democracy, Education, and Access, UCLA. (2007). *A Reflection on Career and Technical Education, Multiple Pathways, and the Academic-Vocational Divide.* Los Angeles, CA.

standards-based instruction into CTE courses and the incorporation of career themes, essential workplace skills, or work-based learning into academic courses. Given the complexity of the task, integration is facilitated by collaboration between CTE and non-CTE faculty, and among faculty and practitioners in the K–12, adult school, postsecondary, and business and industry sectors.

Integrated curriculum organizes the content of education in ways that cut across subject-matter boundaries and standards. The integration of CTE and non-CTE content is a strategy for increasing the rigor of CTE coursework and the rigor and relevance of non-CTE coursework. In other words, integrated curriculum is both academically and technically rigorous, providing students with opportunities to apply academic competencies in occupational tasks or career-related projects, and vice versa, leading to higher levels of both cognitive and technical skill. At the same time, it fosters student engagement and learning by helping students make the link between abstract theory and career-related interests.

The instructional strategies that support integrated curricula differ from conventional subject-matter instruction or the traditional CTE focus on technical skill development. They draw more broadly upon the essential transferable skills and attitudes that are the foundation of success in the workplace — problem identification, problem solving, self-regulation, teamwork, effective communication, follow-through, creativity, and confidence to make decisions, among others.

Linking the classroom to real-world work settings through work-based learning is another form of integration. Work-based experiences facilitate learning by promoting engagement, motivation, and relationships with adult professionals who model what is required to succeed in the workplace. Work-based learning, as well as other forms of integrated curriculum and high-quality CTE, accommodates various learning styles by teaching and assessing mastery in multiple ways, including the use of performance tasks. Finally, because standards of performance and behavior in the workplace are sometimes more rigorous than in classrooms, work-based learning can challenge students to achieve at higher levels.

With the expanded focus of CTE in Perkins IV covering programs that articulate to the baccalaureate level, and given the increased complexity of technical content in many career areas and the high rates of remediation for students entering the community colleges, integrated curriculum and instruction are increasingly applicable not only in secondary CTE and adult schools, but also community colleges and at the university level, as a means to facilitate learning. Indeed, the importance of lifelong learning in a rapidly changing and often unpredictable world suggests that strong foundational skills,

including academics as well as workplace competencies, are vital to both postsecondary and career success. High-quality CTE can provide this foundation.

In summary, high-quality CTE both incorporates academics and essential skills in its own curriculum and complements and enhances academic instruction delivered by other faculty. It highlights, reinforces, and strengthens academic content through learning activities that authentically represent the knowledge, skills, and attitudes needed to succeed in the workplace. Reinforcing academic skills through CTE allows students to assimilate knowledge in ways that are useful, interesting, and potentially remunerative, while building the technical skills that can lead to immediate or future employment.

CURRENT KEY ACTIVITIES AND INITIATIVES

California is committed to strengthening its CTE system through better alignment and integration of CTE and non-CTE curriculum and instruction at the K–12, adult school, and community college levels. It is directed to do so by Perkins legislation. It is also encouraged to do so in the California Education Code. In addition to the activities discussed below, "learning communities" that can facilitate CTE/academic integration have also been expanded; these efforts are further described under "Effective Organizational Design," later in this chapter.

K–12 ACTIVITIES

CDE policy, as codified in the California Education Code, stresses the importance of preparing all students for both postsecondary education and future careers. The California Education Code in Section 51220 specifically requires that districts serving students in grades seven through twelve provide courses in "Applied arts, including instruction in the areas of consumer and homemaking education, industrial arts, general business education, or general agriculture"; and "Career technical education designed and conducted for the purpose of preparing youth for gainful employment in the occupations and in the numbers that are appropriate to the personnel needs of the state and the community served and relevant to the career desires and needs of the pupils." These are in addition to providing courses in English, social science, foreign language, physical education, science, mathematics, and visual and performing arts.

The Education Code also specifically addresses and emphasizes the importance of curriculum integration. It directs school districts to provide courses that prepare students both for admission to postsecondary education and for entry to employment, and encourages integration of the two, as follows:

Section 51228 (a):

> *Each school district maintaining any of grades seven to twelve, inclusive, shall offer to all otherwise qualified pupils in those grades a course of study fulfilling the requirements and prerequisites for admission to the California public institutions of postsecondary education and shall provide a timely opportunity to each of those pupils to enroll within a four-year period in each course necessary to fulfill those requirements and prerequisites prior to graduation from high school.*

In Section 51228 (b):

> *Each school district maintaining any of grades seven to twelve, inclusive, shall offer to all otherwise qualified pupils in those grades a course of study that provides an opportunity for those pupils to attain entry-level employment skills in business or industry upon graduation from high school.*

Section 51228 (b) then stresses the importance of curriculum integration:

> *Districts are encouraged to provide all students with a rigorous academic curriculum that integrates academic and career skills, incorporates applied learning in all disciplines, and prepares all pupils for high school graduation and career entry.*

A number of policies, tools, and strategies have been developed to facilitate high-quality CTE curriculum and instruction in the K–12 system.

California CTE Model Curriculum Standards and Framework. In recent years, the state has made significant strides in furthering high-quality CTE, most notably with the adoption of the California CTE Model Curriculum Standards and Framework by the California State Board of Education in 2005 and 2007, respectively. The nationally recognized California CTE Model Curriculum Standards incorporate academic and workplace skills into the middle and high school curriculum for each of the 15 industry sectors. The standards include 11 foundation standards that students need to master to succeed at CTE and work:

1. Academics
2. Communications
3. Career Planning and Management
4. Technology
5. Problem Solving and Critical Thinking
6. Health and Safety

7. Responsibility and Flexibility
8. Ethics and Legal Responsibilities
9. Leadership and Teamwork
10. Technical Knowledge and Skills
11. Demonstration and Application

In addition, within each of the 15 sectors are two or more career pathways for a total of 58 pathways. The pathways are made up of coherent sequences of rigorous academic and technical courses that allow students to apply academics and develop technical skills in a given curricular area.

The CTE Curriculum Framework provides guidance for implementing the CTE Model Curriculum Standards. Written as a hands-on tool for education professionals and others with an interest in implementing a statewide standards-based CTE, the Framework provides context for the content delineated in the foundation and pathway standards. It is specifically designed to facilitate the development of programs, courses, lessons, and assessments in CTE and provides information on important implementation issues.

CTE Online. Based on the belief that CTE serves a vital role in reinforcing academic skills through contextualized, applied instruction, the CTE Online Web site (www.cteonline.org) was established to help practitioners articulate a clear and deliberate relationship between academic achievement and CTE. The site connects CTE educators and leaders to professional development tools that help establish the role rigorous academic skills play in industry and career-related coursework. It provides all of the tools necessary to help faculty identify and align CTE curricula with the academic skills commonly measured on state assessments: curriculum development materials, guidance, model curriculum examples developed by a cross-section of CTE teachers from across the state, and standards databases cross-referenced to the Standardized Testing and Reporting (STAR) and the California High School Exit Examination (CAHSEE) assessment systems.

Alignment of CTE Curricula with Eligibility Requirements for UC/CSU Admission. Another approach to integration is aligning CTE courses with the rigorous standards required of college preparatory courses. Currently, more than 5,600 CTE courses have been approved to satisfy the eligibility requirements for admittance to the California State University and University of California system, commonly referred to as the "a-g" requirements. This is fewer than 20 percent of all CTE course offerings, and most of the approved courses are in three areas: visual and performing arts (53 percent), college-prep elective (30 percent), and laboratory science (16 percent). However, more classes are added

each year, with the university systems and CDE offering guidance to CTE faculty about how to amend courses to meet the requirements. Of note, support in the agricultural career area through the Agricultural Vocational Incentive Grant Program, authorized in 1983 by California Senate Bill 187, has facilitated the integration of CTE and academic curriculum, with the result that 842 agriculture courses meet UC/CSU "a-g" requirements.

The Rigor/Relevance Framework. Secondary educators are also including contextualized and project-based learning in academic courses. One example, being implemented in 22 school districts in California, is the Rigor/Relevance Framework. Developed by the International Center for Leadership in Education, founded in 1991 by Willard R. Daggett, this framework assists educators in delivering instruction that facilitates integration of academic or cognitive skills with applied learning experiences, such as those offered by CTE programs.

California Resource Clearinghouse Library. Online tools and information about integrated curriculum can also be found at the California Resource Clearinghouse Library.[87] The California Resource Clearinghouse Library features a searchable database of materials such as books and videos that illustrate the relationship between classroom subject matter and real-world applications and help educators effectively develop integrated curricula. Resources are designed for use by faculty, staff, and partners in the K–12, adult school, and community college segments.

Work-Based Learning. Work-based learning is a key strategy for integrating academic and career technical education and ensuring that programs provide students the opportunity to meet high industry standards. Work-based learning, as described in Chapter One, is offered at the secondary level through Work Experience Education, ROCPs, California Partnership Academies and other learning communities, and adult schools. Adult schools, ROCPs, and Partnership Academies require connection of work-based learning to technical or academic classroom curricula, while Work Experience Education programs generally focus on career exploration and work readiness. Secondary students may also access work-based learning through local community college co-operative work experience programs.

Professional Development. Integrating academic subject matter and CTE often requires intensive professional development and "real-time" support for teachers who are typically not trained to combine content across disciplines. CDE staff with subject-area assignments, and county offices of education at the regional level, provide this support to teachers. In addition, CDE has conducted trainings in the implementation of the CTE Model Curriculum Standards and Framework and is planning ongoing training on the CTE

87 The California Resource Library, http://www.ca-clearinghouse.net/

Standards and Framework overall and by industry cluster, using a train-the-trainer model, with the expectation that all CTE programs will implement the standards even though they are currently not mandatory. As described above, CTE Online also provides electronic access to professional development resources. Finally, CDE contracts with educational service providers for professional development.

INTEGRATION EFFORTS IN THE COMMUNITY COLLEGES

The California Community Colleges' mission in Education Code includes both academic and career technical education, as follows:

> *To offer academic and career technical education at the lower division level for both recent high school graduates and those returning to school and to advance California's economic growth and global competitiveness through education, training, and services that contribute to continuous workforce improvement.*

While CTE at the community college level is currently most often designed to lead to immediate employment, there is increasing recognition that basic academic skills are required for all occupations, and that integrating CTE with "developmental education" courses holds promise for advancing the academic skills of many students, while providing the technical skills needed for entry to employment. In the area of English language acquisition, curriculum integration has been occurring for many years through "vocational English as a second language" (VESL), a strategy that has been demonstrated to be among the most effective for fostering learning of both language and technical skills.

The new emphasis in Perkins IV on articulation of CTE programs to the baccalaureate level and increased interest in integration in the California Community Colleges suggest that closer integration of CTE and non-CTE ("general education") academic programs requires increased attention, to ensure that students have the foundation skills to progress to four-year universities if they so choose.

Currently, all AA/AS degrees — including those awarded to students in both CTE programs and non-CTE programs — require general education as well as a major or area of emphasis. Most courses that are AA/AS degree applicable are also transferable to CSU (75 percent) and 64 percent are transferable to CSU or UC. Of those transferable courses in fall 2006 (100,798), 42,315 were CTE courses. The largest numbers of CTE transferable courses occur in the Business and Management (7,429), Family and Consumer Sciences (5,852), and Engineering and Industrial Technology (5,776) disciplines.

In addition, certificate programs of two years or less often include either UC or CSU transferable general education courses or applied academic courses that provide necessary foundational, academic, and general education skills for the occupational area. Short-term CTE programs often include contextual, foundational, and academic skills within CTE courses.

Online Support for Curriculum Integration. Numerous Web sites exist at the college level for integrating academic and CTE content. Many of these sites include resources, such as handbooks, presentations, and lesson suggestions for educators interested in combining classroom content with information on strategies for success in the workplace. For example, the Web site, 4faculty.org, an online professional development network, offers learning modules to assist community colleges with building integrated curricula. In addition to faculty resources with downloadable templates for teachers, the site allows community colleges to share news, policies, procedures, and teaching and learning materials with their faculty as well as other colleges.[88] When educators log in to the Web site, they are taken to a navigation area with a list of modules offering lectures, best practices, recommended reading, and tips on such topics as Building Your Syllabus, Effective Class Management Skills, and How People Learn.

"Work-Based Learning Connections" (WBLC),[89] an online resource for community college faculty, administrators, and local business partners, features an archive of the WBLC biweekly email newsletters. The newsletters are organized by categories relating to workplace success, such as Going Global, Experience the Workplace, The Changing World of Work, and Know How Skills. For example, one newsletter includes step-by-step lesson plans on particular career-related subjects such as branding, informational interviews, and why credit history matters to employers. Each issue of the newsletters also include teaching tips, activities, and links to other online documents that educators would find useful in connecting their college courses to careers.

Professional Development. In the community college system, the 10 advisory committees and the 7 regional consortia support the development of effective practices in both discipline-specific and cross-disciplinary issues.

Work-Based Learning. Work-based learning is offered at the community college level through Cooperative Work Experience Education, which links classroom curricula with experiences in the workplace. Occupational Work Experience is more closely tied to CTE

88 About 4Faculty. (2007). 4faculty.org. Retrieved on July 31, 2007, from http://4faculty.org/public/about4.htm

89 Work-Based Learning Connections. (2006). Retrieved on July 26, 2007, from http://www.wblconnections.com/qt.htm

coursework than General Work Experience, which is available to all students as a means to explore career options and develop general workplace skills.

Despite these efforts, work remains to ensure the highest quality programs. The CTE Model Curriculum Standards have yet to be fully implemented and educators have encountered a number of challenges to integration. The lack of time is a clear impediment; designated time is needed to plan, to meet with colleagues across disciplines, and to teach and assess using project-based approaches and performance tasks. A large inventory of easily accessible model curricula is also lacking. In addition, there is a need for more professional development, for both CTE and non-CTE instructors. CTE instructors need professional development to identify and reinforce the academics inherent in their technical areas and align their instruction with academic requirements of their institutions and industries; and non-CTE instructors need professional development to learn effective practices for teaching academic content in contextual ways.

The implementation of work-based learning is particularly challenging, especially at the secondary level. Challenges include: lack of time for faculty to develop and coordinate placements; lack of designated staff to develop and coordinate placements; lack of coordination between programs to ensure that work-based learning is linked to the classroom; lack of time in a conventional school schedule for students to participate; lack of paid workplace opportunities; liability and insurance issues; and the scheduling and logistics of transportation for students. In addition, most existing Work Experience Education programs operate independently of subject-specific CTE programs and currently offer general work experience, rather than vocational work experience that is connected to CTE curricula. While general work experience is important for providing basic workplace skills, more readily available vocational work experience would provide meaningful expansion of learning for students in CTE programs.

NEEDED ACTIONS

The following strategies have been identified as critical to high-quality CTE programs — to increasing academic rigor of CTE coursework, the rigor and relevance of non-CTE coursework, and the benefits of both in preparing all students for careers:

- Eliminate divisions between CTE and academic curricula, and between college bound and non-college-bound students at the secondary level, so that all students receive preparation for *both* ongoing education and work, including access to career exploration opportunities, development of essential workplace skills, and direct experience in a career area of choice.
- Ensure full implementation of the CTE Model Curriculum Standards and Framework through professional development, technical assistance, and monitoring.

- Consider the inclusion of CTE as a graduation requirement and engage stakeholders, including both CTE and non-CTE educators, industry, community members, parents, and students, in determining what aspects of CTE should be required for all students, for what purposes — career exploration, effective teaching and learning of academics, attainment of essential, transferable workplace skills, and/or technical skill development — and how this should occur.

- Systematically review policies and practices to identify barriers to integration.

- Provide designated time for collaboration between CTE and non-CTE faculty on the development of integrated curricula, lesson plans, and materials.

- Identify and disseminate model integrated curricula that have been reviewed for adherence to both academic and current industry standards, and are useful to both CTE and non-CTE instructors for increasing the rigor of CTE and the relevance of non-CTE courses.

- Expand professional development for CTE instructors, administrators, and other staff at both the district and campus levels, on the broad topic of reinforcing the academic rigor inherent in CTE courses and otherwise increasing the rigor of CTE.

- Expand professional development for non-CTE instructors, administrators, and other staff at both the district and campus levels, on the broad topic of integrating career themes and activities into their courses.

- Provide supplementary resource materials on the integration of CTE content and applied learning strategies into academic curricula and instruction to augment the core academic K–12 California Curriculum Frameworks.

- Continue to strengthen the communication between the University of California Office of the President and high schools and ROCPs on the requirements for "a-g" approval of CTE programs, with a focus on providing specific guidance and feedback to CTE faculty on their course proposals.

- Expand classroom-linked work-based learning and work experience education opportunities through strengthened industry partnerships, effective coordination with ROCP, adult schools, Work Experience Education, and Co-operative Work Experience Education programs, and a systematic review of policies and practices that create barriers to access, including insurance, liability, and other issues.

- Make externships or job shadowing opportunities in industry more readily available to both CTE and non-CTE faculty, counselors, and staff, enabling them to observe and experience the application of knowledge and skills in the workplace.

- Embed workplace and technical skills in adult basic education, GED, English as a second language (ESL), and development education (DE) curricula to enhance relevance and facilitate learning for students in these programs.

- Work with industry to expand industry-based certifications and licensure opportunities to promote programmatic rigor, students' technical and academic achievement, and student transitions to employment and further education.
- Support research and evaluation as needed to determine how CTE and integrated curricula impact student learning, graduation rates, preparation for careers, and other outcomes.

Career Exploration and Guidance

Career exploration and guidance are central to CTE. They provide students with access to information and experiences that allow them to envision a wide range of possibilities for their lives and to make informed decisions, both while in their educational programs and throughout their careers — decisions based both on their own interests, needs, and goals, and on a thoughtful assessment of opportunities.

DEFINITION AND SIGNIFICANCE

In the 21st century economy, it is expected that workers will likely change jobs, and possibly careers, multiple times during their lifetimes. In addition, new health care and employment policies and tax laws add complexity to employment transitions. In order to make these transitions successfully, individuals must be able to set goals, navigate the possibilities, identify appropriate opportunities, evaluate options, and make wise decisions. Above all, they must understand their own interests, skills, talents, and areas needing development, and know how to research their areas of interest and manage their own careers, accessing opportunities and support as needed, in order to continuously learn and upgrade their skills.

The process of career development is, in other words, the process of discovering one's interests and aptitudes — or one's passion — and then generating and seizing opportunities to bring that passion to life. This process evolves throughout childhood, youth, and adulthood in distinct ways and stages, beginning with open-ended exploration in the earliest years and progressing to goal setting and reevaluation in adulthood.

Career development and guidance within CTE encompasses both the services offered by counselors and career guidance staff and the career exploration that may occur through classroom-based, center-based, or work-based activities. Career exploration activities may range from simple reflection exercises, career-related research, assessments, informational interviewing, and speakers to workplace tours, job shadowing, mentoring, and work-based learning, where students have the opportunity to explore all aspects of an industry.

In addition, beyond self-knowledge and exposure to options, students of all ages need opportunities to develop essential transferable workplace skills. Such skills have been

enumerated over the last two decades, beginning with the development of the National Career Development Guidelines and the identification of the SCANS[90] skills, later with the articulation of "new basic skills,"[91] and more recently, with the compilation of the Partnership for 21st Century Skills. The latter include:[92]

1. Core subjects and 21st century themes, including core academic subjects supplemented with the following:
   - Global awareness
   - Financial, economic, business, and entrepreneurial literacy
   - Civic literacy
   - Health literacy

2. Learning and innovation skills
   - Creativity and innovation skills
   - Critical-thinking and problem-solving skills
   - Communication and collaboration skills

3. Information, media, and technology skills
   - Information literacy
   - Media literacy
   - ICT (information and communication technology) literacy

4. Life and career skills
   - Flexibility and adaptability
   - Initiation and self-direction
   - Social and cross-cultural skills
   - Productivity and accountability
   - Leadership and responsibility

A complete list of the skills enumerated by these various initiatives, along with the Foundation Standards presented in the California CTE Model Curriculum Standards

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90 In 1990, the U. S. Department of Labor, Secretary's Commission on Achieving Necessary Skills (SCANS) compiled a list of three sets of "Foundation Skills" (basic skills, thinking skills, and personal qualities) and five sets of "Competencies" (resources, interpersonal, information, systems, and technology); see Appendix A for the complete list.

91 In 1996, Murnane and Levy identified the "new basic skills" as including the ability to read at the ninth-grade level or higher; the ability to do math at the ninth-grade level or higher; and four new "soft skills" required for the workplace: the ability to solve semistructured problems where hypotheses must be formed and tested; the ability to work in groups with persons of various backgrounds; the ability to communicate effectively, both orally and in writing; and the ability to use personal computers to carry out simple tasks like word processing. R. J. Murnane, & F. Levy. (1996). *Teaching the New Basic Skills: Principles for Educating Children to Thrive in a Changing Economy.* New York: The Free Press.

92 *Framework for 21st Century Learning.* (2007). The Partnership for 21st Century Skills. Retrieved on November 5, 2007, from http://www.21stcenturyskills.org/index.php?option=com_content&task=view&id=254&Itemid=120

and the work readiness skills recommended by Equipped for the Future, is provided in Appendix A.

These kinds of essential workplace skills are often best learned through direct experience, including projects, simulations, school-based enterprises, internships, and jobs. Such experiences can be offered in classrooms, through career technical student organizations (CTSOs), in the community, and in the workplace. Where available, career pathways offer these opportunities through contextual learning experiences. The interplay of exploration, reflection, and direct experience with feedback and guidance offered by staff, teachers, mentors, employers, and peers offers rich opportunities for students to learn about themselves as they learn about the world and how to make their way through it.

CURRENT KEY ACTIVITIES AND INITIATIVES

California offers career exploration and development opportunities to students in a number of ways and support for this has grown in recent years.

COUNSELING AND CAREER GUIDANCE

Many high schools and community colleges have career centers that provide career-related materials and a range of services, from career assessment to job search and preparation activities. High school career centers also issue work permits, while most community colleges have separate job placement services. In addition, many counselors in both segments offer career-related support combined with academic counseling. Recent legislation is supporting an increase in the number of counselors available at the K–12 level, along with a requirement that counselors provide information to students about CTE programs and courses needed for UC/CSU admission, in addition to information about services to help students pass the California High School Exit Exam.

ROCPs also provide counseling and guidance in CTE. They do so in several ways. Some ROCPs hire and maintain their own counseling staff and provide services themselves. Others contract with participating districts for partial use of school-based counselors, and still others use a combination of ROCP and outside services.

California Partnership Academies, career pathways, and career-focused small learning communities offer curriculum that integrates academic and career technical education and provide student workplace experiences that allow students to explore and prepare for the career areas in which they are interested.

The California State Budget Act of 2006 (AB 1802, Chapter 79) amended the California Education Code to ensure that students in grades seven through twelve receive counseling services. Subsequently, California published *The California Results-Based School*

Counseling and Student Support Guidelines to help counties, districts, and schools review and strengthen their existing school counseling and student support programs or to create such programs where none exist. The guidelines address the three domains of school counseling: academic, career, and personal/social. The purpose of the career domain is to help students make a successful and lasting transition between school and the world of work and from job to job across a lifespan. The following three areas of proficiency are delineated:

- Proficiency A: Students will acquire the skills needed to explore, create, and discover life and career options.
- Proficiency B: Students will use strategies to achieve future career goals that promote individual success and personal satisfaction.
- Proficiency C: Students will master skills that assist in maintaining and/or advancing careers.

The Governor's 2005–06 budget called for expanded career technical educational opportunities for middle school as well as high school students and improved linkages between the career technical curricula of the high schools, ROCPs, adult schools, and community colleges. Toward those objectives, Senate Bill 70 (Scott) established the Career Technical Education/Economic and Workforce Development Pathways initiative. One of the key objectives of SB 70 is to support projects that create, improve, or expand middle school career exploration and awareness activities, programs, curricula, and/or events that can be replicated regionally or statewide. Projects develop curricula for career awareness and exploration strategies.

In addition, students and transitioning adults in California have access to a wide network of One Stop Career Centers where the Employment Development Department, the Department of Vocational Rehabilitation, ROCPs, adult school programs, community colleges, and numerous community-based agencies are co-located to provide state-of-the-art universal access to career services, with intensive services for those meeting economic thresholds and other criteria. To serve youth, local workforce investment boards contract with agencies that provide youth with career exploration and development services linked to education.

CAREER-RELATED TOOLS AND RESOURCES

California has also established the California Career Resource Network (CalCRN)[93] which provides students throughout the state with a range of online and hard copy resources and materials. The CalCRN Web site[94] offers various materials such as planning guides and assessment tools as well as links to job listing resources, job search preparation guides, and career development information specific to California, including skills and degrees required for many career areas and specific occupations, from agriculture to zoology.[95] In addition, in early 2005, CalCRN developed The Real Game California, which incorporates California economic and workforce information and gives students many of the essential skills to become self-sufficient, career self-managers for life. This career management curriculum is aligned with existing standards, including: the California Academic Content Standards; the California CTE Model Curriculum Standards; Equipped for the Future Content Standards for Adult Literacy and Lifelong Learning; National Career Development Guidelines; American School Counselors Association (ASCA) National Standards for Student Academic, Career, and Personal/Social Development; and the SCANS skills and competencies.

In addition, a number of online resources exist that offer materials about how to implement career development programs and courses. The California Resource Clearinghouse[96] offers a free online library where educators can search for and borrow books, periodicals, pamphlets, worksheets, and various media pertaining to career development in the classroom and career centers. Additional online resources are available at School and Beyond,[97] a Web site that links career exploration and development curricula for students of all ages, in addition to users of information and tools to support integrated curricula and work-based learning.

The Employment Development Department's Labor Market Information Division[98] also provides in-depth information about careers, job availability and earnings, categorized specifically for educators and job seekers. Additionally, resources are available through

93 CalCRN is a state agency funded with State General Funds and Carl Perkins Funds to provide all persons in California with career development information and resources to enable them to reach their career goals. CalCRN policy is set through an advisory committee comprised of the following agencies: California Department of Education; California Workforce Investment Board; Chancellor's Office of the California Community Colleges; Department of Corrections and Rehabilitation; Department of Developmental Services; Department of Rehabilitation; Department of Social Services; and Employment Development Department.

94 California Career Resource Network (CalCRN). http://www.californiacareers.info

95 California career development information. http://www.careerzone.org

96 The California Resource Clearinghouse. http://www.ca-clearinghouse.net/

97 School and Beyond! http://www.schoolandbeyond.org

98 EDD Labor Market Information Division. http://www.labormarketinfo.edd.ca.gov

the community college discipline-industry collaborative Web sites where curriculum, materials, and effective pedagogies are shared, as well as information about student participation in industry-sponsored events.

IDENTIFYING THE ESSENTIAL SKILLS THAT ALL STUDENTS SHOULD POSSESS

California has made great progress in the last several years in highlighting the importance of essential transferable workplace skills. In 2005, the State Board of Education adopted the California CTE Model Curriculum Standards, which include 11 foundation standards that all students need to master to be successful in career technical education and in the workplace. These standards are similar to the competencies described in the June 1991 report issued by the U.S. Department of Labor, Secretary's Commission on Achieving Necessary Skills (SCANS), referred to as the SCANS skills. The foundation standards are uniform in all sectors, although the subcomponents differ. As described above, they cover the 11 areas considered to be essential to all students' success:

1. Academics
2. Communications
3. Career Planning and Management
4. Technology
5. Problem Solving and Critical Thinking
6. Health and Safety
7. Responsibility and Flexibility
8. Ethics and Legal Responsibilities
9. Leadership and Teamwork
10. Technical Knowledge and Skills
11. Demonstration and Application

Despite the systems that have been put in place, work remains to ensure that all students receive the career exploration and guidance services they need. To date, career exploration opportunities have not been widely available before or during the high school years. At the community college level, while career centers exist, students do not always know about the services offered. In addition, exposure to off-site career exploration may be limited by coordination and logistical challenges. Finally, many students do not enroll

in CTE or integrated programs at all due to competing claims on their time; for these students, access to career exploration opportunities is particularly limited.

With regard to capacity, most teacher and counselor preparation programs do not offer significant exposure to career-related issues, whether training in integrated, career-themed curriculum development and pedagogy, or training in career development theory and practice. Parents, also, are not often engaged by schools in career development discussions and activities.

Finally, the California CTE Model Curriculum Standards and Framework, while adopted by the State Board of Education, have not yet been implemented in all CTE programs and, while the SCANS skills are now widely recognized, there is still no widespread consensus among educators-at-large regarding the knowledge and skills — beyond minimum literacy and math — that all students should have by the time they graduate from high school.

NEEDED ACTIONS

Stakeholders have determined that the following strategies are critical if the state is to attain its goal of providing all students with opportunities to explore career options and develop crucial workplace and career management skills:

- Build upon the consensus achieved through the development of the California CTE Model Curriculum Standards and Framework and the Governor's support for CTE to establish a common understanding of essential skills among all stakeholders, including both CTE and non-CTE educators at the K–12, adult school, community college level, parents, industry, and community members. Essential skills include transferable skills that all individuals need in order to navigate through life and multiple career changes, such as learning and thinking skills, life skills, innovation and creativity, entrepreneurship, and "21st century content," in addition to other employability and career management skills.

- Develop a comprehensive career guidance system — K-adult — including such components as age- and stage-appropriate systematic assessment, guidance and goal-setting opportunities, coordination with instruction and instructionally-based career exploration, coordination with advisory committees and industry-sponsored forums, and cross-system, cross-segmental collaboration.

- Offer an array of career exposure and exploration activities at every grade level. Beginning at the middle school, these activities should be linked to existing programs, including academic programming and integrated pathways, to expose students to multiple options, motivate learning, and help students understand the preparation required for a variety of career alternatives.

- Promote strategies that engage peers, mentors, and parents in exploration and career development activities.

- Provide students with access to up-to-date employment-related information, including information on nontraditional careers, and facilitate transitions to employment, especially for students facing barriers.
- Ensure that counselor preparation programs provide counselors with knowledge and skills in the area of career guidance and exploration, and that teacher and administrator preparation programs expose future teachers and administrators to career development and workplace issues.
- Provide professional development for counselors, instructors, and administrators in the theory and practice of career development, including direct exposure to the workplace through job shadowing and externships.
- Disseminate career exploration and rigorous integrated CTE/academic curricula through online tools and professional development.
- Promote career exploration and the development of essential workplace skills (such as SCANS) in after-school and out-of-school programs.
- Promote work-based learning and work experience education as a strategy for both career exploration and the development of essential workplace skills (such as SCANS skills), in addition to the development of technical and academic skills.
- Link the career exploration and guidance system with regional economic development initiatives and One Stop Career Centers.

Student Support and Student Leadership Development

Students in CTE programs — indeed, all students — come to schools and colleges with a range of needs that must be addressed in order for them to succeed in their studies and transition to future endeavors. Needs may range from transportation, child care, and translation services to mentoring and coaching for success in highly challenging CTE competitions and projects or with transitions to new career opportunities. This section addresses the range of services and programs that support and reinforce technical and academic learning, with an emphasis on the relationships — organizational or personal — that make these programs work. It also includes outreach to students for enrollment in CTE, which, in itself, promotes learning and success. Stakeholders emphasized the importance of enrolling students into CTE programs as a means to engage them and facilitate learning, and the subsequent importance of providing the support services necessary to ensure their success.

DEFINITION AND SIGNIFICANCE

Student support and leadership development take many forms, and include:

- Outreach programs
- Referrals and links to services both on and off campus
- Instructional support (e.g., tutoring; vocational English as a second language programs)
- Support for child care, transportation, and other needs
- Recruitment of students into career technical student organizations (CTSOs)
- Coaching, career development, mentoring, and leadership development through CTSOs
- Assistance with transitions to employment
- Adult basic skills and remedial education programs
- Personalized learning environments
- Flexible and individualized technology-based instruction
- Professional development to assist faculty and staff in working effectively with special populations

For students to succeed in an age of increasing classroom rigor and competition for employment, proactive student support services are of paramount importance. In particular, attention must be invested in addressing the needs of special populations, defined in Perkins IV as "individuals with disabilities; individuals from economically disadvantaged families, including foster children; single parents, including single pregnant women; displaced homemakers; individuals with limited English proficiency; and individuals preparing for nontraditional fields." Given the large percentage of students falling into at least one of these categories, services to these special populations are vital. Unlike previous versions of the Perkins Act, Perkins IV imposes an additional requirement that data on the achievement of special populations be disaggregated by subpopulation, to enable administrators to identify areas of needed support for each group.

For each of the first five special population groups (students with disabilities, students with limited English proficiency, displaced homemakers, single parents, and economically disadvantaged students), unique needs can be identified. The sixth category, students in nontraditional occupations for their gender, does not identify a characteristic of the population, but rather a career choice of students who have enrolled in CTE courses or programs that lead to employment in occupations nontraditional for their gender. Recruiting students — particularly women — into nontraditional occupations is, in itself, a "support strategy"; recruiting men into high demand occupations such as nursing is also important.

Studies have shown that special population students experience multiple challenges at different phases during their enrollment and progress in CTE programs. Among the difficulties cited are few role models; competing demands of work and family obligations; inadequate child care; logistical issues such as difficulty with transportation; academic challenges; and limited English proficiency. Systemic barriers include limited sharing of information about available support services, lack of training and professional development for CTE program staff on effective strategies for serving special population students, insufficient numbers of classroom aides, lack of materials in languages other than English, and inadequate time to cover course content.

CURRENT KEY ACTIVITIES AND INITIATIVES

Beyond implementing long-standing targeted programs such as Workability, a work experience program for students with disabilities, and CalWORKS, which provides education and training to individuals transitioning from welfare, California is carrying out numerous initiatives to support student learning, skill development, and success in the workforce. Some of these include focused attention to the needs of special populations through the work of the Joint Special Populations Statewide Advisory Committee; a particular emphasis on nontraditional occupations; an increasing emphasis on services targeted to incumbent and re-entering workers; support for Career Technical Student Organizations (CTSOs); and the personalization of learning environments. Each of these is discussed below.

THE JOINT SPECIAL POPULATIONS STATEWIDE ADVISORY COMMITTEE

The Joint Special Populations Statewide Advisory Committee (JSPAC) is a joint effort of the CDE and the CCCCO to develop the academic, technical, and essential workplace skills of secondary and postsecondary special population students. Perkins funds support the JSPAC in carrying out the following activities:

- Identifying and disseminating specialized curriculum materials and resources for support services to special populations, including books, videos, software, and other materials for students or for professional development of faculty and staff
- Expanding linkages with other programs in which equity and service to special populations is mandated or critical to program success; sharing information on best practices; coordinating and leveraging resources to maximize the number of students who can be served; and incorporating the expertise, resources, and support of those having a stake in ensuring all students succeed in school and the workforce, including business and labor and community-based organizations

- Continuing to expand the relationship between the CDE and CCCCO in serving special population students and involving other staff in all Perkins planning and implementation

- Linking with other state and federal agencies serving special populations and offering jointly developed professional development and technical assistance

NONTRADITIONAL CAREERS

Nontraditional careers for women offer 20-40 percent higher wages than traditional women's jobs, and a dramatic increase in earnings over a lifetime. Yet, since the loss of gender equity funding in Perkins III, services for women in special populations groups has declined across the nation. California has nevertheless provided consistent support for secondary and postsecondary nontraditional career education through its use of the maximum level of Perkins funding allowable for this purpose. Particularly effective are professional development and training for LEAs that focus on career guidance, outreach/recruitment, and retention strategies to promote and encourage all students, especially women, to pursue high skill, high wage, or high demand nontraditional occupations.

SERVICES AND STRATEGIES TARGETED TO INCUMBENT WORKERS AND THOSE RE-ENTERING THE EDUCATIONAL SYSTEM

The California community colleges are increasingly committed to meeting the education and training needs of incumbent and re-entry workers. While not considered by statute to be members of a special population, these students need support services that may differ from other students, including counseling services that help them identify their transferable skills or targeted training to help them master new technologies. They may also need referrals to support services offered by other agencies; access to open-entry/open-exit programs, weekend and evening classes; and distance learning opportunities that facilitate learning outside the workday.

CAREER TECHNICAL STUDENT ORGANIZATIONS (CTSOs)

A primary vehicle for offering support and personalization, as well as leadership development opportunities, is through the extensive and deeply rooted system of national CTSOs, already mentioned as structures that facilitate curriculum integration and career exploration. CTSOs are available to both secondary and postsecondary students, and currently exist in California in the five traditional CTE career areas listed below; a CTSO does not yet exist for students in the Arts, Media, and Entertainment area, as this is a relatively new career area. [99]

99 See Chapter One for a list of the six major career areas and the distribution of the 15 industry sectors among them.

- Agriculture Education: Future Farmers of America (FFA)
- Business and Marketing Education:[100] DECA: An Association of Marketing Students,[101] and Future Business Leaders of America (FBLA)
- Health and Human Services: Health Occupations Students of America (HOSA)
- Home Economics Careers and Technology (HECT): FHA-HERO[102]
- Industrial and Technology Education: SkillsUSA[103]

CTSOs provide students in CTE programs with carefully structured leadership development opportunities, career skills, opportunities to participate in competitive career-related events, and community service opportunities. They also offer connections with peers, alumni, and adults who can serve as mentors, counselors, and conduits to prospective employers.

Community colleges also offer numerous discipline-focused national, statewide, and local organizations to provide leadership opportunities for students. Such organizations provide access to business and industry leaders and opportunities for competitions within the discipline or industry area. CTSOs in the postsecondary environment often focus on specific occupational areas (e.g., Interior Lighting, Child Development, Media Arts) and often include both campus organizations and professional organizations related to the discipline. Economic Development Initiative regional centers and community college collaboratives often fund statewide competitions to support student professional development. For example, the Media and Entertainment-funded Centers have conducted media arts competitions in which students were recognized in more than 50 categories, such as digital imaging, interactive multimedia, and computer modeling. Students are also encouraged to become involved in departmental professional organizations and campus organizations, activities, and competitions. Participation contributes to students' career development and offers the opportunity to network with peers and professionals. In addition, students often are able to get scholarships and attend monthly professional meetings and seminars that are helpful to their studies.

The success and longevity of CTSOs is owed in large part to industry involvement. Given their interest in ensuring that students are well-prepared to enter the workforce, industry

100 Includes the Information Technology industry sector.

101 DECA was formerly known as Distributive Education Clubs of America, but changed its name to Focus on Marketing, Leadership, and Entrepreneurship.

102 FHA-HERO was formerly known as Future Homemakers of America-Home Economics Related Occupations, but changed its name to decrease the emphasis upon the word "homemaker" and increase the emphasis on leadership and career development.

103 SkillsUSA was formerly known as VICA (Vocational Industrial Clubs of America).

organizations provide financial support, sponsor competitions, and offer students work-based learning and career exploration opportunities.

In addition, in the agricultural sector, California's Agricultural Vocational Incentive Grant Program helps to support the agricultural CTSO, the Future Farmers of America, through assistance with student dues, support for student competitions, and other means.

Given the importance of CTSOs in CTE, California is dedicating $2 million annually in SB 70 funds over the next five years for curricular activities for secondary and postsecondary CTE student organizations to strengthen and reinforce leadership skill development and participation.

PERSONALIZED LEARNING ENVIRONMENTS

The general benefits of learning communities, career academies, and pathways have been discussed in the context of integrated curriculum and faculty collaboration. An additional and essential feature of these learning communities is that they personalize learning and ensure that students are known and supported by all the community's faculty and staff. Efforts are underway in the K–12, adult school, and community college systems to expand the number of learning communities available to students. Learning communities are discussed further in "Effective Organizational Design."

In sum, California provides extensive targeted services to students with a variety of needs. Schools and colleges also offer access to CTE student organizations and personalized learning environments. The challenge for CTE educators is ensuring that students have access to these programs and services, as well as to CTE programs that, in themselves, provide support and personalization. Identifying student needs is complex and time consuming, and resources to conduct outreach, offer CTE materials in languages other than English, or provide needed academic support and remediation are limited. However, all of these supports are necessary if students are to succeed, especially in programs that are increasingly rigorous.

NEEDED ACTIONS

Stakeholders have identified the following strategies as critical for improving support services, personalization, and leadership development opportunities for students in CTE programs, with the aim of ensuring that all students succeed in an era of increasing CTE rigor and workplace complexity:

- Ensure that all CTE programs and curricula are designed to meet the needs of both special population students, including special education students and English learners, and the general student population

- Provide career exposure and exploration in the early grades to engage students, emphasizing career awareness about high wage, high skill, or high demand occupations
- Expand outreach to special populations to ensure their awareness of CTE course offerings, pathways, and learning communities, as well as high skill, high wage, or high demand careers, including nontraditional careers
- Expand and strengthen Vocational English as a Second Language programs connected to specific CTE programs and make curricular materials in languages other than English more readily available
- Provide professional development to faculty in differentiating instruction and working with special populations
- Promote CTSOs as a student engagement and support strategy and embed leadership development in all CTE courses
- Improve linkages to and coordination of support services for students in CTE programs, especially transportation and child care services
- Redesign existing programs to allow for more open-entry/open-exit options for students and innovative distance learning approaches
- Create career ladders that accommodate the non-academic demands faced by all students, including those designated as members of special populations, and incumbent or re-entry workers seeking education and training
- Expand opportunities for students to practice job-readiness skills such as networking and interviewing, and provide support to work-based learning placements to ensure successful experiences
- Expand and strengthen professional development opportunities for program staff (administrators, instructors, counselors, and other staff) to learn how to better assess and respond to the needs of special populations
- Weave support services into the fabric of instructional delivery through the expansion of learning communities and pathways that offer opportunities for more personalized teaching and learning
- Explore opportunities to serve the needs of students in continuation schools, court and community schools, and juvenile correctional facilities by linking students to open-entry/open-exit programs in local ROCPs, adult schools, and community colleges and providing career guidance and exploration opportunities, including internship opportunities and mentorships

Industry Partnerships

The unique link between industry and education is an essential feature of CTE and distinguishes it from other types of instructional designs and models. Industry partners play crucial roles in ensuring that CTE curricula are current and relevant and that students and educators have opportunities to explore their interests and learn important skills in the workplace.

DEFINITION AND SIGNIFICANCE

Business and industry, including labor and trade organizations and apprenticeship programs, work with the education community through advisory committees, forums, and other educational and training partnerships to inform CTE program design, instruction, and assessment. These partnerships ensure CTE's relevance to the workplace and facilitate the placement of students and teachers in work experience, work-based learning, job shadowing and internships; skills identification and certification; consultation on career pathways and program design; career exploration in all grades and levels; information sharing on labor market demands and economic trends; and teacher recruitment and professional development.

CURRENT KEY ACTIVITIES AND INITIATIVES

Most industry engagement in CTE occurs through participation in advisory committees or other advisory mechanisms, through the initiatives of the community college Economic Development and Workforce Development Programs, and through opportunities offered to students and educators for direct exposure to the workplace.

ADVISORY COMMITTEES

Currently, the primary formal interface between business and industry and CTE programs is through various advisory committee structures. Specifically, all ROCP and many K–12 CTE programs have advisory committees, with ROCP requiring over 50 percent industry representation. The community colleges have an established network of statewide advisory committees in each of six broad career areas in addition to local level advisory committees for individual programs.

Advisory committee members provide input on required workplace skills, on the local labor market, and on specific technical skill standards. To a lesser degree, they also assist with recruiting fellow employers to provide opportunities such as speakers, job shadowing, and internships, assist with resource development and/or contribute resources

directly, and assist with advocacy.[104] All advisory committees meet at least annually, but many meet twice a year and some meet quarterly or monthly.

The consistency and depth of industry participation on the advisory committees vary widely from program to program. The primary challenge to industry engagement for educators is the time required to recruit and nurture meaningful relationships. Industry also faces the challenge of time, along with challenges in communication with educational institutions when there is no single point of contact.

ECONOMIC DEVELOPMENT INITIATIVES

As mentioned in Chapter One, the Economic and Workforce Development Programs at the community college level also partner extensively with industry to identify labor market needs and priorities in regional markets and promote the development of curricula and programs to address those needs. They operate a network of 115 regional delivery centers, which work with CTE programs, and address industry-specific and other statewide strategic priorities, organized into 10 initiatives:[105]

- Advances Transportation and Energy
- Applied Competitive Technologies/Manufacturing
- Biotechnologies
- Environmental Safety, Health, and Homeland Security
- Health Care Careers
- International Trade Development
- Multimedia and Entertainment
- Small Business Development
- The Workplace Learning Resources
- Business and Workforce Performance Improvement

For example, the Multimedia and Entertainment initiative is a statewide network of community college educators working in strategic partnerships with industry and community organizations to identify and meet California's workforce and economic

104 *A Statewide Assessment of California's Career Technical Education System*. (2006). San Francisco, CA: WestEd

105 Attention is also being given to fostering information technologies, nanotechnology, intelligent transportation systems, logistics, and the hydrogen economy.

development needs in the multimedia and entertainment industry. The initiative has a director and six regional centers working with affiliated colleges throughout California. The initiative is committed to creating environments in which students can achieve artistic excellence and develop technological expertise for careers in the communications, entertainment, and interactive learning industries. As one of its strategies, it supports student competitions to recognize outstanding community college and high school student work in 14 categories of digital and media arts.[106]

WORK-BASED LEARNING FOR STUDENTS, INSTRUCTORS, AND COUNSELORS

Access to work-based learning is extensive in the community colleges through Cooperative Work Experience Education programs, but more limited at the high school level except as available to secondary students through ROCPs. Opportunities for teachers and counselors to observe or experience the workplace directly are even more limited, but highly valued by those who have access to these opportunities. Access to such opportunities may be particularly important for non-CTE instructors and counselors who, in many cases, have had limited work experience outside of education.

There are several key challenges to expanding student access to work-based learning. The most pressing is the time required to cultivate relationships with prospective employers and the complex logistics involved in placing and monitoring students in the field. While Work Experience Education, ROCP, adult schools, and community college Cooperative Work Experience Education instructors routinely perform these tasks, these functions are not part of the job description for most secondary instructors. Additionally, students have limited time to participate in work-based learning, given school scheduling issues and other priorities. Limited time also impedes faculty and counselor involvement in workplace learning. Liability and insurance issues also create barriers to expanding work-based learning for high schools and community colleges. For its part, industry lacks access to central coordination for efficient contact with educational institutions.

NEEDED ACTIONS

Stakeholders have identified the following strategies to strengthen partnerships between CTE programs and business and industry for advisory purposes and work-based learning and other direct forms of engagement:

- Create, expand, and support statewide advisory committees covering all 15 industry sectors to facilitate engagement of business and industry in those sectors and enlist their advice regarding state policies and practice, curriculum, assessment of

106 For more information on the Multimedia and Entertainment Initiative, see http://www.cccmei.net/

students, technology, current and future employment trends, and new and emerging occupations.

- Create a single statewide advisory committee by drawing from the sector advisory committees, including business and industry representatives identified by the K–12, adult school, and community college systems. This committee will advise the State Superintendent of Public Instruction and the Chancellor of the California Community Colleges on the status, development, and needs of CTE.

- Build regional and local level capacity for industry and labor involvement in K–12, adult school, and community college programs and economic and workforce development efforts. Support collaborative regional planning; coordination of outreach, communication, and materials development; and coordinated professional development.

- Explore opportunities for identifying "single points of contact" in educational institutions or intermediary organizations to facilitate and streamline transactions with industry. These contacts or liaisons can assist in sharing labor market and workplace information, development of student work-based learning and teacher externship opportunities, and placement and supervision of students in work-based learning.

- Require advisory committees for all CTE programs at the local and regional levels through an aligned system, and require that these committees provide ongoing and meaningful input to educators.

- Work with industry and business leaders to develop incentives for businesses to give input to CTE programs and provide work-based placements for educators and students.

System Alignment and Coherence

In order to support the academic and career technical achievement of students in CTE programs, it is essential that all the components of the entire CTE system be effectively linked. System coherence and alignment incorporates several elements, including course sequencing, pathways, articulation, and coordination across sectors. Perkins IV, through its requirement that all local grant recipients implement at least one "program of study" and its support of articulation, emphasizes the importance of system alignment. Programs of study as defined in the Perkins Act must:

- Incorporate secondary education and postsecondary education elements.

- Include coherent and rigorous content, aligned with challenging academic standards and relevant career and technical content, in a coordinated, nonduplicative progression of courses that align secondary education with postsecondary education to adequately prepare students to succeed.

They may also "include the opportunity for secondary education students to participate in dual or concurrent enrollment programs or other ways to acquire postsecondary education credits."

DEFINITION AND SIGNIFICANCE

System alignment and coherence ensures that students can make smooth transitions along seamless pathways from secondary to postsecondary education and training, and upgrade skills over a lifetime of learning.

At the program level, CTE requires sequential skill building to enable mastery and application in the workplace. CTE courses, therefore, require coherent course sequences within the K–12, adult school, and community college systems, across the systems as students transition from secondary to postsecondary education, and across various programs and funding streams. To the degree that learning is enhanced through integration, course sequences are best implemented though coherent pathways that align CTE and academic instruction. To build these pathways, in turn, requires coordination with industry and the workforce and economic development sectors.

System alignment and coherence encompass:

- Sequencing of courses and creation of curricular pathways
- Articulation of secondary and postsecondary curricula and alignment of community college to baccalaureate level programs
- Implementation of dual enrollment strategies
- Coordination of programs within each segment, including district, ROCP, and adult schools in the K–12 system and, in the community college system, between credit and noncredit programs
- Coordination overall among education, workforce development, and economic development initiatives

Increased interest in alignment and coherence is reflected in growing support for the development of statewide systemic pathways, based on the following trends:[107]

- A growing research base about student learning and engagement, which emphasizes coherent integrated programs that harness student interests

107 National Council for Workforce Education. (2006, October). *Career Pathways as a Systemic Framework.* Big Rapid, MI.

- Greater recognition of the need for demand-driven and sustained partnerships between community colleges; business, workforce, and economic development efforts; and community leaders focused on meeting regional, sector-based workforce needs
- Evolving models of sustainability as state and federal policies align and encourage connections among students, careers, the labor market, and economic development, allowing multiple funding sources to be blended to cultivate continuity
- The emergent thinking about career pathways as a critical economic development tool that leverages the concept of industry clusters to develop workforce talent and skills that can meet the needs of regional and state economies

CURRENT KEY ACTIVITIES AND INITIATIVES

Currently, there are several efforts in place to foster greater alignment and to strengthen coherence within CTE programs. Some of these efforts are curricular and instructional, while others include changes in policies, procedures, or programs. Collectively, they aim to link various CTE components in ways that enable student learning and progression from secondary to postsecondary education and beyond.

COURSE SEQUENCES AND PATHWAYS

CTE course sequences are available throughout the K–12, adult school, and community college systems in California. Pathways are increasing in number at the secondary level, offering powerful ways to engage students in learning and facilitate promotion to postsecondary education and careers. Some pathways, such as those embedded within California Partnership Academies, begin in the tenth grade, whereas those offered by the ROCP usually begin in the eleventh grade, though recent legislation now allows the ROCP to offer its courses to students as young as 15, under certain circumstances and with a "comprehensive career plan."

Within the community college system, career pathways are not simply viewed as another program or "major," but rather as a framework for transforming educational institutions to meet the ongoing learning needs of students and industries. The ultimate goal is to provide a seamless system of career exploration, preparation, and skill upgrades linked to academic credits and credentials, with multiple entry and exit points spanning from middle school through secondary and postsecondary education, and adult and workforce training.[108]

Efforts are currently underway to organize pathways among the K–12, adult school, and community college systems. At the secondary level, the implementation of the CTE Model Curriculum Standards will help standardize and organize the pathways. The community

108 Ibid.

colleges are using SB 70, informed by Economic Development initiatives, as a vehicle to promote pathways formation aligned with regional economic development priorities. They are also "crosswalking" existing majors with the 15 industry sectors and pathways identified in the CTE Model Curriculum Standards to facilitate secondary to postsecondary alignment.

Despite these alignment efforts, access to pathways, especially those that integrate CTE and academic instruction, is still limited for students. Declining CTE enrollments at the secondary level and funding caps at the postsecondary level limit the availability of course options in schools or colleges, even when priority alignment to regional economies and statewide strategic priorities is taken into consideration. When course sequences exist, low enrollments and funding caps can challenge their viability. While low enrollments overall limit student preparation for more advanced levels of instruction or for entry into the workplace, some educators are concerned that low enrollments in grades 9 and 10 also hamper educators' efforts to engage students in meaningful, relevant curricula at a time when the students may be most vulnerable to disengagement. The challenges of master scheduling, inadequate facilities or equipment for classes, and limited time to engage employers all further hamper the creation or expansion of pathways.

SB 70 grant funding, which has increased to $52 million for fiscal year 2007–08, is supporting efforts to address these challenges and to build pathways throughout the state that link secondary and postsecondary curriculum and instruction. In the first two years of funding, more than 75 grants were made to local partnerships to strengthen CTE pathways in sectors such as Transportation; Health Science and Medical Technology; Arts, Media, and Entertainment; and Manufacturing and Product Development.

CAL-PASS PROFESSIONAL LEARNING COUNCILS

California Partnership for Achieving Student Success (Cal-PASS) Professional Learning Councils provide additional support for alignment efforts in CTE. Cal-PASS Councils are regional teams of discipline-based faculty from elementary, middle school, high school, adult school, community college, and university segments. Participants collaborate to discuss curriculum, exemplary teaching practices, instructional materials, and performance measures that are shared and reviewed in light of transition data. When faculty members work together with their intersegmental colleagues to understand the barriers to successful student transition, solutions to these barriers are proposed and implemented, leading to a more seamless curriculum and improved instructional strategies. There are 40 Professional Learning Councils with over 500 faculty members participating across the state, and the numbers are increasing.

ARTICULATION

According to the 2001 *California Articulation Policies and Procedures Handbook,* course articulation is the process of developing a formal, written, and published agreement that identifies courses (or sequences of courses) from a "sending" campus that are comparable to, or acceptable in lieu of, specific course requirements at a "receiving" campus. Articulation ensures students and faculty that students have taken the appropriate courses, received the necessary instruction and preparation, and that outcomes for students are similar to those that would have been attained had the course been taken at the community college. This enables a smooth progression to the next level of instruction at the receiving institution.[109] Successful articulation promotes student retention, persistence, and program completion, and efficient use of facilities and resources.

In July 2005, the Academic Senate for California Community Colleges was funded to develop Statewide Career Pathways, a project aimed at creating school to college articulation in CTE. Reinforcing the community college system's commitment to the importance of effective alignment, this project specifically intends to increase the number, efficiency, and transportability of articulation agreements among high schools, ROCPs, adult schools, and community colleges.

Additionally, community colleges have articulation agreements with four-year institutions. In the 2007–2008 academic year there are 101,930 CCC courses that are CSU transferable, and of those, 46,363 are also UC transferable for baccalaureate credit in the project ASSIST CCC-CSU-UC articulation database. In the 2007–2008 academic year there were 1,883 published articulation agreements between CCC and CSU and 893 between CCC and UC that allow courses to meet four-year degree requirements. These agreements provide for 28,545 CCC courses that meet CSU GE-Breadth Certification Requirements and 47,447 CCC courses that are directly articulated (for a major requirement) with 9,840 CSU courses. Of the 46,363 courses transferable for baccalaureate credit at a UC, 19,890 CCC courses are qualified to meet IGETC requirements and 28,673 CCC courses are directly articulated (for a major requirement) with 2,847 UC courses. The CCCCO has awarded a contract for research on the nature and extent of articulation between community colleges and four-year degree granting institutions in CTE pathways and related programs that prepare students for careers. The research will identify successful models, determine the feasibility of increasing CTE and related program articulation to four-year institutions, and develop recommendations to achieve increased articulation.

109 Academic Senate for California Community Colleges. (2001). *Handbook of California Articulation Policies and Procedures.* Sacramento, CA.

The current differences in course and program offerings in the secondary and postsecondary systems pose challenges to articulation, as does the time required to negotiate agreements. However, under SB 70, a number of competitive grants have been awarded to K–12, adult school, and community college partnerships to improve coordination of CTE, including improved CTE course and program articulation. A small number of these partnerships include four-year institutions as partners. In addition, articulation from the community colleges to four-year institutions is under review to explore expansion opportunities. Finally, there is increasing interest in articulation directly from secondary programs to four-year institutions, whereby both curricula and teacher qualifications are analyzed to ensure adequate rigor and preparation of students for postsecondary-level work.

TECH PREP

Tech Prep programs are designed to link high school and two-year college programs in specific technical fields and occupational areas. They are "planned sequences of study in technical fields or pathways beginning as early as grade 9 and linked to two or more years of postsecondary education or through an apprenticeship program of at least two years following secondary instruction. The sequence culminates in an associate degree or a certificate."[110] Combining at least two years of high school CTE and academics with two years of postsecondary education, Tech Prep programs are designed to provide maximum preparation for higher-wage employment or continued education.[111]

Funding is awarded through consortia led by a community college district office or county office of education and include the local community colleges working in collaboration with K–12 districts, schools, adult schools, ROCPs, and local business partners. In 2006–07, there were 80 Tech Prep consortia operating across California, involving all 109 community colleges.[112] In addition to enrolling students in course sequences, Tech Prep consortia also offer technical assistance, professional development, curriculum support, and other resources to schools and colleges in their areas. They cover core strategies of secondary-postsecondary articulation, curriculum integration, work-based learning, inclusion of special populations, and outcomes-based assessments.[113]

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110 Tech-Prep Education. (2007). U.S. Department of Education. Retrieved on August 1, 2007, from http://www.ed.gov/programs/techprep/index.html

111 California Department of Education. (2006a). *California Career Technical Education Curriculum Framework.* Sacramento, CA.

112 California Community Colleges Chancellor's Office. (2006b). *Tech Prep Allocation Report.* Sacramento, CA.

113 Bragg, D. (1994, June). *Emerging Tech Prep Models: Promising Approaches to Educational Reform.* Centerfocus, 5. Retrieved on July 15, 2007, from http://vocserve.berkeley.edu/CenterFocus/CF5.html

DUAL OR CONCURRENT ENROLLMENT AND DUAL CREDIT

Dual or concurrent enrollment allows high school students to gain community college credits while still in high school. Data from two National Center for Education Statistics' surveys found that, during the 2002–03 academic year, 71 percent of public schools offered courses for dual credit and 57 percent of postsecondary institutions had high school students taking college credit courses.[114] This strategy is seen as a powerful motivator for students, particularly when students are able to take classes on community college campuses as they do in "middle college high school" programs. Dual enrollment programs provide otherwise unavailable opportunities to students, keep students in school, expand course selections, and decrease time to earn degrees. A Community College Research Center study in the state of Florida found positive relationships between dual enrollment participation and short- and long-term outcomes for both the sample and the CTE subsample. Dual enrollment participants were more likely to earn a high school diploma, enroll in college and enroll full time, persist to a second semester, have higher postsecondary GPAs, and have earned more postsecondary credits three years after high school graduation. Low-income and male students saw larger benefits to their participation than did other subgroups.[115]

Currently, in California, school districts can claim full average daily attendance for dually enrolled students, as long as they are enrolled in and attend high school for at least 240 minutes per day. Senate Bill 338 (2003) stipulates that school districts may determine which students might benefit from "advanced scholastic or vocational work"; students must obtain the principal's recommendation and parental consent; community colleges may restrict admission based on age, grade level, or multiple assessments; and in order for colleges to claim FTE, classes must be open and advertised to the general public. High school students entering community colleges are considered "special admit" students; there are approximately 29,000 special admit students in credit-bearing CTE courses, representing about one-fourth of all special admit students in credit-bearing community college courses.

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114 Waits, T., Setzer, J. C., & Lewis, L. *Dual Credit and Exam-Based Courses in U.S. Public High Schools, 2002–03*. (2005). U.S. Department of Education. Washington, DC. Retrieved October 5, 2007, from http://nces.ed.gov/pubs2005/2005009.pdf; Kleiner, B., & Lewis, L. *Dual Enrollment of High School Students at Postsecondary Institutions 2002–03*. (2005). U.S. Department of Education. Washington, DC. Retrieved October 5, 2007, from http://nces.ed.gov/pubs2005/2005008.pdf

115 Karp, M., Calcagno, J.C., Hughes, K.L., Jeong, D.W., Bailey, T.R. (2007). *The Postsecondary Achievement of Participants in Dual Enrollment: An Analysis of Student Outcomes in Two States*. New York, NY: Community College Research Center.

Despite its promise, nationally, schools with higher minority enrollments are currently less likely to offer dual enrollment than schools with lower minority enrollment;[116] thus, greater access for minority students is necessary. However, there are several hurdles to bringing dual enrollment to scale. Negotiating both the high school and college schedules, the fear that schools will "double dip" (double fund), and concerns about the transferability to UC and CSU of college courses taken in high school are all challenges. In addition, some cite the challenge of providing educational services to high school students not prepared for postsecondary work; many community colleges do not have the teacher capacity, supplies, facilities, or support systems in place to bring these students up to speed. Further, books and supplies can be costly for students. Some stakeholders believe that extensive use of dual enrollment will further decrease secondary CTE enrollments as students seek more of their CTE training through the community college system.

An additional innovative strategy for providing students the opportunity to earn college credits while in high school is that of providing dual enrollment community college programs on the high school campus; this strategy is sometimes called "dual credit," to distinguish it from "dual enrollment" in general. With dual *enrollment*, instruction happens on the college campus and can interfere with the required hours of instruction on a high school campus, but with dual *credit*, instruction is provided on the high school campus by high school teachers. The curriculum is developed collaboratively with community college faculty high school teachers and assessments are developed by the community college faculty. The curriculum is fully aligned with, and has the same learning objectives and assessments as, the community college course. Students who complete the college application and pass the course with a grade of an A or B are provided college credits, noted as "credit by exam," immediately upon completing the course.

While this strategy, which has arisen from the need for more portable Tech Prep articulation, eliminates some of the previously mentioned barriers of dual enrollment such as college capacities and student costs, there are additional barriers to its development and maintenance. The benefits to community colleges lie in contributing to better-prepared students. However, while students earn portable college credits, those students may never attend the awarding community college. This creates a disincentive for colleges to employ this strategy, as they are expending resources to enter and maintain records for students who may never generate revenue for the college (FTEs). Finally, Tech Prep funds for high school teachers and college faculty to align curriculum, coordinate assessments, and process student paper work are limited.

Efforts are underway to develop or strengthen dual-enrollment-enhanced CTE programs. In one such effort, supported by the James Irvine Foundation, researchers are exploring

116 U.S. Department of Education, National Center for Educational Statistics (2005).

how dual enrollment strategies can increase the number of low-income youth who complete high school on time and attain a postsecondary credential by age 25. A small number of partnerships, consisting of community colleges and at least one secondary partner offering integrated academic/CTE pathways, would be identified to expand CTE dual enrollment participation to low-income students. This initiative will develop and showcase CTE dual enrollment models that meet several criteria. They must:

- Ensure the rigor and integrity of college courses
- Simplify credit earning and credit transfer processes
- Create strong collaborative relationships between secondary and postsecondary partners
- Provide supports to help students succeed
- Create program sequences that span high school and college classes

Partnerships will also collect data on students' secondary and postsecondary outcomes. The initiative will produce information that can help inform discussion throughout California concerning the design of dual enrollment policy that meets the state's fiscal standards and needs and takes maximum advantage of the potential benefits of dual enrollment for low-income and other underserved students.

MIDDLE COLLEGE AND EARLY COLLEGE HIGH SCHOOLS

A particular form of dual enrollment is the "middle college high school." In 1998, the California Community Colleges created the Middle College High Schools (MCHS) initiative, enabling high-potential students at risk of academic failure to complete high school while concurrently receiving direct access to college courses and services. Located on community college campuses and integrated into the community college environment, MCHSs merge the high school and community college curricula and experience in order to enhance academic and personal success. High school students attend classes at a community college and earn credit toward a high school diploma while having the opportunity to concurrently take college courses and receive more intensive counseling and administrative attention. Currently, there are 13 MCHSs operating in California serving nearly 2,000 students.

Early college high school blends high school and college in a rigorous yet supportive program — enabling students to complete a high school diploma and the first two years of college. This innovative model is based on the understanding that a postsecondary education can be key to an individual's economic and personal success — and that the students who are least likely to achieve a postsecondary degree are most in need

of early and engaging experiences with college. Since 2002, six intermediary partners in the national Early College High School Initiative supported by the Bill and Melinda Gates Foundation have started or redesigned 24 schools in California, with six more in the planning stages.[117] The schools have a projected total enrollment of more than 10,000 students. The Foundation for California Community Colleges, in its role as a state intermediary partner, is responsible for establishing 15 of the California Early College High Schools and is working with other partners to blend the early college program design into existing small high schools previously supported by the Bill and Melinda Gates Foundation.

COORDINATION OF SERVICE DELIVERY ACROSS PROGRAMS IN EACH SEGMENT AND WITH OTHER WORKFORCE DEVELOPMENT EFFORTS

Coordination across the various CTE funding streams is widespread, and conducted by a variety of programs and agencies, with ROCPs providing crucial support for career centers in many California high schools, as well as CTE curricula that are complementary to district programs. ROCPs also provide work-based learning opportunities with ROCP faculty monitoring and supervising students. However, in some counties, travel distances to ROCPs may limit student participation. Distance may also limit meaningful integration or coordination of curricula with district programs. In addition, the decline in ninth and tenth grade CTE enrollments has resulted in diminished feeder programs to ROCPs serving eleventh and twelfth grades.

In addition, county offices of education play a crucial role in promoting, coordinating, and implementing CTE and other career-related programs in their counties. Many of them oversee the administration of ROCP programs. Many also played lead roles in convening and managing school-to-career partnerships during the 1990s and still provide crucial leadership for countywide career-related activities through the school-to-career partnerships that continue to operate, participation on their local workforce investment boards, direct engagement with employers and employer organizations in their counties, and through the myriad convenings, programs, and organizational relationships that county offices are responsible for managing. In addition, as brokers and providers of professional development services to their local school districts, county offices of education disseminate information to the field regarding integrated curricula and smaller learning communities, among many other issues. Finally, as administrators of special education, "Workability" programs, court and community schools, and other alternative education programs, including programs for homeless children and those in foster care,

117 Early College High School Initiative. (2007). Foundation for California Community Colleges. Retrieved on July 27, 2007, from http://www.foundationccc.org/WhatWeDo/EarlyCollegeHighSchool/tabid/70/Default.aspx

county offices play a crucial role in reaching students who are in greatest need and who could benefit from CTE.

Adult schools also partner with secondary and postsecondary institutions to provide students with seamless transitions as they participate in the CTE system. Given their mission to provide high-quality lifelong learning opportunities and services to adults in an era of rapid change, adult schools recognize the need for interagency coordination and support to continually strengthen their services.

In the community colleges, the Noncredit Alignment Project and the Community Colleges System Office Strategic Plan have focused on integrating noncredit instruction with academic and career technical credit instruction. This initiative includes strengthening the coherence and articulation of noncredit instruction with community colleges' other instructional delivery systems and developing career pathways aligned with adult school programs. In addition, recent legislation (SB 361) was enacted to ensure equity in funding for noncredit career development and college preparation courses. This has led to increased efforts to improve the coherence and articulation of adult education/noncredit instruction to postsecondary education. SB 361 will also expand the CCC's longitudinal student record system to track the progress of adult education/noncredit students to credit postsecondary education and employment.

In addition, important models exist throughout the state for coordination between CTE and local workforce investment boards, Youth Councils, and One Stop Career Centers. Such coordination was further strengthened by the passage in 2006 of Senate Bill 293, which called for the California Workforce Investment Board, in collaboration with state and local partners, including the CCCCO, the CDE, other appropriate state agencies, and local workforce investment boards, "…to develop a strategic workforce plan to serve as a framework for the development of public policy, fiscal investment, and operation of all state labor exchange, workforce education, and training programs." This new plan is intended to expand the regional and local coordination of the education and workforce systems in California.

SINGLE PLAN FOR STUDENT ACHIEVEMENT

Finally, at the K–12 level, schools are required to align all of their efforts toward the goal of student academic achievement. As described under Evaluation, Accountability, and Continuous Improvement below, schools that participate in state and federal categorical programs, funded through the Consolidated Application process, must create a *Single Plan for Student Achievement* (SPSA) to "improve the academic performance of all students to

the level of the performance goals, as established by the Academic Performance Index."[118] School site councils must develop and approve the plans, and the contents of the plans must be aligned with school goals for improving student achievement. Although Carl D. Perkins funding is not allocated as part of the Consolidated Application process, NCLB Title I funds are. One of the requirements of Title I is the coordination with other federal programs, including Perkins, and Perkins legislation, in turn, requires coordination with NCLB. These requirements for reciprocal coordination suggest that activities funded with Carl D. Perkins funds should be included in the SPSA.

NEEDED ACTIONS

To promote greater alignment and coherence among components of the CTE system, allowing for seamless transitions for students while meeting the crucial workforce development needs of regional economies, stakeholders have identified the following critical strategies:

- Specify the respective roles of school districts, ROCPs, adult schools, community colleges, apprenticeships, and four-year colleges in the CTE system.
- Align funding mechanisms and accountability systems to promote the achievement of shared goals and optimal divisions of responsibility.
- Encourage and promote the development of coherent career pathways that foster complementary and integrated CTE and academic content, faculty collaboration, and secondary to postsecondary transitions.
- Provide sufficient time for faculty to build cross-segmental and cross-disciplinary collaborations aimed at aligning curricula and programs, as well as models, tools, and professional development to facilitate pathway development.
- Define a sequence of CTE foundation courses that begin in middle school, continue through grade 10, and are aligned to secondary and postsecondary career pathways.
- Increase CTE enrollments at all grade levels to engage students in learning, enable the creation of complete course sequences, and ensure sustained support and program quality.
- Facilitate program-to-program articulation and use model articulation agreements to promote consistency and minimize duplication of effort.
- Expand the number of community college CTE programs that articulate to four-year university programs.

118 California *Education Code (EC)* Section 64001(a)

- Examine concurrent enrollment and "credit by exam" efforts to identify promising opportunities for expansion as well as CTE growth.
- Encourage education and workforce development offices and organizations to collaborate in designing pathways that are aligned to economic development initiatives and include coordination with support services.
- Create incentives for community colleges, K–12, UC/CSU, and county/city economic development agencies/departments to work together in their cities/counties to strengthen workforce development.
- Incorporate CTE programs among those aligned through consolidated planning processes at school sites.

Effective Organizational Design

For CTE to prepare students to meet rigorous standards and become lifelong learners with employable skills, the K–12, adult school, and community college systems need to be intentionally designed to ensure that this occurs. Minimally, this entails the development of organizational structures and processes that facilitate student access to programs, enable faculty to collaborate with one another, promote personalization, link students with business and industry for workplace learning, and encourage course and program completion. In so doing, CTE also blurs the line between education and the workplace, in such a way that all are working toward the common goal of ensuring student success and workforce readiness.

DEFINITION AND SIGNIFICANCE

Organizational design issues comprise how K–12 schools, adult schools, and community colleges and programs are structured to facilitate effective teaching and learning, and how programs and courses are scheduled and delivered to facilitate student enrollment and successful program completion. The issues to be addressed include:

- The creation and support of learning communities
- Block or alternative scheduling in high schools
- Effective use of after-school, extended-day, and out-of-school time
- Choice and student mobility within and across districts
- Open-entry/open-exit opportunities
- Effective use of technology for distance learning and other career-related opportunities

Development of integrated curricula, team teaching, effective student support, meaningful career guidance, and access to work-based learning are all facilitated by the creation of career-themed learning communities — whether embedded within larger structures as "schools-within-schools" or as stand-alone programs. In addition, the use of "block scheduling," seven-and eight-period days, and the effective use of after-school hours can enable students to enroll in CTE while completing other course requirements and facilitate participation in work-based learning. Similarly, enhanced opportunities for student mobility within and across districts, particularly when districts are small, can facilitate access to career-themed programs that may not be available in every district, due to demand and funding limitations.

For adults, programs that require uninterrupted enrollment are often at odds with the demands and realities of their daily lives. Single parents and economically disadvantaged students face particular challenges to enrolling and persisting in community college courses while meeting their economic and family obligations. CTE programs that offer open-entry/open-exit and career ladder formats give students a chance to tailor their school schedules around their personal lives, creating the flexibility to stay enrolled to complete their programs without penalties or being forced to terminate.

The effective use of distance learning and other technologies also facilitates flexibility in course delivery in response to student needs.

Regardless of whether programs are structured in an open-entry/open-exit format or sequentially, or offered in person or online, flexibility for students requires a shift from the conventional "seat time" paradigm to one based on skill mastery and the use of performance-based instructional design approaches.

CURRENT KEY ACTIVITIES AND INITIATIVES

California has implemented a variety of innovations in the structure, scheduling, and delivery of CTE.

LEARNING COMMUNITIES

California has recognized the importance of creating environments and scheduling systems that promote integrated learning and access to programs for students. Learning communities, including state-funded California Partnership Academies and Specialized Secondary Programs, federally funded Smaller Learning Communities, and learning communities implemented in community colleges, create conditions conducive to cross-disciplinary collaboration for curriculum integration. The Partnership Academy is a three-year program that spans tenth through twelfth grades, and is structured as a school-within-a-school. The state's 290 career-themed Partnership Academies integrate academic

courses and CTE, create small and personalized learning communities, and partner with businesses and community organizations. Specialized Secondary Programs (SSPs) are another vehicle for integrated learning. These programs provide students with advanced learning opportunities in academic disciplines, and often include a career focus to develop students' talents, skills, and interests as they prepare for work and higher education. Out of the 59 SSPs currently funded in California, 21 have a career focus.

As in the K–12 system, learning communities are increasingly being implemented in community colleges. A growing body of research is emerging on learning communities at the college level with early research suggesting higher course-pass rates and higher rates of completion of developmental English requirements.[119] SB 70 explicitly includes the building of learning communities as a key strategy to promote the creation of a coherent CTE system for California. Currently, although learning communities have long been established in California community colleges, there is no systemwide data on the scope of implementation within the community college system.

ALTERNATIVE AND BLOCK SCHEDULING

Likewise, following the postsecondary scheduling model, many high schools and middle schools have implemented block or alternative scheduling to facilitate integration of curricula, project-based learning, innovative teaching strategies, and work-based learning. However, for some schools, the costs of making this transition have been prohibitive, and further professional development is needed to ensure that blocked time is used effectively.

AFTER-SCHOOL, EXTENDED-DAY, AND OUT-OF-SCHOOL PROGRAMS

After-school programs hold promise for extending the school day in ways that allow students to participate in valuable integrated experiences, such as project-based and service learning opportunities, career exploration, and work-based learning. The CDE currently funds 720 after-school programs through its 21st Century Community Learning Centers, including 540 elementary and middle schools and 180 high schools through its 21st Century High School After School Safety and Enrichment for Teens (ASSETs) Program. Funding for ASSETS for the 2007–08 school year has been budgeted at more than $42 million, with each high school receiving up to $250,000 through a competitive grant process targeting high-poverty schools. CDE also supports approximately 3,800 elementary and middle schools in its After School Educational and Safety (ASES) programs. Some of these programs offer career-related programming, but further investigation is needed to ascertain the degree to which this is occurring and if these programs are connected to

119 D. Price & M. Lee. (2005, December). *Learning Communities and Student Success in Postsecondary Education: A Background Paper.* Indianapolis, IN: MRRC and DVP-Praxis LTD.

in-school learning or career pathways. In addition, CDE conducts professional development and technical assistance to strengthen after-school programming, including effective youth development strategies. This may offer an opportunity to expand career exploration and work-based learning for students in these programs.

Many CTE programs offered through adult schools, ROCPs, and community colleges are offered during extended-day periods including evening hours, on weekends, and during the summer months.

Secondary and postsecondary programs also exist to explicitly facilitate work-based learning as an extension of classroom learning. For example, ROCP, adult school, and high school work experience programs are structured to enable the placement and supervision of students in the workplace. Similarly, community colleges offer Cooperative Work Experience Education (Co-op) — a form of work-based learning that occurs at times and locations agreed upon by the employer, student, and supervising faculty member. These types of programs can provide flexible vehicles for expanding student access to valuable learning opportunities that enhance and extend classroom-based curricula.

CTSOs offer important project-based learning and career exploration opportunities and receive the direct support of businesses in related industries. CTSOs are linked closely to CTE content in their occupational areas, and offer maximum flexibility for delivery of career-related experiences.

STUDENT MOBILITY WITHIN AND ACROSS DISTRICTS

Currently, community college students have flexibility with regard to enrollment in courses within and across districts to ensure that they can access the courses they need. Secondary students are more limited in their mobility, but often have choices with regard to attending magnet schools, career-themed schools, or schools with specialized programs. Given limited resources for creating or expanding pathways in new career areas, and employers' need to connect to districts and schools strategically, the state, through SB 70 funding, is encouraging labor market analyses and coordination among schools to minimize duplication of pathways in a given geographic area. To ensure that this approach does not limit student access to pathways in their areas of interest, greater student mobility among high schools and across districts may be required, particularly when districts are very small. This will, in turn, require possible expansion of interdistrict transfers and strategies to mitigate equity issues that may arise due to transportation or other issues.

OPEN-ENTRY/OPEN-EXIT PROGRAMMING

Many ROCP, adult school, and community college programs offer open-entry/open-exit enrollment opportunities that allow adults with multiple priorities to access "just-in-time" training to further their careers. For example, the CDE adult school program operates almost entirely on an open-entry/open-exit system and is implementing "managed enrollment" systems, designed to facilitate data collection and class placements, in ways that support the open-entry/open-exit model. Many ROCP programs are also designed for open-entry/open-exit of participants. Open-entry/open-exit courses in community colleges are offered only in courses that require daily attendance accounting (known as positive attendance). Approximately 50 percent of colleges (58 of 116 reporting entities, with colleges and centers reporting separately) offered at least one course section in open-entry/open-exit mode during 2005–2006. Statewide, about 3.6 percent of all course sections and 18 percent of positive attendance course sections were offered in an open-entry/open-exit format within the community colleges.

At the same time, a number of factors must be considered in designing open-entry/open-exit systems. The need for access to open-entry/open-exit systems must be balanced against the need for progressive skill mastery that is often required in CTE. Due to the increase in industry-based certification programs, more courses are only offered for the required hours, making it more difficult for students to enter and exit with just the few skills they need. Finally, under current funding and accountability structures, all CTE programs must be a certain number of hours in length in order to qualify for funding and students must attend the full number of hours to be considered "completers."

TECHNOLOGY-ASSISTED LEARNING

Technology can offer alternatives to changing or expanding scheduling structures to accommodate student needs. Virtual Enterprise is an example of an online CTE curriculum that can be accessed irrespective of scheduling restrictions. The CCCCO supports distance learning and other technological solutions to promote access to CTE programs and career exploration in a number of ways. It supports various state-funded initiatives that provide needed training in the use of educational technology for instruction, hosts courses on centralized servers, negotiates discounts on group purchases on course management systems, and ensures compliance with the laws governing accessibility. At the local level, districts and individual colleges provide courses online. In State Fiscal Year 2005/06, more than 17,000 online courses were available through these agencies.

The CDE adult school program supports distance learning and innovation projects by allowing LEAs to use 5 percent of their apportionment for these programs. The LEAs may use this for any adult school program they choose, but CTE has traditionally been taught

through hands-on or direct instruction, and only a small percentage of adult schools use their distance learning apportionment for CTE. Given current funding structures, it is difficult for the agencies to make this program cost effective. Presently, CDE has about 25 adult schools with registered distance-learning programs in CTE. It is exploring policy changes that will allow programs to raise the percentage cap to 15 percent. This will enhance the prospect of the adult LEAs offering many more CTE courses through all delivery methods in the future.

The advent of online "social networking" sites such as MySpace also offers opportunities for online mentoring and career-related information exchange that have yet to be tapped in any formal or organized way.

Despite the availability of these programs, strategies, and technologies, work remains for California to realize its vision of providing access to high-quality CTE for both school-aged students and adults with multiple claims on their time. Demand for open-entry/open-exit programs is great, yet the need for flexibility must be matched with the need for students to build skill mastery through successive learning experiences. Schools are still generally organized and scheduled according to the needs of an agrarian society, but existing systems and norms are becoming less relevant to the current learning needs of students. Mechanisms for placing students in work-based learning — whether through after-school programs, ROCPs, work experience, adult schools, or community college Co-op programs — could be used more widely. CTSOs exist in the traditional CTE areas but not in many new career areas, and the promise of technology as a means to reach students with "just-in-time" education, training, and career exploration has yet to be fully realized.

NEEDED ACTIONS

For CTE reforms to take hold, stakeholders asserted the importance of organizational structures and designs that facilitate improvements, and recommended the following:

- Promote and expand career-themed learning communities, career academies, and other models structured to promote cross-disciplinary collaboration and curriculum integration.
- Provide resources and assistance to schools in reorganizing school schedules into "blocks" or seven or eight-period days to enable students to enroll in CTE beginning in the ninth grade and to facilitate enrollment in integrated programs.
- Explore opportunities for better use of after-school, extended-day, and out-of-school time for career exploration, projects, and work-based learning connected to in-class curricula.

- Promote student participation in CTSOs and develop ways to increase industry and private and public support for the creation of similar organizations in new career areas.
- Evaluate strategies to expand student access to career-themed programs that may be geographically dispersed.
- Explore the expansion of open-entry/open-exit strategies where feasible, in ways that maintain the integrity of CTE courses and course sequences and comply with industry requirements; structure and sequence curriculum in modules or "chunks" tied to jobs with multiple entry and exit points, and with multiple levels of industry-recognized credentials built into the sequencing of the pathway.
- Provide education and training for students and incumbent workers at times and locations convenient to students and employers, including asynchronous or synchronous learning offered evenings or weekends, blended or "hybrid" delivery models, and delivery at off-campus locations such as job sites and community facilities.
- Promote greater use of technology-assisted and distance learning in all programs, including elementary, middle, and high schools, adult schools, ROCPs, and community colleges.

System Responsiveness to Changing Economic Demands

For California's immense and diverse economy to retain its prosperity and competitive position in the global market, education must meet the demand for skilled workers in a wide range of industries. A demand-driven system is responsive to current workforce development needs and labor market realities and predictions.

DEFINITION AND SIGNIFICANCE

A demand-driven educational system:

- Builds a curriculum that is relevant to both current and future workforce needs
- Establishes public/private partnerships between industry and education to inform educational programs
- Builds the capacity of educators and counselors so that they maintain currency with the needs of the workplace
- Ensures sufficient enrollments to meet workforce needs
- Maintains sufficient funding to cover the cost of necessary equipment and facilities
- Ensures consistent and reliable data about regional economic and labor markets for the high schools and community colleges to plan programs

» "Moves at the speed of business" to address workforce needs as quickly as possible

CURRENT KEY ACTIVITIES AND INITIATIVES

CTE responds to the changing demands of industry through a variety of mechanisms.

CALIFORNIA CTE MODEL CURRICULUM STANDARDS AND FRAMEWORK

In 2005 and 2007 respectively, the State Board of Education approved California CTE Model Curriculum Standards and Framework that identify 15 industry clusters around which to organize CTE instruction, strategies for creating industry linkages including advisory committees for input on curriculum, and a recommended mechanism for the development of pathways aligned with postsecondary education and local labor market demands.

THE COMMUNITY COLLEGES' ECONOMIC AND WORKFORCE DEVELOPMENT PROGRAM

CTE at the community college level is aligned with economic development activities and data, including 10 initiatives to expand programs in emerging and high-growth industries. Objectives of the community college system's Economic and Workforce Development Program (EWDP) include the following:

» Advance California's economic growth and global competitiveness through quality education and services focusing on continuous workforce improvement, technology deployment, and business development

» Coordinate a community college response to meet statewide workforce needs that attracts, retains, and expands businesses

» Develop innovative solutions in identified strategic priority areas for workforce development

» Identify, acquire, and leverage resources to support local, regional, and statewide economic development

» Create logistical, technical, and marketing infrastructure support for economic development activities within the community college system

» Optimize employer and student access to community colleges' economic development services

» Develop strategic public and private sector partnerships

The EWDP leads the state in economic development efforts, serving small businesses, strategic sectors and regions, and conducting studies on new emerging areas such as nanotechnology, digital manufacturing, new subsectors within biotechnology,

intelligent transportation systems, the service sector, and international trade. The EWDP provides funding for colleges to develop and implement training and curriculum in key strategic industry sectors that will create jobs and career pathways for students. The EWDP Regional Centers act as incubators that identify changing needs and trends and link colleges with businesses. The Regional Centers also have business development services, which are augmented with fee-based services to businesses and nonprofits.

EWDP also pioneers new courses in concert with local businesses to ensure training is relevant and to create and retain jobs. It was designed to leverage local college educational resources across regions of the state and to share best practices and outstanding curricula. As part of the educational system, it assists colleges in the development of new curricula, staff development, faculty internships, and workforce training. EWDP projects can expedite the local development of courses and enable colleges to respond quickly to workforce training needs, particularly in emerging technologies. Many of the courses developed through EWDP become for-credit courses that help colleges answer the immediate and lifelong workforce training needs of students and incumbent workers. A specific component of the EWDP, the Industry-Driven Regional Collaboratives, addresses local short-term needs.

EWDP also serves the needs of incumbent workers. In 2006–07, the EWDP received $8 million in ongoing funding for the Responsive Training Fund for Incumbent Workers. Grants funded under this project enable colleges to provide short-term, intensive training for incumbent workers in high-growth/high-wage technical positions in sectors important to California's economy (such as biotechnologies, information technologies, nanotechnologies, digital manufacturing, and Micro-Electro-Mechanical Systems). The grants may also be used to guide the state in new directions that will lead colleges to offer training in these new areas.

CONTRACT EDUCATION

Contract education in community colleges is a primary delivery system for providing services to business, industry, and government agencies. California Education Code (Sections 78020-78023) defines contract education as "those situations in which a community college district contracts with a public or private entity for the purposes of providing instruction or services or both by the community college." The direct and administrative costs of providing these services, which include credit, noncredit, and not-for-credit training, are typically recovered through fees paid by the employer or organization to the college.

Contract education programs also offer additional services designed to improve business or individual performance, including training needs assessment, training material

development, performance needs analysis, job profiling, and other consulting services. They also coordinate the delivery of traditional credit enrollment classes to meet the needs of their client organizations and industries.

SB 70 PROJECTS

The Governor's Career Technical Education Initiative of 2005–06 (SB 70), modeled on EWDP priorities, is an initiative to begin revitalizing CTE in high schools and create career pathways for middle and high school students. The Initiative has already expanded linkages from business and industry to high schools, ROCPs, and community colleges through its Quick Start Projects. Projects continue to be defined that will make K–12, adult school, and community college CTE programs more responsive to industry needs in high skill, high wage, and high growth areas.

ADVISORY COMMITTEES

In the K–12, adult school, and community college systems, industry advisory committees help ensure that curricula address workplace demands. Educators then use the input to update curricula with the skills required for the workplace and align educational process as appropriate to respond to industry needs. Individual educators' ability to do this varies widely, depending on the level of change and innovation allowed and encouraged on their campuses.

FACILITIES AND EQUIPMENT

Access to state-of-the art facilities and equipment is key to ensuring that students are prepared for the workplace and that programs can remain responsive to industry needs. Since launching his CTE initiative in 2005, the Governor has increased funding by 18 percent and worked with the Legislature to include $500 million for facilities and equipment in the 2006–07 education bond. With advancing technology, equipment and facilities will be an ongoing issue requiring careful leveraging of resources across the K–12, adult school, and community college systems.

SYSTEM LEADERSHIP

System leadership and subject area expertise at the administrative and consultant levels within the CDE and CCCCO are critical to ensuring that CTE meets the demands of current and emerging industries. As mentioned earlier, in the past, such leadership was supported by Perkins funds, but shifts in funding allocations have restricted the support available.

Challenges to CTE becoming more of a demand-driven system include staying current and abreast of labor market demands and new occupational classifications, dealing with the complexities of industry partnerships, the lack of alignment among advisory committees,

the lack of systematic processes or structures that would enable small businesses to communicate their needs to educators and education systems, and difficulties in reacting nimbly to changes in the workplace or the economy. The high cost of many CTE programs, especially at the community college level where state-of-the-art equipment and facilities are imperative, where faculty must continually update their curricula, and where class sizes must remain small in order to ensure skill mastery, can impede the creation or expansion of programs in response to the demands of industry. Resources for state leadership in this area have diminished over the last decade.

NEEDED ACTIONS

For the education systems to effectively meet the workforce demands of California industry, the following strategies are considered critical:

- Develop mechanisms to systematically track labor market demands, maintain the currency of occupational classifications, and ensure that teachers and counselors are informed of new developments in their fields.
- Encourage educational institutions to maintain close ties with their local communities to understand local workforce needs, quickly detect shifts in local labor market needs, and offer targeted and contract training.
- Encourage the identification of a single point of contact in educational institutions for industry, including the use of designated staff, liaisons, or other intermediary mechanisms as appropriate, at K–12, adult school, and community college levels within local and regional geographic areas.
- Provide additional operational funds to support and expand CTE subject area expertise in the CDE and CCCCO in order to provide state leadership and technical assistance to the field on maintaining a demand-driven system.
- Support and align advisory committees across the K–12, adult school, and community college systems at state and regional levels to examine labor market information and regional economic data on an ongoing basis.
- Encourage partnerships among local businesses and local workforce development and educational organizations.
- Identify and disseminate successful strategies employed for increasing responsiveness to industry needs.
- Ensure sufficient funding for activities, such as program development, equipment, and faculty externships that would permit education to remain responsive to workforce needs.

Skilled Faculty and Professional Development

Key elements of quality CTE are the skill of its instructors and the existence of a sufficient pool of skilled instructors to adequately staff programs.

DEFINITION AND SIGNIFICANCE

California's CTE faculty are required to be experts in many areas: the technical skills required in their fields, transferable essential workplace skills, and academic skills required of practitioners in their career areas. In addition, they must be exceptional teachers — able to use a multiplicity of strategies, including didactic instruction, projects, simulations, applied performance, and supervision in the workplace — to facilitate learning. Further, they must know how to assess student performance in correspondingly varied ways. They must also be career guides, mentors, business liaisons, advisory committee chairs, coordinators of field placements, and employment coaches, as well as champions for both students and their own programs. Finally, they are held accountable for meeting the needs of students, schools, and industry. The task is daunting — and it changes constantly.

CTE instructors in California have proven that they are up to the task. However, many of them are close to retirement. Many also need additional support as they juggle the multiple new roles required of them. New instructors are needed to address the growing needs of industries and occupations that have recently come into existence, as well as to respond to the needs of a new generation of students — learners who are more comfortable with the Internet than they are with pens and paper. Finally, instructors are needed who can take on the new challenges of working with a diverse increasing population of lifelong adult learners.

These demands require a concerted innovative strategy of faculty recruitment, preparation, support, and ongoing professional development, with emphasis placed on both creating opportunities for mutual learning among faculty across disciplines, and providing real experience in the workplace. Perkins IV requires LEAs receiving these funds to provide professional development to CTE teachers, faculty, administrators, and career guidance and academic counselors, that promotes "the integration of coherent and rigorous academic content standards and career and technical education curricula, including through opportunities for academic and career and technical teachers to jointly develop and implement curricula and pedagogical strategies."

This section of the plan addresses:

- Recruitment, qualifications, and retention of faculty
- Preservice preparation of faculty, counselors, and administrators, coupled with new teacher support

- Ongoing professional development of faculty, counselors, administrators, and other staff
- Opportunities for ongoing learning among faculty and staff, including collaboration to enable cross-disciplinary integration

CURRENT KEY ACTIVITIES AND INITIATIVES

California is undertaking or exploring a variety of activities to facilitate recruitment of skilled CTE faculty and professional development to strengthen CTE programs.

FACULTY RECRUITMENT, QUALIFICATIONS, AND RETENTION

Teacher and faculty recruitment in CTE is particularly challenging because teachers need both industry knowledge and pedagogical skills. They must possess integrated technical, workplace, and academic knowledge and skills, and know how to convey this knowledge and facilitate skill development using multiple instructional and assessment strategies.

Currently, the major segments of CTE have varying requirements for instructor qualification. Teachers in the K–12 system generally hold single- or multiple-subject credentials, which require a bachelor's degree, and may also require evidence of occupational experience in the career area authorized by the credential. Many K–12 CTE teachers also meet the "highly qualified" teacher criteria in NCLB.[120]

Many CTE teachers employed by ROCPs and adult schools also hold single- or multiple-subject credentials. However, because of the emphasis these agencies place on occupational preparation, a much higher percent of their teachers hold designated subjects (DS) credentials. DS credentials do not require a bachelor's degree; they require a high school diploma and a combination of five years of subject-related occupational experience and college work.

The California Commission on Teacher Credentialing (CCTC) is currently revising the DS credential system to reduce the number of different credentials issued by expanding the scope of subjects authorized by each credential. The new credentials will be aligned with the 15 industry sectors identified in the California CTE Model Curriculum Standards, and will replace the approximately 175 credentials currently offered in specific occupations. The CTC is also reviewing the hiring requirements for much needed part-time CTE teachers — typically, individuals with current experience who are willing to teach one or two classes a year. Their familiarity with industry trends, technology, and practice helps

120 CTE instructors with single-subject credentials only need to meet the "highly qualified" teacher status if their courses are considered core academic classes that can be used to meet graduation requirements.

ensure that the content of CTE courses is relevant and that the skills students learn are those needed by employers. The current structure limits the schools' flexibility to assign additional classes to part-time teachers, and creates barriers that discourage skilled and talented individuals from teaching opportunities.

Community college CTE instructors must meet minimum qualifications that are based on a combination of degrees and industry experience. CTE instructors must have a master's, bachelor's, or associate degree. In order to teach with a bachelor's degree, individuals must have two years of experience in their career area; with an associate degree, they must have six years of experience.

As noted in earlier sections, counselor training programs focus predominantly on academic counseling, rather than on career counseling. Additionally, many counselors lack direct experience in occupations outside of the education sector.

Challenges to recruiting and retaining staff include low pay compared to the private sector; an inadequate supply of individuals who have the breadth of skills required; inadequate supply of credentialing programs, exacerbated by the currently cumbersome and extensive credentialing process that deters otherwise skilled professionals from becoming teachers; difficulties in retaining faculty for part-time positions; challenges in recruiting staff for positions in rural areas; and pressures on staff due to a continual need to re-train to keep pace with trends in industry.

Further, beginning CTE instructors often do not receive adequate support. Beginning Teacher Support and Assistance (BTSA) programs are not widely offered for beginning CTE instructors, nor do existing BTSA programs generally incorporate support in areas that would provide CTE teachers with subject-area support, strengthen integrated strategies, or facilitate collaboration between CTE and non-CTE instructors. In community colleges, support systems like BTSA often do not exist at all.

PRESERVICE PREPARATION, PROFESSIONAL DEVELOPMENT, AND COLLABORATION

In California, preservice preparation for faculty in both the CTE and academic disciplines focuses on content-related coursework and pedagogy or teaching methods particular to a given discipline. Programs vary slightly from college to college, but all programs include specific requirements established by the CCTC. CTE teacher preparation programs are offered at one University of California campus and 10 of the 23 California State University campuses, with industrial and technology education available at two campuses, business and health science each available at three campuses, and agriculture and home

economics each available at five campuses.[121] Not all teacher preparation programs — for either CTE and non-CTE teachers — emphasize development of integrated curriculum, integrated teaching strategies, multiple assessments, team teaching, collaboration with community-based agencies or businesses, or career development issues — all topics that would promote effective collaboration between CTE and non-CTE teachers and preparation of young people for their future endeavors. In addition, there is little consistency statewide in the implementation or monitoring of teacher preparation programs across all CTE disciplines.

Generally, professional development in CTE is offered through professional and industry conferences, workshops, and meetings. Teacher externship and job shadowing opportunities are highly valued by those who have experienced the benefits they provide, but there is a much higher demand for these opportunities than there are opportunities available. As reflected in the needs assessment responses, many teachers particularly value time to learn from other teachers and collaborate with their colleagues in other disciplines to develop integrated curricula and strengthen their programs.

At the K–12 level, CDE staff have provided both professional development and targeted technical assistance to CTE practitioners in the field. Plans are currently underway to provide professional development specifically to facilitate implementation of the CTE Model Curriculum Standards and Framework, given that many CTE instructors have expressed interest in receiving guidance on curriculum integration and standards-based instruction in CTE.[122]

CTE-focused professional development can be valuable for non-CTE faculty, counselors, administrators, and other staff as well. While K–12 non-CTE teachers may have single-subject or multiple-subject credentials, they often lack extensive experience in the workplace outside of education, and preparation programs do not emphasize knowledge of workplace needs, career development issues, or CTE-academic integration, as described above. Greater exposure to the needs of the workplace could also enhance administrators' ability to provide vision and leadership in CTE.

At the community college level, professional development is offered through the Community College Advisory Committees and collaboratives, Academic Senate, Regional Consortia, content area conferences, and sabbaticals. Colleges also pay for "flexible

121 Commission on Teacher Credentialing, retrieved November 29, 2007 from http://www.ctc.ca.gov/credentials/leaflets/cl560c.pdf and http://134.186.81.78/CAW_CIG/FMPro?-DB=CIG_SubjMatt_new.fp5&t-Format=FMW-NewSubjIndex_school.html&t-SortField=Institution&t-SortField=Institution&t-Error=FMW-NewSubjIndex_schoolErr.html&t-Max=ALL&t-Find

122 WestEd. (2006). *A Statewide Assessment of California's Career Technical Education System*. San Francisco, CA.

professional development," called "flex," whereby faculty participate in at least five days of professional development activities each year to strengthen their programs. In addition, the CCCCO also offers professional development on special topics, such as integrating curricula, effective practice in developmental education, and assessing student learning. Initiatives reflecting system priorities are usually addressed through professional development offered in approximately16 two- or three-day workshops during the year. The CCCCO has covered faculty stipends and substitutes so that colleges can then use Perkins funds to train large groups of faculty on their campuses.

Finally, SB 70 supports faculty professional development through teacher externships, a strategy demonstrated to be highly effective in informing educators about the needs of the workplace.

NEEDED ACTIONS

The following strategies are critical to ensuring that students have access to the most capable faculty and that there is sustained recruitment and preparation of CTE faculty to meet growing needs:

- Develop strategies to recruit and prepare industry representatives who may want to enter the teaching profession.
- Expand and promote effective and innovative models of CTE teacher preparation to meet the CTE teacher shortage, including the expansion of teacher preparation programs in the community colleges, articulated with the California State University system.
- Identify and encourage students in CTSOs who may be interested in teaching CTE within their area of career interest.
- Include integrated teaching and learning strategies and career development issues in the content of both CTE and non-CTE teacher preparation programs and ensure systematic implementation and monitoring of CTE preservice preparation programs.
- Provide mentoring and support programs for all new CTE instructors, ensuring that instructors have both the content and the pedagogical skills required.
- Provide in-depth professional development in the implementation of the CTE Model Curriculum Standards.
- Expand professional development to incorporate high-priority topics and strategies, including curricular integration, collaborative strategies, career development, work-based learning, specialized strategies to effectively serve special populations, diverse learners, and adult students, and the collection and use of data for program improvement.

- Include counselors, non-CTE faculty, both CTE and non-CTE administrators, and other staff in CTE professional development whenever possible to foster mutual understanding and alignment of efforts toward the common goal of preparing all students for success.
- Promote and fund job shadowing and externships for both CTE and non-CTE faculty, counselors, and administrators to provide direct exposure to the needs of the workplace and the skills required for student success.
- Promote and fund support for CTE and non-CTE faculty to learn from one another and to collaborate in the development of curricula, in team teaching, and in forming and strengthening learning communities.
- Promote and fund support for CTE faculty to collaborate with industry representatives in the development and delivery of curricula.
- Incorporate CTE teacher preparation programs into CSU/UC programs and promote the building of contextual teaching skills in master's degree-level programs.
- Promote the sharing of models integrating curricula and teaching strategies, as well as ongoing learning among educators, through conferences and electronic tools.

Evaluation, Accountability, and Continuous Improvement

Evaluation and accountability are key to any system or program improvement process and feature prominently in Perkins IV. Multiple accountability systems already exist in California to provide data that both meet specific requirements at the federal and state level and support program improvement efforts. These include systems mandated by NCLB, the Carl D. Perkins Act, and the Workforce Investment Act, as well as state systems designed to provide the Academic Performance Index for schools; ensure continued funding for high-quality, high-demand community college programs; and assess compliance with the requirements of many different individual programs in both segments. In view of the multiplicity of existing accountability systems, coupled with the intended integration of CTE into educational policy as a strategy to serve all students, any discussion of accountability must focus on utilizing, aligning, and expanding upon existing systems, and must emphasize program improvement along with reporting of compliance-driven data. Similarly, to the extent that such a system (or collection of systems) is intended to drive improvement in CTE for the benefit of all its customers — students, businesses, communities, and taxpayers statewide — it must report progress on measures that are meaningful to each of these groups.

DEFINITION AND SIGNIFICANCE

The CTE Resource Group highlighted accountability as a key driver for CTE program improvement, echoing the National Council for Workforce Education (NCWE) message that planning and accountability are key features in the creation of a seamless system to ensure student success in both education and careers. Establishing any program improvement system requires:

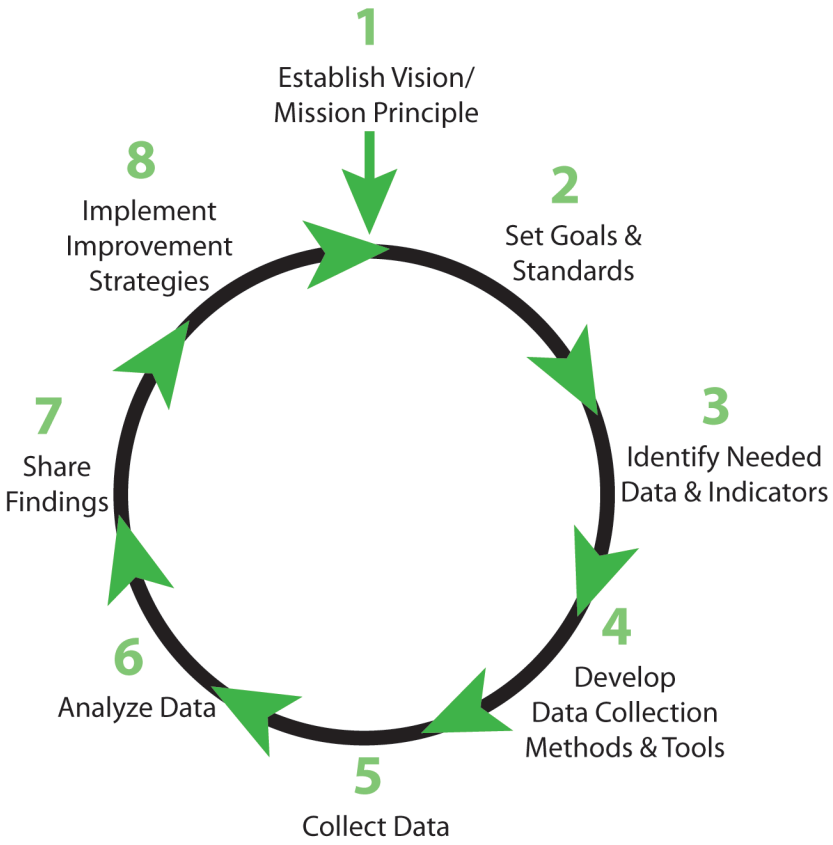
- Agreement about goals and standards
- Identification of needed data and indicators based on the agreed upon goals and standards
- Identification and, if necessary, development, of data collection tools and methods, including appropriate assessments and databases
- Collection and analysis of data
- Sharing of findings with customers, practitioners, and policymakers
- Implementation of improvement strategies

Establishing such a system in CTE is more complex than in other aspects of education because CTE serves both students and industry; it is intended to prepare students for further education *and* career success, while providing the economy with a skilled workforce. Any metrics established must therefore be understood by business and non-educational partners, as well as by educators. Establishing a CTE program improvement system is further complicated by the fact that CTE focuses on long-term outcomes, including long-term career fulfillment across multiple career transitions and long-term economic prosperity for the state. Finally, implementation of a useful system requires attention to both local and state progress indicators — the latter being greater than the simple sum of the local efforts.

Despite these complexities, with sufficient clarity of purpose and the participation of both education and industry, as well as other stakeholders, measures and systems can be established to gauge progress in CTE at both the local and state level, and to identify the mechanisms required to adjust performance as needed.

Figure 9 on the next page depicts a basic continuous program improvement cycle. The discussion below follows the general flow of this cycle, highlighting current activities in key areas, and begins with a very brief overview of the state's educational accountability systems. Note that the CTE vision, mission, and principles described at the beginning of Chapter Three are not discussed further here, except to say that, as in the model below, these are proposed to serve as the foundation of any continuous improvement system put in place for CTE in California.

Figure 9. The Program Improvement Model



CURRENT KEY ACTIVITIES AND INITIATIVES

California implements a variety of accountability, data collection, and assessment systems. For the most part, data are currently collected and analyzed primarily for compliance with the requirements of specific, discrete funding streams. Analysis of student outcomes in CTE has been driven in large part by the requirements of the Carl D. Perkins Act. However, progress is being made in expanding the collection and use of data in more integrated ways — across time, across programs, and across educational segments — in order to produce a clearer picture of how well California's educational system is serving all students and meeting state goals.

STATE ACCOUNTABILITY SYSTEMS

The K–12 system implements the Standardized Testing and Reporting (STAR) system to measure student performance and determine school and district achievement of both state and federal performance requirements. In addition, the California High School Exit Examination (CAHSEE) was implemented for the first time in 2004 to ensure that students graduate from high school with the academic skills required for success after high school.

The CAHSEE and STAR data are used by the state to establish a rating of schools, called the state Academic Performance Index (API),[123] and are also used by the federal government under NCLB to determine schools' adequate yearly progress (AYP) rating. Under Perkins IV, CTE students' academic achievement will also be captured based on CAHSEE scores.

In 2001, the California legislature amended the planning requirements for schools that participate in state and federal categorical programs funded through the Consolidated Application process, creating the *Single Plan for Student Achievement* (SPSA).[124] The purpose of the SPSA is to "improve the academic performance of all students to the level of the performance goals, as established by the Academic Performance Index."[125] The requirements for monitoring these categorical programs are part of the same legislation. The SPSA planning process and local compliance monitoring are directly related. The legislation established eight requirements for school plans. Among these are the requirement that school site councils develop and approve the plans, and that the contents of the plans be aligned with school goals for improving student achievement. As mentioned above, although Perkins funding is not allocated as part of the Consolidated Application process, NCLB Title I funds are. One of the requirements of Title I is coordination with other federal programs, including Perkins, and Perkins legislation, in turn, requires coordination with NCLB. These requirements for reciprocal coordination suggest that activities funded with Perkins funds be included in the SPSA and monitored accordingly.

Schools are required to complete yearly School Accountability Report Cards (SARCs), which provide parents and the community with information on demographics, academic achievement, fiscal areas and expenditures, school completion rates, class sizes, teachers and staff members, CTE participation, and postsecondary preparation.

Since the late 1980s, student outcome performance reporting at the college and college program level has been designed and made available to facilitate analysis that could identify performance gaps for purposes of local program improvement and for targeting state resources. Recently, the community colleges implemented the Accountability Reporting for Community Colleges (ARCC), mandated by California State Assembly Bill 1417 (Pacheco). ARCC provides a framework for annual evaluation of community college performance in meeting statewide educational outcome priorities. ARCC reports on

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123 Information on the API can be found at http://www.cde.ca.gov/ta/ac/ap/ on the Web site of the California Department of Education.

124 *A Guide and Template for The Single Plan for Student Achievement: A Handbook for School Site Councils*. (2006, November). California Department of Education. Retrieved on November 6, 2007, from http://www.cde.ca.gov/nclb/sr/le/documents/spsaguide.doc

125 California Education Code (EC) Section 64001(a).

such indicators as course completions, grades by type of course, degrees and certificates awarded, and employment and earnings.

The community colleges also employ a number of other performance reporting processes. Some examples include local program performance review for annual budget requests, biennial program reviews required by Title 5, Perkins performance reporting and program improvement analysis, reporting for college accreditation through the Western Association of Schools and Colleges, and the annual Integrated Postsecondary Education Data System reports.

Under the Perkins Act, CTE programs in both segments are required to track students' academic achievement, technical skill attainment, successful transitions to further education, employment, military service or apprenticeship programs, and participation in nontraditional programs, among other measures. In all of the Perkins accountability measures, individual programs and the state as a whole must meet negotiated levels of performance.

GOALS AND STANDARDS

Local agency goals together with system goals such as those proposed in Chapter Three, serve as the point of departure for determining what system improvements are required. In addition, standards of performance, whether for the system as a whole, for districts, colleges, and schools, or for individual students, are needed in order to determine the extent to which students are learning and the system is meeting its goals.

At the K–12 level, the CTE Model Curriculum Standards, established for grades 7 through 12, serve to provide the knowledge, skills, and competencies that students are expected to attain in CTE, including both foundation standards based on the SCANS skills that undergird all pathways, and specific pathway standards. These standards serve as the basis for the development of assessments to measure the attainment of the required skills, examples of which are provided in the CTE Curriculum Framework. The CTE Model Curriculum Standards can also provide the point of departure for a statewide discussion on the essential skills that *all* students need to attain in order to be successful in the 21st century. In addition, K–12 students in CTE programs are held to the state-adopted academic content standards in English language arts, mathematics, history-social science, science, physical education, and visual and performing arts.

In the community colleges' occupational courses, industry drives both the standards, as reflected in model course outlines required for all courses, and the assessment tasks that allow students to demonstrate attainment of those standards. The processes put in place

at the community colleges to ensure rigor and content currency are specified in Education Code, Title 5, and in CCCCO requirements, and are carried out at three levels:

1. College curriculum committees approve new courses and programs.
2. Regional consortia review and approve new programs to verify labor market demand to avoid destructive competition.
3. CCCCO provides guidance and manages a process to approve all new and modified stand-alone courses and programs.

Title 5 regulations for occupational programs require biennial review and documentation of sufficient labor market demand, student enrollment and completion, and student employment. Programs not meeting sufficiency in these areas are required to be terminated within one year.

DATA AND INDICATORS

Data to ascertain student performance and other outcomes in CTE depend on both accurate student and course information as well as appropriateness of the indicators used to measure the achievement of outcomes. Programmatic data must also be clearly defined in order to enable the tracking of progress in system development. In addition to serving program improvement needs, accurate data are required for research purposes, to allow for the identification and replication of effective practices.

Student Data. Student data at the K–12 level and in adult schools are currently captured in school district databases. Data include demographic information, grades, test scores, and whether students have completed "a-g" course sequences, among other information. Data on the completion of CTE course sequences, while captured in the Perkins database and in some district databases, are not included in CDE's public Web-based database (Dataquest). Student "identifiers" or codes are assigned by the enrolling district. Students do not currently have unique identification numbers that would allow for following students from one district to another, between the district or the ROCP, or from one segment to another over time.

At the community college level, student data are submitted to the CCCCO and stored in a single statewide database.

Course Data. Currently, in the K–12 system, courses are coded in the California Basic Educational Data System (CBEDS) as either CTE or academic. Some courses meet the criteria for both categories and the number of these courses is increasing. Counts of student enrollments in CTE must draw from both the CTE course list and those courses listed as "academic" that also meet the criteria for CTE courses. These CTE course criteria include:

1. The course and its curriculum are explicitly designed to prepare students with career skills that lead to employment, whether after high school or after postsecondary education.

2. More than 50 percent of the course curriculum content consists of career knowledge and skills.

3. Business and industry are directly involved in the development and validation of the curriculum.

In the community colleges, courses are coded by the degree to which a course is considered "occupational," ranging from Apprenticeship, Advanced Occupational, Clearly Occupational, Occupational, Possibly Occupational (introductory courses), or Non-Occupational. The criteria for defining each of these levels of CTE are provided in the CCCCO Data Element Dictionary.

In Tech Prep, student participation is determined by student enrollment in sequenced, articulated CTE courses within a particular industry sector at both the secondary level (including both high school and ROCP courses) and at the community college level. Accurate counts depend on clear definitions of CTE courses and the courses allowable in a course sequence.

Indicators. As described above, secondary accountability measures such as API and AYP are based on academic achievement in reading/language arts and mathematics as measured by paper and pencil tests. Such indicators pose some challenges for measuring CTE outcomes. For example, Perkins accountability in the area of academic attainment is now aligned with NCLB requirements, which, like AYP ratings in California, are based on the CAHSEE. The CAHSEE assesses student achievement in reading/language arts and mathematics in the tenth grade for most students, but the fact that many students do not enroll in CTE coursework before the eleventh grade makes it difficult to associate these results with CTE programs.

Specific CTE indicators will be added to other existing systems, such as the California Longitudinal Pupil Achievement Data System (CALPADS), which is being designed to meet the requirements of NCLB. To allow for a more comprehensive view of student achievement, CALPADS will be expanded, as funding becomes available, to address the needs of CTE by including CTE data elements, such as participation of students in CTE course sequences. (See CALPADS description below under the section titled Data Collection Methods and Tools.)

The community colleges have identified key indicators of performance and a recommended program improvement process, as described in the *Instructional Program*

Improvement Resource Guide.[126] Indicators fall into four areas: access, resources, efficiency, and program success. The core indicators reported to meet requirements of the Perkins Act fall into the "program success" category of indicators but represent only a fraction of the indicators that should be considered when implementing a comprehensive program improvement process.

The California Community Colleges' Management Information System (MIS) captures grades, course completions, and the granting of certificates and degrees. In addition, CTE student enrollments and specific outcomes are documented and reported, including: academic and technical skill attainment; transitions to further education, military service, and apprenticeship; and employment and earnings. Some reporting issues have yet to be resolved. For example, the current reporting systems do not distinguish between students who leave programs for employment (a positive outcome) and those who leave for other reasons. Although it is important to understand that students leaving courses become employed, related information on course completions also allows colleges to strengthen their communications with students on the importance of completing courses and programs. The link between employment and course and program completion allows colleges and faculty to assess program impacts. The system also provides for detailed analysis of student outcomes by special population groupings for all indicators as well as for analysis of outcomes at the introductory versus advanced coursework levels.

Programmatic Data to Measure Systemic Improvement. Programmatic data are also required, both at the local or state level, to ascertain progress in system development. Some steps are being taken in this direction. For example, the CDE is identifying the distribution and quality of some career pathways throughout the state. The University of California Office of the President tracks the number of CTE courses that have been approved as meeting the "a-g" requirements for university admission, and California Partnership Academies and other learning communities are also evaluated regularly with regard to their structures and levels of student participation, in addition to their student outcomes.

At the community college level, evaluation efforts have begun to measure progress in SB 70-funded career pathway and career exploration projects throughout the state, and the Academic Senate of the community colleges is identifying replicable articulation agreements. Tech Prep programs have also been evaluated. In addition, every year, the six discipline-industry collaboratives evaluate student outcomes and program performance at the statewide level in their specific areas. These analyses inform the development of funding priorities for the following year's activities within the industry or collaborative

126 *Instructional Program Improvement Resource Guide.* (2003). California Community Colleges Chancellor's Office. Retrieved on July 15, 2007, from http://www.cccco.edu/divisions/esed/cte/resources/faq/pirg-full_doc.pdf

area. Collaboratives often leverage state (e.g., SB 70 and Economic Development) and federal (e.g., Perkins and WIA) funds. However, for the most part, all of these efforts have been carried out separately, driven by their respective funding sources, and the requirements to track the funds separately, as well as by discipline/industry needs. Few overarching measures of system development have been identified, or processes put in place, to monitor system improvement or how well the system meets statewide priorities on an ongoing basis.

DATA COLLECTION METHODS AND TOOLS

Data collection methods and tools include the development of both methods to assess student performance (including performance-based assessments of technical and workplace skills) and methods and systems to collect, store, and retrieve student and program data.

Assessment Methods. Success in CTE and in careers — or even in the component projects and activities that make up a rich CTE program — is best measured through multiple assessments, including completion of industry-driven and performance-based tasks, presentations, portfolios, and direct feedback from employers. In CTE, performance-based tasks are often used to assess student learning; the CTE Curriculum Framework provides a "Sample Performance Task," including the applicable standards, the assignment, and the "performance task rubric," for each of the pathways in the 15 industry sectors. In addition, "technical skill assessment that is aligned with industry-recognized standards, including the California CTE Model Curriculum Standards" will serve as the basis for assessing "technical skill attainment" for Perkins reporting at the secondary level.

At the postsecondary level, grades attained in occupational courses — reflecting the outcomes of performance-based and other assessments — have served as the measure of "technical skill attainment" for Perkins reporting. Student technical skill attainment, progression through course sequences, and program completion are good predictors of employment and earnings.

Data Collection and Management Systems. Currently, most K–12 data are collected in the CBEDS system, with CTE data collected, in addition, through the Perkins data system. While it is currently impossible to follow a student over time or across schools, efforts are underway to implement the California Student Information System (CSIS) that will provide a unique and confidential student identifier for students, enabling the system to follow students' progress from one program, district, or educational system to another. In addition, the California Longitudinal Pupil Achievement Data System (CALPADS), a relational database that allows for analysis of student outcomes, will be implemented in 2008–09 as the foundation of California's K–12 education data system. CALPADS

will collect student-level data on demographics, program participation, and course completion. Teacher-level data will include course assignments. CALPADS will eventually replace a number of the CDE's current aggregate collections, including the CBEDS collections, the Language Census, Student National Origin Report, and portions of the Consolidated Application. CALPADS will also reduce the amount of data collected on the answer sheets of statewide assessments.

The California Community Colleges' Management Information System (MIS) was designed to provide for efficient and systematic reporting to meet the full spectrum of local, state, and federal requirements, and is therefore intended to be a comprehensive system. For example, the MIS includes student Social Security and other ID numbers and allows for analysis of both course enrollments and transitions to further education and employment. The CCCCO also maintains a "Datamart" and Perkins Core Indicator report system on its Web site that allows researchers and community members easy access to innumerable reports and data. One of the key advantages of this system is that both funding and accountability are driven from the same data, ensuring accuracy and timeliness of the data.

In addition, efforts are underway in many regions of the state to measure progress from secondary to postsecondary education through the California Partnership for Achieving Student Success (Cal-PASS). Cal-PASS began as a local initiative in one county to collect, analyze, and share student data in order to track performance and improve success from elementary school through university. Use of the Cal-PASS system is voluntary, but more than 2,600 institutions from 40 counties now participate in this partnership. These include 22 universities, 85 community colleges, and over 2,500 schools — and the numbers continue to grow.

COMMUNICATION OF RESULTS

Currently, CDE-collected student and school data are publicly available through reports, online Web sites, and School Accountability Report Cards at levels of aggregation that ensure individual students' anonymity and privacy. Teacher data are primarily collected by agencies that operate and report independently of CDE and cannot currently be linked easily to school and student information. As mentioned earlier, Perkins data for secondary students are not available online on the CDE Web site.

Community college reports and nonconfidential data files are publicly available through the community college system online Web sites, and written reports. In addition, each of the accountability systems mentioned previously requires an analysis of the data in annual submissions of planning documents.

IMPLEMENTATION OF IMPROVEMENT STRATEGIES

According to a recent RAND Corporation study, "The state has not developed a 'culture of data' that emphasizes the necessary connection between good data and school improvement efforts. California has not created strong incentives for school districts to care about the substance and quality of the data they provide to the state."[127] Currently, the CDE monitors grantees of Perkins funds for compliance with Perkins regulations and to ensure that programs are meeting their targeted performance levels. Local recipients are required to review their local levels of performance within their annual Perkins application. Districts that have not met the state-required levels of performance must submit an improvement plan, describing both why they have not met performance requirements and their planned actions for improving performance. State staff also provide technical assistance as needed and when requested. However, resources are limited for additional technical assistance to ensure program improvement.

Program improvement in the community colleges is driven by a number of forces ranging from accreditation to funding. Perkins funds are used to improve CTE programs that result in increased student success. College programs receiving Perkins funds must describe how the funds will be used for program improvements that result in increased student success. Collaborative efforts among the CCCCO, the research and planning group for California Community Colleges, regional consortia, local districts, and experts in the fields of academic-CTE integration and assessment of student learning have resulted in a variety of improvement efforts. These have included the development of instructional program improvement guides, institutes and conferences focused on improving student success, workshop materials and practicums for delivering research-based staff development, Web sites featuring effective practices, and multimedia resources designed for facilitating program improvement.

NEEDED ACTIONS

In this era of accountability, and given the new requirements of Perkins IV, increasing attention will be placed on CTE's role in improving student achievement in a variety of arenas. CTE can lead the way in identifying outcomes that are relevant to successful adulthood and careers, valid means to assess attainment of those outcomes, the tools and systems required to collect and analyze data, and the processes necessary to ensure continuous system improvement. It must simultaneously provide data that are relevant to workforce and economic development needs and systemwide improvements. The following strategies have been identified as critical to accomplish these aims:

127 Ibid.

- Articulate a vision of CTE and its significance to both immediate and long-term student success that is persuasive to educators across both segments.
- Obtain broad consensus on the goals of CTE and develop measurable objectives that will drive system development and improvement.
- Work with industry members, educators, parents, and community members, obtaining broad consensus on the knowledge, skills, and attitudes that all students should master throughout their educational endeavors as measures of "readiness" for work and life.
- Implement a secure student identifier system that allows the CTE system as a whole to follow the progress of students across programs, segments, and education/employment sectors.
- Expand state secondary accountability measures, such as the API, to include CTE measures; include CTE in the accountability process required for the Single Plan for Student Achievement.
- Include additional outcome data elements in all data systems, to the extent appropriate and possible, that would shed light on student and program performance, for example, the results of licensing examinations and other industry-based certifications that could be linked to student data.
- Implement the California CTE Model Curriculum Standards statewide and use them as the basis for developing valid traditional and performance-based assessments in each of the 15 industry sectors, aligned with assessments conducted at the community college level.
- Identify statewide industry standards, as appropriate, to guide both secondary and postsecondary curriculum development.
- Align data collection and reporting systems across programs and segments to follow student performance over time.
- Provide evaluation and program improvement tools and guidelines to local agencies to promote comparability of data and statewide benchmarking of improvements.
- Provide resources to both CDE and CCCCO to facilitate data collection, data analysis, and technical assistance to local agencies.
- Provide professional development to practitioners in the collection and use of data, and disseminate models of effective practice and information on effective program improvement strategies.
- Allocate sufficient funding for system development, data collection, data analysis, and professional development in the use of data for program improvement.

CTE Promotion, Outreach, and Communication

CTE offers myriad benefits to students, employers, state and regional economies, and communities. In order to ensure continued support for CTE, its benefits must be validated and made more widely known to students, parents, educators, counselors, community members, and policymakers. This plan makes explicit the need to clearly communicate the benefits of CTE to each of these groups based on evidence of its impacts.

DEFINITION AND SIGNIFICANCE

Recent educational priorities have diminished the visibility of CTE and the ways it can contribute to academic success, personal development, career preparation, and secure employment. In addition, CTE has not conveyed a clearly articulated, consistent message about the benefits it confers to students, communities, industry, and the economy, and how CTE has worked to remain relevant to modern students and employers. This, combined with other factors, has contributed to decreases in high school CTE enrollments, which, in turn, result in students' lack of preparation for higher levels of CTE and lost opportunities to use CTE as a strategy to improve student learning, persistence, graduation, and transitions to postsecondary opportunities and work. Decreasing enrollments also impact the availability of a skilled labor force for an increasingly competitive economy.

CTE promotion, outreach, and communication encompass:

- Demonstrating how CTE promotes student academic achievement, as well as the attainment of technical and workplace skills, and contributes to enhanced student outcomes and long-term success
- Promoting communication between CTE and non-CTE faculty
- Communicating broadly with students, parents, community members, and policymakers about the opportunities and benefits offered through CTE
- Ensuring that all administrators and counselors understand the benefits of CTE
- Ensuring that students get the information they need about CTE programs at key decision points in course selection and career development
- Ensuring that students are aware of the wide array of leadership and learning opportunities available through CTSOs
- Communicating with incumbent workers about the training opportunities available to them in CTE programs
- Generating political will for further support and resources

» Expanding and strengthening outreach efforts to encourage teaching in CTE as a profession

CURRENT KEY ACTIVITIES AND INITIATIVES

CTE at the K–12, adult school, and postsecondary levels implements varying promotional, communication, and outreach strategies.

In the K–12 system, individual programs promote CTE through written materials, and conduct outreach or produce special events to inform students about career academies, pathways, courses or career-related events and encourage their participation. Counselors inform students about CTE, though schools and counselors sometimes prioritize other programs. ROCPs that serve high school students often promote their programs though the high school career centers, if such centers exist, but some counselors are not aware of the variety of ROCP courses available to students in their communities. Adult ROCP and adult school programs promote their programs directly to the community. Promotion of and enrollment in CTE is facilitated by the creation of learning communities that incorporate both CTE and non-CTE courses, thus reducing the need for students to choose between CTE and non-CTE courses. Communication between CTE and non-CTE teachers and between teachers and counselors or other support staff is also facilitated by participation in learning communities, but does not occur systematically when learning communities are not in place.

In the community college system, the CCCCO has created a variety of public service announcements to facilitate individual colleges' communications with the public and provides a searchable database on its Web site to assist the public in finding programs and courses. Promotional activities also occur through each of the 10 community college advisory committees. CTE programs develop their own materials at the college and regional level; every region has a Web-based program to enable the public to view courses available in their region. Colleges also conduct career days, bringing high school students onto campuses, where they have the opportunity to talk with community college students.

Where learning communities exist in colleges, they promote communication among faculty and staff. However, beyond these structures, communication between CTE and non-CTE faculty is somewhat limited.

In addition, in both secondary and postsecondary segments, while programs communicate with the public in order to recruit students to their programs, with few exceptions, the *benefits* of CTE programs have not been made widely known to educators at large or to the public in any systematic way across the state since the termination of school-to-career funding in 2003. Further, in the current era of accountability and increased global competitiveness, CTE needs to demonstrate and trumpet its role in engaging students in

learning and promoting high academic achievement, as well as in the development of students' technical and workplace skills.

NEEDED ACTIONS

To ensure full participation of students in CTE from K–12 through adult school and postsecondary education, stakeholders have determined that the following strategies are critical:

- Make CTE and its benefits — including its role in promoting student engagement and achievement — more visible to students, to parents at all levels, to other educators, including non-CTE faculty, counselors, and other staff, and to the public at large.
- Promote communication among CTE and non-CTE faculty, counselors, guidance staff, administrators, and other staff to foster understanding and the development of a shared vision for student success.
- Work with statewide stakeholders to craft a message about CTE that is clear, coherent, and can galvanize interest in and support for CTE programs.
- Ensure that counselors are fully informed of the CTE resources and support services available to students in their schools and colleges.
- Engage business organizations to communicate with educators and students about the value of CTE programs and to encourage participation.
- Review policies and practices that may pose barriers to full implementation of CTE.
- Base promotion efforts on data-driven evidence of success.

Summary

California seeks to build a world-class, demand-driven CTE system to serve all students, from young people first exploring possibilities to adults seeking to update their skills or change careers. The state envisions a CTE system that is fully embedded within California's education system, K–16 and beyond, promoting economic development and providing students with the full range of knowledge and skills necessary to become successful, contributing members of society. To realize this vision, strategies have been proposed in the following 11 areas:

1. Leadership at all levels to both articulate and champion the realization of a renewed vision for CTE
2. Development and implementation of high-quality and integrated curricula and instructional strategies, including classroom-based and work-based learning, to engage and facilitate learning and link students to workplace opportunities

3. Career exploration and guidance to ensure that all students can imagine a full range of life possibilities and manage their careers to realize their dreams

4. Student support and student leadership development to ensure that all students succeed and achieve their full potential

5. Effective industry partnerships to ensure relevance of curricula to the workplace and to facilitate linkages of students and educators to workplace knowledge and experiences

6. System alignment and coherence to ensure students' smooth progression throughout their educational and career pursuits and to maximize the efficient use of system resources

7. Effective organizational design to facilitate integrated teaching and learning strategies, including faculty collaboration, and to ensure that all students have access to CTE programs

8. System responsiveness to changing economic demands to ensure that employers' workforce needs are addressed in timely ways and that education contributes to continued economic prosperity

9. Faculty recruitment, preparation, and professional development to ensure that there is an adequate supply of qualified faculty who are knowledgeable in their technical areas as well as in the academic competencies and workplace requirements essential to their fields, and who are also skilled instructors

10. Evaluation and accountability to ensure that the CTE system is meeting its goals and to promote continuous program improvement

11. Program promotion, outreach, and communication to ensure that students, parents, educators, and communities are aware of the opportunities and benefits offered by CTE

In addition, the Resource Group and other stakeholders emphasize the importance of addressing the needs of all students, including young children for whom CTE can open endless future possibilities, youth seeking meaning and identity, young adults forging their career paths, and re-entry and incumbent workers seeking new skills and options. Inclusion means serving all individuals seeking to fulfill their career aspirations and contribute to the well-being of society. To achieve this aim, both visionary leadership and adequate resources are necessary at all levels.

CHAPTER FOUR
RESPONSES TO THE U. S. DEPARTMENT OF EDUCATION GUIDE FOR THE SUBMISSION OF THE 2008–2012 STATE PLAN FOR THE PERKINS IV FUNDS

I. Planning, Coordination, and Collaboration Prior to Plan Submission

A. STATUTORY REQUIREMENTS

1. **The State must conduct public hearings, after appropriate and sufficient notice, for the purpose of affording all segments of the public and interested organizations and groups (including charter school authorizers and organizers consistent with State law, employers, labor organizations, parents, students, and community organizations) an opportunity to present their views and make recommendations regarding the state plan. [Section 122(a)(3)]**

RESPONSE

In accordance with Section122 (a)(3) of the Carl D. Perkins Career and Technical Education Act of 2006 (Perkins IV) and the "Guide for the Submission of State Plans," the California Department of Education (CDE) and the California Community College Chancellor's Office (CCCCO) jointly conducted a comprehensive and thorough process to elicit public input on the state plan. Public hearings were conducted, after appropriate and sufficient notice, for the purpose of affording all segments of the public and interested organizations and groups (including charter school authorizers and organizers consistent with state law, employers, labor organizations, parents, students, and community organizations) an opportunity to present their views and make recommendations regarding the state plan.

The following state plan development activities were conducted in accordance with the framework of consultations required by section 122(b)(1)(A-B) and section 122(b)(2) of the Act:

- A statewide needs assessment
- Structured input from a State Plan Resource Group that included representation from all the required stakeholders
- Web-based input to draft plan
- Public hearings

Appropriate records for these mandated consultations have been maintained.

Statewide Needs Assessment. In anticipation of the reauthorization of the Carl D. Perkins Act, during the period February 15, 2006 - December 15, 2007, the CDE and the

CCCCO contracted with WestEd to conduct a CTE needs assessment. The primary purpose of this study was to examine the status of CTE in California and explore opportunities for strengthening the CTE system as a whole. The secondary purpose was to identify and document potential system improvements to provide direction for California's 2008–2012 state plan. CTE improvement issues, solutions, and effective practices that surfaced through participant input and responses may be implemented through any number of initiatives, all working toward the creation of a coherent and comprehensive CTE system.

Specifically, this study sought to answer two major questions:

- What is the status of CTE in California and what are the major trends?
- What resources and system improvements are essential at the state and local levels to ensure that CTE meets the current and evolving needs of students, communities, and the economy?

To answer these questions, WestEd first conducted a literature review on state and national CTE trends, and then elicited input directly from the field through a survey of stakeholders, as well as focus groups and interviews.

Customized surveys were developed and disseminated to:

- Administrators
- CTE instructors
- Academic only (non-CTE) instructors
- School/college and community-based counselors/career advisors
- Business/industry

Focus group meetings and interviews involved:

- Administrators and staff representing special populations groups
- Representatives from economic and workforce development and industry organizations
- Administrators of high schools, community colleges, Regional Occupation Centers and Programs (ROCPs), and adult education programs
- Secondary and postsecondary CTE instructors
- Counselors/advisors
- Students in CTE programs
- Parents

A comprehensive report of the needs assessment findings, conclusions, and recommendations was prepared and the results shared in a presentation to the State Plan Resource Group at its first meeting on February 5-6, 2007.

State Plan Resource Group. The CDE and CCCCO, with the assistance of WestEd and additional facilitators, conducted a series of two-day State Plan Resource Group meetings, in February, March, and May 2007, to elicit input on the state plan from all the required stakeholder groups. The State Plan Resource Group consisted of approximately 52 participants selected by the CDE and CCCCO.

Web-Based Input. A public Web site was developed by WestEd to publicize the opportunity to review and comment on the CTE plan. It included background information on the planning process and links to download the five chapters as PDF files, and a link to comment on the chapters. It also included a link to subscribe to an email list to receive updates about the project. Individuals were offered the option of entering comments directly into text boxes on the Web site, or to email comments to staff. The Web site also included information about the public hearings and the means by which individuals could participate either in person or via Webcast.

Beyond notifications posted on the Web site, individuals were informed of their opportunities to provide input to the state plan through public notices, email notification through all pertinent listservs, and an extensive network of professional organizations.

E-mail notifications were sent to:

- The CTE project listserv
- The CDE high school listserv
- CCCCO listservs
- All county offices of education (for distribution to districts)
- The Chancellor's Office of the California Community Colleges (for distribution to interested staff and faculty)
- The Chancellor's Office of the California State University (for distribution to interested staff and faculty)
- The University of California Office of the President (for distribution to interested staff and faculty)
- The California State PTA (for inclusion in their calendar and publications)
- The California School Boards Association (for distribution to members)

- Business and industry organizations suggested by the Joint CDE-CCCCO State Plan Steering Committee
- CTE professional associations and organizations

Notices of the field review period and the public comment meetings as well as other response options were posted per the Bagley-Keene Open Meeting Act requirements on both the CDE and CCCCO Web pages. Options individuals had for responding included:

- Web-based input (WestEd Web site: www.wested.org/cteplan)
- E-mail comments (cteplan@wested.org)
- Mail or fax input to WestEd
- Regional public hearings

Public Hearings. For those individuals preferring to provide input to the state plan in person, or to amplify their written input, public hearings were held on September 7, 14, 17, and 24 in Los Angeles, Fremont, Fresno, and Sacramento, respectively. The public also had the opportunity to provide input to the plan at the JACCTE meetings beginning in November 2006 and spanning through November 2007. Notices of the field review period and the public hearings were posted per the Bagley-Keene Open Meeting Act requirements on the CTE plan Web site, as well as on both the CDE and CCCCO Web sites. Appendix B provides more detailed information about the public hearings.

2. **State must include a summary of the above recommendations and the eligible agency's response to such recommendations in the state plan. [Section 122(a)(3)]**

RESPONSE

A summary of the recommendations is included in Appendix C. Following the public hearings, the recommendations were either integrated into the draft plan and approved by the State Board of Education or rejected because they did not relate to Perkins IV.

3. **The state plan must be developed in consultation with academic and CTE teachers, faculty, and administrators; career guidance and academic counselors; eligible recipients; charter school authorizers and organizers consistent with state law; parents and students; institutions of higher education; the state Tech Prep coordinator and representatives of Tech Prep consortia (if applicable); entities participating in activities described in section 111 of Public Law 105-220; interested community members (including parents and community organizations); representatives of special populations; representatives of business and industry (including representatives of small business); and representatives of labor**

organizations in the state. The state must consult the Governor of the state with respect to the development of the state plan. [Section 122(b)(1)(A)-(B)]

RESPONSE

The state plan was developed in consultation with a State Plan Resource Group comprising academic and career technical education teachers, faculty, and administrators; career guidance and academic counselors; eligible recipients; charter school authorizers and organizers consistent with state law; parents and students; institutions of higher education; the state Tech Prep coordinator and representatives of Tech Prep consortia; entities participating in activities described in section 111 of Public Law 105-220; interested community members (including parents and community organizations); representatives of special populations; representatives of business and industry (including representatives of small business); and representatives of labor organizations in the state. Effective activities and procedures, including access to information needed to use such procedures, were used to allow these individuals and entities to participate in state and local decisions related to the state plan's development. The Governor's Office was also consulted with respect to state plan development. A list of the 52-member group is provided in Appendix D.

4. **The State must develop effective activities and procedures, including access to information needed to use such procedures, to allow the individuals and entities listed in item 3 to participate in State and local decisions that relate to development of the state plan. [Section 122(b)(2)]**

RESPONSE

Please see response to #3.

5. **The State must develop the portion of the state plan relating to the amount and uses of any funds proposed to be reserved for adult career and technical education, postsecondary career and technical education, Tech Prep education, and secondary career and technical education after consultation with the State agency responsible for supervision of community colleges, technical institutes, or other two-year postsecondary institutions primarily engaged in providing postsecondary career and technical education, and the State agency responsible for secondary education. If a State agency finds that a portion of the final state plan is objectionable, the State agency must file its objection to the State. The State must respond to any objections it receives in the state plan submitted to the Secretary. [Section 122(e)(3)]**

RESPONSE

The distribution of funds formula approved for the 2000–2004 state plan and 2006–2007 State Transition Plan was approved by the JACCTE for the 2008–2009 program year. The CDE and CCCCO will convene a representative field committee for advising the JACCTE on alternative options for distributing these funds in subsequent years.

II. Program Administration

A. STATUTORY REQUIREMENTS

1. The State must prepare and submit to the Secretary a state plan for a 6-year period; or a transition plan for the first year of operation of programs under the Act. [Section 122(a)(1)]

RESPONSE

With a combined total of nearly 4.5 million secondary and adult students, California has made major strides in its commitment to reform and revitalize its CTE system. In the last three years:

- The CTE Model Curriculum Standards were developed for the 15 industry sectors addressed by the state and approved by the State Board of Education (SBE) in May 2005.
- A CTE "curriculum framework" was developed to guide LEA implementation of the CTE and academic standards and approved by the SBE in January 2007.
- A comprehensive needs assessment of the state's CTE system and a review of relevant research were completed in January 2007; the contracted needs assessment and research review were conducted in anticipation of the reauthorization of the Perkins Act and to provide a research-based foundation for the development of the state's 2008–2012 Plan.

The statewide needs assessment focused on two key issues: (1) major trends and the status of CTE programs in the state; and (2) the resources and CTE system improvements needed at the state and local levels to meet the current and evolving needs of students, communities, and the economy.

The assessment process used online surveys and meetings with CTE stakeholder groups to obtain current status and needs information on a myriad of pertinent CTE topics. It also included the review of relevant research and statistical reports to determine the importance of CTE in state and national education reform and in the preparation of the skilled workforce required for healthy state and national economies, to identify the critical organizational characteristics or elements of effective state and local CTE programs, and to

develop a list of effective state and local CTE program improvement practices that should be considered in the implementation of the reauthorized Perkins Act.

The findings, conclusions, and recommendations of the completed needs assessment report were carefully examined in the state plan development process, which involved a Joint State Plan Steering Committee of CDE and CCCCO staff members; a State Plan Resource Group (SPRG) comprised of representatives of CTE stakeholder groups, business and industry, students, parents, teachers, administrators, counselors, higher education, teacher education, and each of the other groups mandated in Section 122(b)(1) of the new Act; and the state's Joint Advisory Committee on Career Technical Education (JACCTE) described in the response provided for Item B2 in Section II. The SPRG deliberated future trends in education and the economy; the statewide needs assessment findings, conclusions, and recommendations; the intent and mandates of Perkins IV; and a myriad of policy issues related to state and local administration and uses of the Perkins IV funds. CTE system improvements and Perkins IV-related policies recommended by the SPRG were forwarded to the JACCTE for further deliberation, approval action, and decisions regarding inclusion in the state plan.

2. The State must describe the career and technical education activities to be assisted that are designed to meet or exceed the State adjusted levels of performance, including a description of:

(a) The career and technical education programs of study that may be adopted by local educational agencies and postsecondary institutions to be offered as an option to students (and their parents as appropriate) when planning for and completing future coursework, for career and technical content areas that:

i. Incorporate secondary education and postsecondary education elements;

ii. Include coherent and rigorous content, aligned with challenging academic standards, and relevant career and technical content in a coordinated, non-duplicative progression of courses that align secondary education with postsecondary education to adequately prepare students to succeed in postsecondary education;

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

iv. Lead to an industry-recognized credential or certificate at the postsecondary level, or an associate or baccalaureate degree.

RESPONSE

The state acknowledges the potential of the program of study's organizational structure to deliver high school graduates who are prepared for immediate employment and postsecondary education. It also recognizes the challenges posed in the requirement that programs of study must incorporate secondary and postsecondary elements. The state's current CTE delivery system comprises secondary and postsecondary programs connected by articulation agreements. The transition from this system to a system based primarily on programs of study will demand that a high priority be given to the development of an action plan to implement the program alignment actions presented in Chapter Three of this plan. In the interim, all local educational agencies (LEAs) receiving Perkins IV funds must provide at least one program of study that includes the elements identified in items i., ii., and iv. All other LEA programs to be assisted with the funds must meet items ii. and iii, in addition to a number of other planning, organization, and operation requirements determined by the state to be essential to effective, high-quality programs. Please refer to Chapter Five for the requirements for CTE programs to be assisted with Perkins IV funds.

(b) How the State, in consultation with eligible recipients, will develop and implement the career and technical programs of study described in (a) above;

RESPONSE

As noted in the response to 2(a), each LEA receiving Perkins IV funds will be responsible for providing at least one CTE program that meets the Perkins IV program of study requirements. CDE and CCCCO staff will utilize a variety of professional development activities and strategies to provide LEAs with the direction, resources, leadership, and technical assistance needed to develop and implement programs of study. The combined impact of the Perkins IV requirement of programs of study in Tech Prep programs and the state's decision to retain the Tech Prep program for no less than two more years is expected to significantly increase the number and quality of programs of study developed and implemented throughout the state.

(c) How the State will support eligible recipients in developing and implementing articulation agreements between secondary education and postsecondary education institutions;

RESPONSE

Beginning in the 2005–06 program year and continuing through the 2013–14 program year, California is using state funds through its Initiative on Economic Development and Career Technical Education (SB70, SB1133) to support regional and statewide articulation. Led by the Academic Senate of the California Community Colleges, the Statewide Career Pathways project (www.statewidepathways.org) is working to systematize the state's articulation efforts and promote regional and statewide articulation.

The project's purpose is as expressed in the pertinent 2005–06 Budget Language: "… to improve the coordination and articulation of curriculum between K–12 and community college career technical education programs … and to increase relevant course availability for K–12 students." The project focuses on improving the linkages and career technical pathways among high schools, ROCPs, and the community colleges, and is developing the technological and human infrastructure for articulation between those institutions. The project will also coordinate with grant-funded regional articulation projects to ensure that appropriate resources are available to the faculty tasked to develop articulation agreements.

The state's implementation of the Perkins IV Title I and Title II guidelines will be brought into alignment with these emerging articulation templates and standards.

(d) How programs at the secondary level will make available information about career and technical education programs of study offered by eligible recipients;

RESPONSE

Outstanding LEA CTE programs of study will be identified by CDE and CCCCO staff through reviews of local plans and applications and on-site Perkins monitoring visits. Information on these programs of study and strategies for their implementation will be disseminated to LEAs electronically and through a variety of statewide professional development activities.

(e) The secondary and postsecondary career and technical education programs to be carried out, including programs that will be carried out by the State, to develop, improve, and expand access to appropriate technology in career and technical education programs;

RESPONSE

Technology, consistent with the needs of industry, is a required element of all CTE programs assisted with Perkins IV funds. This Section 124 and 135 mandate will continue to be addressed through annual statewide Perkins workshops that emphasize Section 135

and state-established quality criteria requirements for programs to be assisted with the funds, a variety of pathway-specific professional development activities supported with State Leadership funds, a thorough examination of the annual LEA Section 131 and 132 applications to ensure compliance with the technology requirement, and an established CTE program on-site monitoring process to confirm LEA compliance.

(f) The criteria the State will use to approve eligible recipients for funds under the Act, including criteria to assess the extent to which the local plan will:

i. promote continuous improvement in academic achievement;

ii. promote continuous improvement of technical skill attainment; and

iii. identify and address current or emerging occupational opportunities;

RESPONSE

The instructions developed by the CDE and CCCCO for the 2008–2012 Section 131 and 132 local plans will require LEAs to identify projected levels of performance for core indicators 1S1, 1S2 and 2S1 for program years 2008–09 and 2009–10 as required in Section 113(b)(4)A)(ii), and to describe proposed actions to promote continuous improvement in all three core indicator areas as required in Section 113(b)(4)(A)(i)(II). The criteria used by CDE and CCCCO to assess the potential effectiveness of the LEA's proposed actions will be based on the degree to which the proposed actions are expected to result in improved continued improvements in the three core indicator performance levels that meet or exceed the state-adjusted levels.

The local plan instructions will also require the LEAs to identify the occupational programs to be assisted with the funds, and to describe the process used to ensure that the CTE programs assisted with the funds will prepare students for current and emerging occupations. A variety of labor market demand information sources will be used to validate the LEA response, including Labor Market Information (LMI) data, Regional Economies Project reports and analyses, labor market projections in the California Workforce Investment Plan, and other industry analyses and reports on economic and labor market trends.

(g) How programs at the secondary level will prepare career and technical education students, including special populations, to graduate from secondary school with a diploma;

RESPONSE

As is evidenced by the state's Consolidated Annual Performance, Financial, and Accountability Report data, the graduation (diploma) rate of high school CTE program completers (including members of special population groups) has consistently paralleled the state's regular high school graduation (diploma) rate. Development and implementation of the high-quality CTE programs of study described in (b) and (h) that require alignment with the model academic standards and articulation with postsecondary instruction should enable the state to maintain its high CTE student graduation rates. These high-quality programs are also expected to significantly increase the number and percentage of high school students who enroll in and complete CTE programs and successfully enter employment and/or transition to further education or training for careers.

(h) How such programs will prepare career and technical education students, including special populations, academically and technically for opportunities in postsecondary education or entry into high skill, high wage, or high demand occupations in current or emerging occupations, and how participating students will be made aware of such opportunities;

RESPONSE

All CTE programs assisted with Perkins IV funds must be designed to recruit and serve all students, including those who are members of special populations. LEAs must ensure that CTE program components are:

- Aligned with the required academic and CTE skills established in the California CTE Model Curriculum Standards and Framework
- Designed to facilitate secondary to postsecondary articulation

All CTE students will receive career guidance based on industry standards and the latest labor market trends. In compliance with negotiated performance standards, attention will be given, as necessary, on the outreach and recruitment, skill attainment, completion, placement, and retention of all students, especially of women in nontraditional, high skill, high wage, and/or high demand, current, or emerging occupations that lead to self-sufficiency.

Perkins IV requires LEAs to identify any gaps or disparities in performance of each category of special population students and be able to quantify the progress these students have made toward meeting the negotiated levels of performance. Every statewide secondary and postsecondary CTE communication system will be used to disseminate to participating students, counselors, and instructional faculty, training

resources and employment opportunities regarding current or emerging high skill, high wage, or high demand and/or nontraditional occupations.

(i) How funds will be used to improve or develop new career and technical education courses:

i. At the secondary level that are aligned with rigorous and challenging academic content standards and student academic achievement standards adopted by the State under section 1111(b)(1) of the Elementary and Secondary Education Act (ESEA) of 1965, as amended;

ii. At the postsecondary level that are relevant and challenging; and

iii. That lead to employment in high skill, high wage, or high demand occupations;

RESPONSE

The state's awareness of the importance of having a CTE system that is responsive to the workforce needs and state, regional, and local labor market priorities is clearly reflected in the needed system improvements presented in Chapter Three and in the number of new CTE courses and programs approved annually for assistance with the Perkins funds. Though state funds provide the primary support for maintaining local CTE programs, the Perkins Act provides critically needed funds to improve and update existing secondary and postsecondary programs, develop new courses and programs, integrate CTE and academic education, imbed technology into the curriculum and instructional delivery, provide staff training and development, and link the programs to the state's industry and labor needs.

Perkins IV funds will provide the impetus and fiscal resources needed to bring the CTE and academic standards of all secondary CTE courses and programs assisted with Perkins IV funds into alignment with the state's approved California CTE Model Curriculum Standards and Framework. Note: The standards contained in this document are aligned with the academic content and student achievement standards adopted by the state under Section 1111(b)(1) of the ESEA of 1965, as amended.

Perkins IV funds will also facilitate a variety of activities used by postsecondary CTE administrators and faculty to provide academic rigor and relevance in CTE courses and programs. These activities include, but are not limited to, the application of applied problem solving, work-based learning, and rigorous academic study.

All secondary and postsecondary programs approved for assistance with Perkins IV funds must prepare students for high skill, high wage, or high demand occupations.

(j) How the State will facilitate and coordinate communications on best practices among successful recipients of Tech Prep program grants under Title II and other eligible recipients to improve program quality and student achievement;

RESPONSE

The state's effort to provide a statewide conduit and repository for Tech Prep best practices, resources, and statewide dissemination was initiated in 1992 through a State Center Tech Prep Consortium Outreach and Guidance project developed and administered with Perkins II, Title III, Part E Tech Prep funds. The project was expanded in 1999 to include a Resource Clearinghouse that is currently being funded as a part of the Tech Prep special project to provide statewide access to career paths, best practices, and legislative updates, and to facilitate statewide networking discussions on critical state Tech Prep issues. The State Center Consortium is also coordinating the Clearinghouse activities with SB70 funds to develop a Technical Assistance Center for Career Pathways and Work-Based Learning that will continue the communication and coordination of the following statewide activities related to Economic Development, Tech Prep, STC, Workforce Investment Act (WIA), and Perkins III/IV:

- Identification and cataloguing of effective CTE practices, products, services, and curricula statewide and making this available through the online Web site (this is already in place and allows for both an electronic and hard copy lending library)
- Development, maintainance, and evaluation of the effectiveness of an Internet-based Web site to provide ongoing support to CTE practitioners to improve the achievement of students enrolled in CTE programs of study through e-mail, web-based discussion(s); link major technical assistance providers nationwide, and maintain a calendar of events
- Coordination of regional forums to provide training and share in-depth information and to encourage attendees to access the Web site and participate in dialogues

The most successful forum conducted by the State Center Tech Prep Consortium is the statewide Education for Careers conference that provides cutting-edge speakers, a large number of workshops highlighting California's best practices in Tech Prep and CTE, and a statewide project directors meeting. This annual conference is attended by approximately 1,200 Tech Prep consortia personnel, brings together all 81 Tech Prep project directors, offers a variety of networking venues for statewide career technical organizations, and facilitates partnership building and regional collaboration.

(k) How funds will be used effectively to link academic and career and technical education at the secondary level and at the postsecondary level in a manner that increases student academic and career and technical achievement;

RESPONSE

As noted in the response to (b), Tech Prep will be maintained as a separate funding stream through the 2008–09 program year. The 81 Tech Prep consortia supported by these funds involve all 109 of the state's community colleges and approximately 1,252 secondary schools. Services are provided annually to more than 14,200 faculty members and 350,000 Tech Prep students.

Each consortium comprises secondary institutions, postsecondary institutions, and business partners with a formal written agreement to develop Tech Prep program curricula, provide for professional development, provide for student recruitment, retention, and support services, and facilitate equal and full access to all programs and services. The required alignment of all of the state's CTE programs with the Model Curriculum Standards for CTE that integrate rigorous academic content standards with industry-specific knowledge and skills is expected to have a significant impact on CTE student achievement of academic skills.

(l) How the State will report on the integration of coherent and rigorous content aligned with challenging academic standards in career and technical education programs in order to adequately evaluate the extent of such integration. [Sec.122(c)(1)(A)-(L)]

RESPONSE

The effectiveness of the state's effort to integrate coherent and rigorous content aligned with challenging academic standards in CTE programs will continue to be measured by increases in the number and percent of secondary and postsecondary CTE students who successfully complete articulated career pathways and receive diplomas, industry-recognized certifications, and advanced degrees. The results will be reflected in the annual Consolidated Annual Performance, Financial, and Accountability Reports.

3. The State must describe how comprehensive professional development (including initial teacher preparation and activities that support recruitment) for career and technical teachers, faculty, administrators, and career guidance and academic counselors will be provided, especially professional development that:

(a) promotes the integration of coherent and rigorous academic content standards and career and technical education curricula, including through

opportunities for academic and career and technical teachers to jointly develop and implement curricula and pedagogical strategies;

(b) increases the percentage of teachers that meet teacher certification or licensing requirements;

(c) is high-quality, sustained, intensive, and focused on instruction, and increases the academic knowledge and understanding of industry standards, as appropriate, of career and technical education teachers;

(d) encourages applied learning that contributes to the academic and career and technical knowledge of the student;

(e) provides the knowledge and skills needed to work with and improve instruction for special populations; and

(f) promotes integration with professional development activities that the State carries out under Title II of the Elementary and Secondary Education Act of 1965, as amended, and Title II of the Higher Education Act of 1965, as amended. [Section 122(c)(2)(A)-(G)]

RESPONSE

Professional development is both a required State Leadership activity and an established state priority for the use of the Perkins IV State Leadership and Title I, Part C funds. Because of the number and diversity of the state's CTE programs, the annual professional development activities conducted by the CDE and CCCCO are necessarily comprehensive in scope, focus, and content. Major thrusts include the following:

- The support of efforts to recruit new CTE teachers, the preparation of new CTE teachers, the mentoring of beginning CTE teachers, and efforts that address the continuing and advanced degree needs of experienced teachers.
- Ensuring that LEA teachers and faculty have a current awareness of industry standards and are able to teach to the standards; are able to provide their students with an understanding of all aspects of the industry; understand the importance of and are capable of developing coherent sequences of courses that prepare students for immediate employment and further education; are using state-of-the-art curriculum materials, information, and instructional methodologies — including work-based learning; understand the importance of, and strategies for, developing student leadership skills; are aligning their courses and programs with the California CTE Model Curriculum Standards and Framework; are using and teaching current technology; are effectively integrating academic and CTE; and understanding the needs of, and are

recruiting and effectively serving students who are members of special populations in their courses and programs.

» Allocating $2 million a year for five years from the Governor's Career Technical Education Initiative (SB70) to improve the CTE teacher preparation pipeline. The goal of this effort is to increase the number of students enrolling in CTE teacher preparation programs and the number of well-prepared CTE classroom teachers that complete the programs.

Efforts will also continue to be made to involve the state's secondary and postsecondary career guidance and academic counselors and site- and district-level administrators in pertinent professional development activities and to keep this group apprised of evolving CTE trends, career opportunities, successes in career and advanced education preparation, and discipline-specific best practices.

4. The State must describe efforts that it and eligible recipients will make to improve:

(a) the recruitment and retention of career and technical education teachers, faculty, and career guidance and academic counselors, including individuals in groups underrepresented in the teaching profession;

RESPONSE

The CTE statewide needs assessment and national research effort conducted to support the development of this state plan identified development of a comprehensive K-adult career guidance system and expansion and promotion of CTE teacher preparation models as essential to building an effective CTE system and to meeting the current and evolving employment preparation demands of the state's population and new economy. As such, these were incorporated into the Plan as two of the eleven "key elements of a high-quality CTE system for California." (See Chapter Three.) The state is addressing the guidance needed through legislation, which provides more than $200 million annually for increased counseling services related to careers and the high school exit exam. The adult schools, ROCPs, and community colleges are currently meeting their CTE teacher/faculty supply and retention needs through effective recruitment practices and a variety of teacher qualification criteria.

An action plan to expand the state's CTE teacher preparation program to provide a sufficient supply of well-trained high school CTE teachers will be developed to effectively mitigate the following barriers to recruiting and retaining high school CTE teachers identified in the needs assessment findings:

» Low pay compared to the private sector

- An inadequate supply of qualified teacher candidates
- An inadequate supply of CTE teacher preparation programs
- A cumbersome and extensive credentialing process that deters otherwise skilled professionals from becoming teachers
- Difficulties in retaining teachers for part-time positions
- Challenges in recruiting teachers for positions in rural areas
- Pressures on teachers to continually retrain in order to keep pace with industry trends

(b) the transition to teaching from business and industry, including small business. [Sec. 122(c)(3)(A)-(B)]

RESPONSE

The state use of a designated subjects (DS) credential program to prepare and employ individuals with recent industry experience as teachers in CTE programs conducted in adult education and regional occupational centers and programs (ROCPs) has been highly successful. The community colleges are also able to employ, as part- or full-time CTE instructors, individuals in business and industry with master's degrees. Efforts undertaken to transition individuals from business and industry to regular high school CTE classrooms have been successful, but limited. Much more planning and organization must occur in order to take full advantage of this potential source of CTE teachers. Three noteworthy points: 1) creating partnerships with business and industry for the recruitment and professional development of faculty is one of the needed actions on the "visionary" list described in the response to 4(a); 2) a task force created by the California Commission on Teacher Credentialing to address the CTE teacher shortage problem is studying alternatives for encouraging individuals in business and industry to consider full- or part-time careers as CTE teachers; and 3) the state's DS credential program is being streamlined to reduce the number of credentials from 175 to 15 (1 for each of the 15 industry sectors) and expand authorization of the 15 credentials.

5. The State must describe efforts that it and eligible recipients will make to improve the transition of sub-baccalaureate career and technical education students into baccalaureate degree programs at institutions of higher education. [Sec. 122(c)(4)]

RESPONSE

The California Education Code and California Code of Regulations (Title 5) mandate transfer as a primary mission of the state's community colleges. Both Codes direct the

California Community College Board of Governors (BOG) to establish transfer centers on each community college campus and to develop and adopt plans to ensure transfer of students to baccalaureate granting institutions. The CCCCO provides training to colleges to help facilitate the annual transfer of approximately 94,000 community college students to four-year institutions and support the training of college staff responsible for transfer and articulation efforts. The CCCCO also works closely with the California State University and University of California systems to facilitate policies and practices that support student transfer. Finally, the CCCCO uses $1.1 million of budgeted state funds to support a transfer counselor Web site, transfer research and outreach campaigns, and other systemwide transfer activities.

6. **The State must describe how it will actively involve parents, academic and career and technical education teachers, administrators, faculty, career guidance and academic counselors, local business (including small businesses), and labor organizations in the planning, development, implementation, and evaluation of career and technical education programs in your State. [Sec. 122(c)(5)]**

RESPONSE

The CCCCO and CDE are actively involved in the planning, development, implementation, and evaluation of CTE at the state and local levels. In addition to the State Plan Resource Committee's involvement in the development of the state plan, as described in Section I of this Chapter:

- The CDE and CCCCO both have statewide advisory committees that assist in the development of priorities for program improvement, implementation, and evaluation
- An industry-based advisory committee for each CTE program assisted with the Perkins IV funds
- Each school district participating in CTE, in accordance with Section 8070 of the California Education Code, must maintain a CTE advisory committee to develop recommendations for the program and provide a liaison between the district and potential employers. The Section also identifies the required composition of the committee
- Each local plan for the secondary and postsecondary Perkins IV funds must include a description of how these individuals and groups will be involved in the CTE planning, implementation, and evaluation processes

7. **The State must describe efforts that it and eligible recipients will make to:**

   (a) Improve the academic and technical skills of students participating in career and technical education programs, including by strengthening the academic

and career and technical components of career and technical education programs through the integration of academics with career and technical education to ensure learning in —

i. The core academic subjects (as defined in section 9101 of the Elementary and Secondary Education Act of 1965, as amended); and

ii. Career and technical education subjects;

RESPONSE

The California CTE Model Curriculum Standards and Framework, cited in the response to A(1), integrate California's rigorous academic content standards with industry-specific knowledge and skills to prepare students for direct entry into the state's vibrant industry sectors and for postsecondary education. The state will use these documents to support the following strategies for improving the academic and technical skills of students participating in CTE programs:

- CTE courses will integrate academic content that is appropriate for the career technical subjects being presented. Students will apply academic content and skills in order to accomplish CTE goals in the classroom and in the workplace, and will be made aware of the academic standards being addressed.
- Real-world applications for academic content standards will be developed for academic classes that partner with CTE programs and/or for academic classes that request this resource.
- Integration of academic and CTE knowledge and skills will be accomplished through strategies such as project-based learning, problem-based learning, service learning, integrated courses, CTE courses that meet university requirements, team teaching, and other similar approaches.
- CTE will provide support for students who have not passed the California High School Exit Exam by approaching targeted standards and competencies in a manner that applies those concepts in the career technical areas.
- Technical skills will be furthered and supported through partnerships with industry, updating of curriculum, development of courses and programs of study that address workforce needs, articulation with postsecondary education programs, recruitment and training of qualified CTE teachers, teacher externships, and ongoing professional development opportunities.

(b) Provide students with strong experience in, and understanding of, all aspects of an industry;

RESPONSE

Strong experience in, and understanding of, all aspects of an industry is incorporated into the state's CTE Model Curriculum Standards, which are integral to each LEA application for Section 131 or 132 funds. In addition, each LEA application includes a signed statement of assurances that the programs identified for assistance with the funds will provide students with strong experience in and understanding of all aspects of the industry addressed by the program(s). CDE and CCCCO staff use annual statewide application funds for workshops to provide the LEAs with detailed information related to the "all aspects" requirement, including the importance of this instruction and strategies for its provision, the types of knowledge and skills that encompass each of the eight aspects and performance objectives for each, and a matrix that illustrates how the needed experience and understanding can be spread over the entire sequence of courses developed for the program. Program monitoring visits and scheduled program reviews are used by both state agencies to determine LEA compliance with this Section 135 requirement.

(c) Ensure that students who participate in career and technical education programs are taught the same challenging academic proficiencies as taught to all other students. [Sec. 122(c)(7)(A)-(C)]

RESPONSE

Pursuant to California Education Code Section 60851, commencing with the 2005–06 school year and each year thereafter, each student completing grade twelve, including students who participate in CTE programs, must successfully pass the high school exit examination as a condition of graduating from high school. The examination was developed by the Office of the State Superintendent of Public Instruction to measure student achievement of the academically rigorous content standards for English language arts and mathematics adopted by the State Board of Education (SBE) and described in Section 60605 of the Education Code. Each student must also complete the minimum state-mandated course requirements for graduation, as prescribed in Code Section 51225.3, which include three years of English; two years of mathematics (including Algebra 1); three years of social science (including U.S. history and geography; world history, culture and geography; one semester of American government; and one semester of economics); and two years of science (including biology and physical science).

As noted in the response to 2(a), the CTE Model Curriculum Standards and Framework have been developed and approved for the 15 industry sectors addressed by the state. Commencing with the 2007–08 school year, all CTE programs assisted with Perkins IV funds must be aligned with the California CTE Model Curriculum Standards and

Framework. This alignment should help to ensure that academic content and rigor being provided in CTE courses and programs are consistent with that which is being provided in the academic core courses.

8. The State must describe how it will provide local educational agencies, area career and technical education schools, and eligible institutions in the State with technical assistance. [Sec. 122(c)(15)]

RESPONSE

CDE and CCCCO staff provide LEAs and state institutions with two types of technical assistance. One is concerned with local receipt, administration, use, and accountability of the Perkins funds. State administration funds are used by both state agencies to provide this assistance. The other is concerned with the elements, content, design, instruction, accountability, funding, and success of CTE pathways in the schools and colleges. State Leadership funds are used by both agencies to provide needed curriculum development, professional development, and technical assistance activities. CDE and CCCCO staff assign a high priority to ensuring that LEA administrators and teachers are provided with the statewide workshops, presentations, and variety of oral and written technical assistance activities needed to effectively administer and use the Perkins funds.

Much of the professional development activity and technical assistance directed to improve special population student access to CTE programs and the support services needed to enhance their success in the programs emanate from actions undertaken or recommended by the Joint Special Population Advisory Committee (JSPAC) described in Section III. Noteworthy efforts include career awareness programs; counseling and guidance for students with special needs; supportive services such as transportation, child care, and assistance with books and tuition; appropriate use of needed technology; special training for CTE teachers and administrators; and professional development targeted to the total school population to foster an equitable climate for special population students.

9. The State must describe how its career and technical education program relates to occupational opportunities in the State and region. [Section 122(c)(16)]

RESPONSE

California's commitment to ensuring that its CTE programs relate to state and regional occupational opportunities is reflected in goal number six of the state's approved CTE System Goals (see Chapter Three) and in the following state statutes related to this issue:

» CA Code of Regulations, Title 5, Section 11504(j) specifies that courses offered by Regional Occupational Centers and Programs (ROCPs) may only be for providing

training, upgrading, and retraining in recognized occupations and/or emerging occupations to meet the labor demand.

- CA Education Code, Section 52302.3 requires that every CTE course or program offered by a ROCP be reviewed every two years to ensure that each course or program meets a documented labor demand.
- CA Education Code, Section 52519 requires the governing board of any high school district or unified district, prior to establishing a CTE program for adults, to conduct a job market study of the labor market area in which it proposes to establish the program.
- CA Education Code, Section 52520 requires that every CTE training program for adults offered by any high school district be reviewed every two years to ensure that the program continues to meet a documented labor market demand.
- CA Education Code, Section 78015 requires the governing board of a community college district, prior to establishing a CTE or occupational training program, to conduct a job market study of the labor market area.
- CA Education Code, Section 78016 requires that every CTE or occupational training program offered by a community college district be reviewed every two years to ensure that it continues to meet a labor market demand. Labor market demands are determined through a variety of methods, including reviewing Labor Market Information (LMI) data, reviewing Regional Economies Project reports and analysis using the labor market projections in the California Workforce Investment Act Plan, and reviewing other industry analysis and reports on economic and labor market trends.

10. The state must describe the methods proposed for the joint planning and coordination of programs carried out under this legislation with other federal education programs. [Section 122(c)(17)]

RESPONSE

The Perkins Joint Management Team (PJMT), comprising appointed staff from the CDE and CCCCO, is responsible for the joint planning and coordination of programs conducted under Perkins IV. The committee will meet monthly to:

- Cooperatively plan and discuss items of mutual concern and resolve issues related to the administration and operation of all state and federally funded CTE programs and services, including Perkins IV
- Plan and coordinate support services to the Joint Advisory Committee on Career Technical Education (JACCTE), including preparation of agendas, meeting minutes, reports, and staff recommendations

- Participate in the planning, development, dissemination, implementation, and evaluation phases of the state plan, and provide LEAs with information on the process and specific timelines to develop and/or amend the state plan
- Establish procedures for addressing local performance
- Plan and coordinate data collection and statistical and narrative information for annual fiscal and performance reports as required by state and federal regulations
- Evaluate the state's performance in reaching established goals
- Develop operational definitions and methods of verification for core indicators, division of funds, program review, program compliance, and fiscal and performance reporting
- Recommend committee appointments as needed to ensure compliance with the state plan
- Address other topics of mutual concern and interest pertaining to state and federally funded CTE programs and services
- Serve as support staff to the JACCTE

11. The State must describe the procedures to be developed to ensure coordination and non-duplication among programs listed in sections 112(b)(8) and 121(c) of the Workforce Investment Act (Public Law 105-220) concerning the provision of services for postsecondary students and school dropouts. [Section 122(c)(20)]

RESPONSE

At the state level, the CCCCO and the California Workforce Investment Board (CWIB) have developed strategic plans to provide a comprehensive guide for improving student access and success for the state's workforce. The CCCCO's strategic plan for the community colleges was developed with input from a wide range of external stakeholders and partners, including other segments of education, business, and state agencies. In addition, a Strategic Plan Steering Committee, with representation from these stakeholder groups, developed recommendations for review by the California Community Colleges Board of Governors (BOG). One of the five major goals of the Strategic Plan is Partnerships for Economic and Workforce Development. Under this major goal are six strategies including Regional Collaboration through Multi-Agency Networks. An Implementation Oversight Committee comprising a wide range of both internal and external constituencies and external stakeholders and partners will oversee the implementation process both at the state and local levels.

As a member of the CWIB, the CCCCO joined the CWIB Partner Coordination Team to assist in creating a strategic workforce plan for the state that provides a framework

for the development of workforce policy and fiscal investment and the operation of California's labor exchange, workforce education, and training programs.

Also at the state level, the CCCCO chairs the Life Long Learning Committee, one of the four major Committees of the CWIB, and is an active participant on the Business and Industry Committee. In addition, the CCCCO has assisted the CWIB in the implementation of the State Youth Vision Team, as required by the federal WIA. The CCCCO is currently investigating ways to involve the Department of Corrections and Rehabilitation in providing services to youthful offenders.

At the regional level, the CCCCO:

- Is continuing to implement, as part of the Perkins State Leadership activities, regional partnerships with the Local Workforce Investment Boards (LWIBs). Each of the community college CTE regional consortia is creating partnerships with the LWIBs and One Stops to identify and address regional workforce development issues.
- Will partner with the California Economic Strategy Panel, the California Employment Training Panel, and the CWIB to provide train-the-trainer sessions throughout the state. The CCCCO will use the California Regional Economies studies and data to prioritize policy, programmatic, and investment decisions to develop regional community action plans and effectively design a coordinated response to the workforce needs of key industries and industry clusters.
- Will collaborate with the CWIB, the CDE, the Division of Apprenticeship Standards, and private and public employers to provide apprenticeship for different industries and to develop strategies to create apprenticeship programs to meet the needs of industries with a high demand for workers.
- Will collaborate with the CWIB to promote the Career Advancement Academies currently being offered in three regions within the state. Information will be disseminated to encourage local boards and employers to develop contextualized basic skills programs and provide employment opportunities to successful completers.

Guidelines for implementing community college district CTE programs at the local level are provided in the California Education Code. Section 78015 requires the local governing board, prior to establishing a CTE program, to conduct a job market study of the labor market area served by the district. The study must include an analysis of available labor market information. An analysis must also be conducted of existing CTE programs for adults operated by area high schools, community colleges, and private-postsecondary schools to ensure that the anticipated employment demand for students in the proposed program justifies the establishment of the proposed program. The local governing board of the community college district shall determine whether the study provides sufficient justification.

Section 78016 of the Code requires that every community college CTE program be reviewed biennially by the district's governing board to ensure that each program continues to meet a documented labor market demand, does not unnecessarily duplicate other workforce development programs in the area, and is effective as measured by the employment and completion success of its students. Any program that does not meet these requirements shall be terminated within one year. A written report of the board's findings must be made available to the public. The required process shall include the opportunity for review and comments by the local WIB prior to any decision by the local governing board.

B. OTHER DEPARTMENT REQUIREMENTS

1. **The State must submit a copy of its local applications or plans for secondary and postsecondary eligible recipients, which will meet the requirements in section 134(b) of the Act.**

RESPONSE

The 2008–2012 Local Plan Instruction document prepared by CDE for eligible recipients of Section 112, 131 and 132 funds distributed to state special schools and secondary correctional agencies, unified and union high school districts, charter schools, county offices of education, ROCPs, and adult school agencies is available at http://www.cde.ca.gov/ci/ct/pk/. The 2008–2012 Local Plan Instruction document prepared by CCCCO for the eligible recipients of Section 112 and 132 funds distributed to the state's adult correctional agency and community college districts is available at http://www.cccco.edu/divisions/esed/cte/grants/perkins_1c/perkins_1c.htm.

2. **The State must provide a description of its governance structure for career and technical education, including the approximate number of eligible recipients at both secondary and postsecondary levels.**

RESPONSE

Section 12053 of the California Education Code designates the State Board of Education (SBE) as the sole state agency responsible for the administration of the state's CTE program as described in Section 3(12) of Perkins IV. The Board of Governors of the California Community Colleges (BOG) cooperates with the SBE in the administration of the Perkins IV funds through an interagency agreement and a Memorandum of Understanding approved by both boards. See Appendix E.

The Joint Advisory Committee on Career Technical Education (JACCTE) was created to ensure shared planning and coordination of CTE in California and to provide a forum for

the discussion of policies and procedures related to the Perkins funds. The committee consists of three members of the SBE and three members of the BOG appointed by their respective board presidents. The committee's chair and vice chair assignments rotate each year between SBE and BOG members. Staff support for the committee meetings is provided by CDE and CCCCO.

The operational functions of JACCTE are to:

- Facilitate coordination in the planning, development, and implementation of the state plan and/or amendments to the plan
- Distribute federal funds between CDE and CCCCO in accordance with the state plan, MOU, and the Perkins Act
- Verify compliance with the state plan and federal requirements in regard to the evaluation of programs and services, data collection, and fiscal and performance reports
- Provide a forum for discussion of issues and concerns on CTE programs and services supported by the shared federal funds
- Facilitate collaborative long-range planning among various stakeholders to meet the education and employment needs of California, including emerging occupations, applications of new technologies, and high skill, high wage, or high demand careers
- Provide for programs that prepare members of special populations for high skill, high wage, or high demand careers

The CDE Assistant Superintendent and Director of the Secondary, Postsecondary, and Adult Leadership Division and State Director of Career Technical Education provides overall leadership for the administration of the Perkins funds, and for the coordination and articulation of CTE programs provided by the state's secondary school and adult education agencies.

The CCCCO Vice Chancellor of the Economic Development and Workforce Preparation Division is responsible for the administration of the Perkins funds, and for the administration, coordination, and accountability of Economic Development, Career Technical Education, and Workforce Preparation programs in the California Community Colleges.

In the 2007–08 program year:

- Section 112(a)(2)(A) funds were distributed to four state institutions: School for the Blind, Fremont; School for the Deaf, Fremont; School for the Deaf, Riverside; and

the California Department of Corrections and Rehabilitation (for secondary and postsecondary programs).

- Section 131 funds were distributed to 420 LEAs, including 388 unified and union high school districts, seven public charter schools, 24 court and community schools administered by county offices of education, and the California Department of Corrections and Rehabilitation (for secondary programs).
- Section 132 funds were distributed to 201 LEAs, including 41 ROCPs, 86 adult school agencies, one county office of education, 72 community college districts, and the California Department of Corrections and Rehabilitation (for postsecondary programs).

3. The State must provide a description of the role of postsecondary career and technical education in the One Stop Career Center delivery system established by Title I of WIA.

RESPONSE

Perkins IV and the Workforce Investment Act (WIA) are part of the effort to build a comprehensive workforce preparation system. Specific requirements in both Acts require close coordination of the activities each provides, including the requirement that all agencies receiving Perkins IV funds be partners in the One Stop system.

Perkins IV programs and activities are part of the referral system for core services and training provided at the One Stop Career Centers. A listing of all postsecondary, adult, and school dropout programs have been made available to the Service Delivery Area system established under Title I for funding One Stop Career Centers. LEAs receiving Perkins IV funds are required to determine, in conjunction with local workforce investment areas and One Stop operators, the required resources and services to be provided. This is accomplished through the use of MOUs.

The MOUs are developed between the Local Workforce Investment Boards (LWIBs) and the One Stop partners. They describe the services to be provided through the One Stop delivery system, how the costs of such services and the operating costs of the system will be funded, methods of referral of individuals between the One Stop operators and the One Stop educational partners for the appropriate services, and the duration of the MOU, and procedures for amending the MOU.

Some postsecondary institutions operate One Stops on their campuses while others operate them at separate locations near the school campus. All postsecondary institutions are involved with their local One Stop operators providing a variety of services depending on the service needs of the area served by the One Stop Center. Many of the postsecondary and secondary schools are represented on their local WIBs.

III. Provision of Services for Special Populations

A. STATUTORY REQUIREMENTS

1. The State must describe its program strategies for special populations listed in Section 3(29) of the Act, including a description of how individuals who are members of the special populations:

(a) Will be provided with equal access to activities assisted under the Act;

RESPONSE

Perkins IV requires the state plan to describe strategies to ensure special populations equal access, nondiscrimination, and programs to enable them to meet the state levels of performance, while State Leadership requirements dictate that the state assess the needs of special populations, promote preparation for nontraditional fields, and provide instructional and/or support programs for special populations. The state affirms its continuing commitment to provide and ensure equal access to CTE programs and support activities and services for all secondary and postsecondary students who elect to enroll in these programs, particularly members of special populations.

As required by the Act, LEAs must disaggregate and report data for each of the core indicators of performance and for each special population group. Much of the state's current difficulty in collecting accurate and consistent special population student enrollment data in its K–12 and adult programs will be resolved by the upcoming implementation of a new student-level data system. The availability of this information on the special population groups in the K–12 and adult education systems will also enable LEAs to objectively develop and implement strategies to inform these students about available CTE programs and services, ensure that they have equal access to the programs, and that they are provided with the support services needed for successful completion of the programs and placement.

Furthermore, the state encourages LEAs to design educational environments that are attuned to the needs of special population students. This includes developing and/or disseminating training and informational materials for administrators, faculty, counselors, and student support staff to assist students who are members of special populations gain access to and succeed in quality CTE programs; providing adaptive equipment and services; and increasing the flexibility of program schedules to accommodate working students and students with young children.

(b) Will not be discriminated against on the basis of their status as members of special populations;

RESPONSE

In meeting the requirement of the federally mandated Vocational Education Guidelines for Eliminating Discrimination and Denial of Services on the Basis of Race, Color, National Origin, Sex, and Disability, the CDE and CCCCO provide continuous oversight and technical assistance to schools and colleges with respect to preserving nondiscrimination of students who are members of special populations. California community colleges and selected secondary school districts systematically receive annual statistical reviews or audits of programs and enrollments to ensure equal access and compliance with policies related to race, sex, disability, limited English proficiency, salary, hiring practices, harassment, and technology. The ongoing federal Office of Civil Rights (OCR) compliance reviews conducted by both agencies and the continuous oversight and monitoring by the departments' assigned staff members ensure that special populations are not discriminated against in programs and classes, and that all special population groups have access to all programs.

The OCR provides guidance that secondary, adult, and alternative school agencies and community colleges receiving Perkins IV funding comply with the CTE-Civil Rights regulations and that state-administered compliance reviews meet all OCR-approved timelines. Biennial site visit schedules and targeting plans will continue to be developed and submitted for OCR approval and both agencies will continue to submit CTE-Civil Rights reports as required by the OCR.

(c) Will be provided with programs designed to enable the special populations to meet or exceed State adjusted levels of performance, and how you will prepare special populations for further learning and for high skill, high wage, or high demand occupations. [Sec. 122(c)(9)(A)-(C)]

RESPONSE

K–12 and adult education will continue to develop and use a variety of program organization and instructional strategies to motivate and engage all students, including those who are members of special populations, in higher math and science as well as CTE courses in order to enable special populations to meet high school graduation requirements, prepare for entry into nontraditional, high skill, high wage, or high demand occupations, and prepare for further education or training. Additional support for students to gain knowledge regarding specific industry clusters and acquire leadership skills is provided through student organizations and other student leadership activities.

Under Perkins IV, the state is responsible for professional development to LEAs on serving *all* special population students. This service is especially critical to institutions that are not meeting their negotiated performance measures. California will continue to use the

maximum amount of its Section 112(a)(2)(B) nontraditional set-aside funds to fund the Joint Special Populations Advisory Committee (JSPAC). The JSPAC provides expert state leadership to facilitate and improve access to quality CTE programs and the necessary support services for special populations to achieve nontraditional, high skill, high wage, or high demand occupations that lead to self-sufficiency. Since its formation in 2000–01, the JSPAC has been jointly supported by the CDE and the CCCCO. The 30-member JSPAC represents the education community served by CDE (grades K–12, ROCPs, and adult education), the 10 California community college regions, and private and public sector groups, including representatives from industry, labor, professional organizations, community-based organizations, affiliated agencies, and/or four-year universities. Additional information about the JSPAC is located at www.jspac.org.

The JSPAC has focused its efforts on bringing about the following school and college improvements intended to ensure special population student access and success in the state's CTE programs:

- Outreach and recruitment to increase student/parent awareness of educational/career options
- Career support (career development and exploration, field trips, mentoring and exposure with a focus on career paths that include high skill, high wage, or high demand jobs)
- Academic support (advisement, tutoring, and special instructional classes)
- Financial support (for childcare, transportation, books, and instructional materials)
- Access to technology (special populations need technology skills to succeed)
- Staff development (Staff need to be informed about the specific needs of special populations and provided with the most effective tools and strategies to assist special population students. Many of these students fall into more than one special population category and face multiple barriers.)

Examples of support services available to special population students include:

- Linkages to support services on and off campus
- Support for child care, transportation, and other needs
- Participation in CTE student organizations; educational, skills, and interest assessment; and academic and career counseling
- Financial aid
- Matriculation services

- Remedial education or basic skills programs
- Strengthening skills in mathematics and science
- Noncredit instruction
- Vocational English as a Second Language courses
- Apprenticeship and pre-apprenticeship programs
- Learning laboratories
- Tutoring, coaching, and mentoring
- Assistance with study and test-taking skills
- Placement and employment services

With online access to up-to-date employment information and job skills requirements, faculty, counselors, librarians, and instructional support personnel effectively help special population students make informed career choices, including nontraditional, high skill, high wage, or high demand occupations that lead to self-sufficiency and/or toward a baccalaureate degree or higher.

In California, labor information is collected, analyzed, and reported by the Labor Market Information Division (LMID) of the Employment Development Department (EDD). The CDE's Secondary, Postsecondary, and Adult Leadership Division and the CCCCO collaborate with other state agencies such as EDD and the California Workforce Investment Board to provide student access to online resources for career information and workforce opportunities through One Stop Career Centers and other online workforce sites.

2. The State must describe how it will adequately address the needs of students in alternative education programs, if it has such programs. [Sec. 122(c)(14)]

RESPONSE

California's alternative education system provides a supportive environment with specialized curriculum, instruction, materials, guidance and counseling, psychological services, and tutorial assistance to help students overcome barriers to learning. Many of the students served by the system have behavioral problems, are at risk of academic failure, and have been referred by expulsion, probation, or a school attendance review board. Others are simply disengaged from academia.

The system comprises a variety of alternative schools and programs administered by school districts and county offices of education, including alternative schools of choice,

magnet schools, community day schools, county community and juvenile court schools, continuation schools, opportunity education, and home and hospital instruction. Though different security measures are required in the various schools and programs, alternative instructional opportunities and strategies are common as each program strives to foster the academic, social, and emotional development needed by its students to complete the high school graduation requirements. Integral to the strategy is a supportive environment and the provision of challenging academic curricula and socialization opportunities to develop prosocial skills and resiliency. These efforts may include an integration of core academic, career technical education, either as specific CTE course offerings, and/or as CTE content embedded in standard academic courses, practical applications and simulations, and work experience opportunities to offer academic and career preparation and development skills to students with distinctive needs.

For further information, see http://www.cde.ca.gov/sp/eo/as/aeoverview.asp.

3. The State must describe how funds will be used to promote preparation for high skill, high wage, or high demand occupations and nontraditional fields. [Sec. 122(c)(18)].

RESPONSE

The state will provide direction, leadership, professional development, and technical assistance to promote high skill, high wage, and/or high demand and nontraditional fields by supporting the JSPAC, separately sponsored activities, and other special projects.

The JSPAC assists secondary and postsecondary eligible recipients of Perkins IV funds to address these issues by identifying, developing, and disseminating:

- Performance of all special population students and overcome performance gaps
- Opportunities for professional development to address the needs of special populations
- Effective practices on serving nontraditional and special population students
- Research-based documents on nontraditional and special population students to improve public awareness and marketing materials to support and promote outreach to and recruitment of special population students

Related activities or services provided by the JSPAC include:

- A statewide leadership training conference and regional workshops
- Information and policy recommendations to facilitate statewide planning

- Training and strategies to educators to assist special population students in meeting or exceeding state-adjusted levels of performance
- Linkages and partnerships to support special population students, including the identification of community-based organizations, social service agencies, and workforce development agencies
- Collaboration with other programs and service providers to address the needs of nontraditional and special population students

The CDE and CCCCO separately sponsor ongoing related activities. The Nontraditional Careers Statewide Leadership Project supported by the CDE since 2004 includes:

- A Web site at http://nontrad.info/ with resources and tips for nontraditional enrollment/retention
- Online professional development courses for Nontraditional Awareness for educators
- Women in Industrial Technology — instructor and nontraditional student encouragement project
- Training/technical assistance workshops in partnership with JSPAC for educators/local educational agencies to increase nontraditional student success and meet local accountability goals

The Community College Special Populations Collaborative Project provides research on and support for special population students in the California Community College system. Initiated in 2002, the Project developed and maintains:

- A statewide survey of community college programs and services for special population students
- Identification of effective practices for meeting the needs of all special population groups
- Analyses of core indicator performance of each special population category
- Dissemination of strategies for assisting special population students

Further information about this project is available at http://www.cccspecialpopulations.org.

4. **The State must describe how funds will be used to serve individuals in state correctional institutions. [Sec. 122(c)(19)]**

RESPONSE

The CTE programs in the California Department of Corrections and Rehabilitation (CDCR) are designed to enhance employability skills, advance inmate literacy and computation proficiency, and prepare the students for initial employment and career progression. The CDCR, Office of Correctional Education currently operates 45 different program types in 12 different curriculum areas. A portion of the Perkins IV funds will be used to update and modernize educational curriculum.

The CDCR's CTE delivery system consists of more than 418 shops providing instruction in 30 occupational areas. There are more than 286 CDCR inmates enrolled in CTE programs at 33 prison facilities. Perkins IV funds will be used to support activities that will increase the success of students in CTE programs within the CDCR. Due to the special needs of the student population, Perkins IV funds will be used to assist students in assessment, learning laboratories, tutorials and assistance with study skills, as well as provide funding for the Developmental Disability Program (DDP) CTE courses. The DDP sets specific requirements to enable all students, including those with developmental disabilities, to have the same opportunities as nondisabled students. Perkins IV funds will be used to assist the student inmate population and developmentally disabled students to assimilate into both apprenticeship and non-apprenticeship programs. By combining the expertise of the trades and CTE training, the program benefits by a curriculum that reflects current industry standards, and the trades benefit from an enlarged pool of immediately employable students; in addition, women in nontraditional occupations benefit from the nationally recognized certifications offered in the other program areas of improvement.

5. **The State must describe how it will require each applicant for funds to include in its application a description of the steps the applicant proposes to take to ensure equitable access to, and participation in, its federally assisted program for students, teachers, and other program beneficiaries with special needs as contained in section 427(b) of the General Education Provisions Act (GEPA) as amended. For further guidance and examples, see the Notice to All Applicants at http://www.ed.gov/fund/grant/apply/appforms/gepa427.pdf**

RESPONSE

The state's annual Perkins IV Section 131 and 132 applications for funds will inform LEAs of the GEPA Section 427 statute and requirement, and will require them to annually review all of the local CTE programs planned for assistance with Perkins IV funds to:

- Determine if any of these programs, based on local circumstances, has a gender, race, national origin, color, disability, or age barrier that could prevent or impede the access or participation of any students, teachers, and/or other program beneficiaries with special needs
- Identify any program(s) which has such a barrier
- Provide a clear and succinct description of the actions that will be taken to ensure that the barrier is effectively removed

IV. Accountability and Evaluation

Perkins IV made major revisions in the accountability and reporting requirements of state and local agencies participating in these federal funds. Under this new Act, states must meet all of the annual secondary and postsecondary core indicator performance levels established through a negotiation process with the U.S. Office of Vocational and Adult Education (OVAE). Local agencies must also set specific performance level targets for each core indicator and be responsible for meeting these targets. State and local agencies failing to meet at least 90 percent of any of their established performance-level targets will be required to develop and implement an improvement plan. Failure to sufficiently correct determined performance-level deficiencies at either level within a three-year period could ultimately result in the loss of part or all of the Perkins IV funding.

The new Act also made significant changes in the core indicator measures for secondary and postsecondary programs. At the secondary level, the academic attainment of students enrolled in CTE programs must now be measured by the academic assessments the state has approved under NCLB graduation rates and must be reported as defined in NCLB; and technical proficiency should include student achievement on technical assessments that are aligned with industry-recognized standards when possible.

At the postsecondary level, academic attainment will no longer have to be reported as a separate measure, but, like the secondary level, technical skill proficiency should include student achievement on technical assessments that are aligned with industry-recognized standards, when possible. Also at the postsecondary level, student placement in high skill, high wage, or high demand occupations or professions must be measured.

The following revised secondary and postsecondary core indicators were established for state and local agency recipients of the Perkins IV funds.

SECONDARY CORE INDICATORS

- Academic Attainment: as adopted by the state in accordance with section 1111(b)(1) of the Elementary and Secondary Education Act of 1965 and measured by the state-determined proficient levels on academic assessments

- Skill Attainment: career and technical skill proficiencies, including student achievement on technical assessments, aligned with industry-recognized standards
- School Completion: obtainment of a secondary school diploma, a General Education Development (GED) credential, or other state-recognized equivalent
- Graduation Rates: as described in Section 1111(b)(2)(C)(vi) of the Elementary and Secondary Education Act of 1965
- Placement: in postsecondary education or advanced training, in military service, or in employment
- Nontraditional Enrollment and Completion: participation in and completion of career technical education programs leading to employment in nontraditional fields

POSTSECONDARY CORE INDICATORS

- Skill Attainment: career and technical skill proficiencies, including student achievement on technical assessments, aligned with industry-recognized standards
- Credential, Certificate, or Degree: attainment of a postsecondary degree, certificate, or credential
- Student Retention/Transfer: career and technical education student retention in postsecondary education or transfer to advanced training
- Placement: career and technical education student placement in military service or employment
- Nontraditional Enrollment and Completion: participation in and completion of career technical education programs leading to employment in nontraditional fields

Annual agreed-upon performance levels for each secondary and postsecondary core indicator are established through a negotiation process with OVAE. The state's failure to meet these levels is expected to result in the required development and implementation of a state improvement plan. Failure to correct determined performance level deficiencies could ultimately result in federal sanctions and the loss of part or all of the state's Perkins IV funding.

To satisfy the federal reporting requirements of Perkins IV, staff from the CDE and the CCCCO meet separately and as a team to address the accountability requirements. Both agencies are committed to addressing the issue of accountability in ways that are mindful of the burdens of data collection and are useful to LEAs in improving local programs while complying with the federal mandate.

IMPROVEMENT OF CALIFORNIA'S ACCOUNTABILITY AND PERFORMANCE MANAGEMENT SYSTEM

The state is continuing to improve and expand its statewide data collection system to meet the new Perkins IV accountability requirements. It is also expanding the use of the achieved core indicator performance levels to identify and direct needed program improvements and technical assistance activities. Data collection instruments will be assessed and improved to better measure student and program outcomes. The measures described in this state plan offer the best approaches currently available for the collection of accountability data as defined in Perkins IV.

Significant efforts are underway to improve the quality of secondary level student data and coordination of the exchange of information across education and workforce systems. The California Student Information System (CSIS), a student-level data system designed to include information on participation at all levels of CTE, is currently being beta tested. Upon its completion and statewide implementation, local agencies will report data directly through the system, thus eliminating separate data entry systems. The California Longitudinal Pupil Achievement Data System (CALPADS), a system that will allow tracking a student's academic performance over time, is also being developed. This system will enable California to meet the federal requirements of NCLB and the accountability measures in Perkins IV.

The California Community Colleges system maintains an electronic, relational, student-level information system that includes the Social Security number as a unique student identifier. The CCCCO continues to increase the data quality of this database through both special projects for specific areas for data clean up and provides workshops throughout the state to help colleges understand the requirements for submitting accurate and reliable data. Additionally, the system office intentionally uses the same data for both funding and accountability to increase the validity and reliability of the data.

Finally, the CDE and CCCCO are working to improve the transfer of student information across both agencies. A joint task force, composed of representatives of secondary, adult, and higher education systems, is continuing to work on the alignment of pertinent definitions across agencies and to explore the potential of linking secondary and higher education student records. California currently has more than 2,600 elementary schools, high schools, community colleges, colleges, and universities from 40 counties participating in the Cal-PASS partnership. Cal-PASS is an initiative that collects, analyzes, and shares student data in order to track performance and improve success from elementary school through university. These data focus primarily on student transcript information, such as courses, grades, and student outcomes. Each participating institution agrees to provide data once a year to the Cal-PASS system. Each eligible recipient of Perkins IV Section

131 funds desiring to participate in a Tech Prep consortium must join the system in the 2008-09 program year. A one year exemption to this requirement is available (see page 219) for local agencies that cannot join this system because of staff time commitment to the implementation of CALPADS. All eligible recipients of Section 131 and 132 funds must have the Cal-PASS system in place by the 2011–12 program year as a condition of funding. Upon request, the CDE and CCCCO staff will assist the eligible recipients with the implementation and use of the system.

A. STATUTORY REQUIREMENTS

1. **The state must describe the procedures it will use to obtain input from eligible recipients in establishing measurement definitions and approaches for the core indicators of performance for career and technical education students at the secondary and postsecondary levels, as well as for any other additional indicators of performance identified by the eligible agency. [Sec. 113(b)(1)(A)-(B), sec. 113(b)(2)(A)-(C)]**

SECONDARY AND ADULT RESPONSE

Representatives from the CDE and the CCCCO meet monthly as a Perkins Joint Management Team (PJMT) to discuss issues related to the state and local administration of the Perkins funds. During these meetings, the core indicators and measures of performance are frequently the topic of discussion. Recommendations from this group are used to develop definitions and establish parameters for determining the impact of changes in the performance levels. Prior year data are reviewed to provide estimates of new performance measures. Feedback from staff is provided to the PJMT members and shared with local recipients to ensure that eligible recipients are capable of providing the necessary data elements.

Ten regional workshops are conducted annually to review the Perkins accountability requirements with local agencies and gather input from eligible recipients on the viability and reasonableness of the proposed core indicator measurement definitions, approaches, and standards. Information gathered at the 2007 workshops was shared with the approximately 60-person State Plan Resource Group (SPRG), described in the Introduction, for review and recommendations. The SPRG's recommendations were forwarded to the JACCTE for that body's review and use in directing state staff action on the establishment of the measurement definitions and approaches and the state-adjusted levels of performance for each of the core indicators.

POSTSECONDARY RESPONSE

All of the 10 statewide advisory committees used to obtain input in the postsecondary system are concerned with program accountability and evaluation; however, one committee has as its primary focus research, accountability, and evaluation. The Vocational Education Research and Accountability Technical Advisory Committee is responsible for the development of the recommended community college core indicators and levels of performance under Perkins II and III and will continue through Perkins IV. The committee meets at least three times a year in person and often continues discussions through e-mail and conference calls.

The committee's approximately 15 regular members represent CTE educators, administrators, and researchers from community colleges across California, with faculty representatives approved by the statewide Academic Senate for the California Community Colleges. Additional representatives are recruited, as needed, from specific areas in colleges, business, industry, and labor, as well as four-year institutions, state labor department representatives, and secondary education. Appropriate agencies and associations nominate business and industry representatives.

Under Perkins, college districts must determine how the federal funds can most effectively be used to improve career and technical education programs. Data from the Perkins performance accountability system and new and existing evaluation and assessment activities must be analyzed so that informed decisions can be made and priorities for program funding can be identified. Because this committee serves as a liaison to the statewide industry-based advisory committees and the 10 regional consortia, it provides a conduit for information regarding access and success of students, current and future research, and implementation and use of the accountability systems. The committee maintains strong linkages to the Academic Senate, Regional Consortia, Economic Development, and appropriate professional associations providing access to thousands of practitioners across California for input and information dissemination.

The Vocational Education Research and Accountability Advisory Committee makes recommendations in the following areas:

- Career and technical education research and accountability issues
- Implementation of the accountability provisions of Perkins IV (Section 113), including the core indicators and negotiated levels of performance
- Design and implementation of core indicator program level reports that facilitate local planning and continuous program improvement

» Policy development and/or implementation of guidelines that will facilitate alignment of state and federal career and technical education and workforce improvement accountability requirements

Over the past three years, throughout the Data Quality Institute process, the committee has discussed and deliberated on proposed modifications to the Perkins accountability measures and approaches in an effort to bring the California Perkins accountability system in line with the definitions and approaches derived by consensus at the institutes and keep alignment with other federal and state accountability systems.

Established processes for developing performance targets include development of analysis reports for each core indicator, which are then reviewed and commented on by the Vocational Education Research and Accountability Advisory Committee and members of the Perkins Joint Management Team.

The postsecondary Perkins IV performance accountability system, through appropriate performance indicators, benchmarks, levels of performance, and performance goals, maximizes the utility of accountability information by providing local districts with data and other information that can be used by faculty and administration to improve student performance. The accountability process is coordinated with other accountability requirements including those of the Workforce Investment Act (WIA) and the Accountability Reporting for the Community Colleges developed pursuant to the requirements of California law AB 1417 (Pacheco), [Chapter 581, Statutes of 2004]. Wherever similar outcomes are being measured and reported, efforts have been made to use existing definitions and criteria.

No additional postsecondary indicators of performance have been identified for inclusion in the 2008–2012 State Plan.

2. The state must describe the procedures it will use to obtain input from eligible recipients in establishing a State adjusted level of performance for each of the core indicators of performance for career and technical education students at the secondary and postsecondary levels, as well as State levels of performance for any additional indicators of performance identified by the eligible agency. [Sec. 122(c)(10)(A), sec. 113(b)(3)(B)]

SECONDARY, ADULT, AND POSTSECONDARY RESPONSE

Please refer to the responses provided for #1.

3. The state must identify, on the forms in Part III of this guide, the valid and reliable measurement definitions and approaches it will use for each of the

core indicators of performance for career and technical education students at the secondary and postsecondary/adult levels, as well as any additional indicators of performance identified by the eligible agency, that are valid and reliable. The state must describe how its proposed definitions and measures are valid and reliable. [Sec. 113(b)(2)(A)-(B)]

SECONDARY RESPONSE

Academic Achievement, 1S1 and 1S2. This will be determined by the number of secondary CTE completers performing proficient or above on the California High School Exit Exam. The proficiency level for English language arts will meet the requirements for core indicator 1S1 and mathematics will be reported under 1S2. This is the same measure currently used by the state for determining Adequate Yearly Progress as defined in the NCLB guidelines.

CTE Technical Skill Attainment, 2S1. Lacking statewide skill assessments for all career pathways, the state has determined that the most valid measure of technical skill attainment for core indicator 2S1 will be the same measure used under Perkins III. Successful program completion will be determined by the program instructor and validated by the content area advisory committee. CTE programs throughout the state are in the process of implementing the state's CTE Model Curriculum Standards and Framework. These curriculum standards are designed around 15 industry sectors and 58 career pathways. The curriculum standards include 11 areas of foundation standards, most of which are directly aligned with the state's core academic standards, as well as specific career pathway standards. Over the next several years, one of the priorities of the CDE is to ensure that assessments are designed or made available for and align with the 58 pathway standards. The California CTE Model Curriculum Standards and Framework were validated by business and industry representatives and approved by the state curriculum committee and the State Board of Education. The numerator will be the number of secondary CTE concentrators who passed an end-of-program technical skill assessment that is aligned with industry-recognized standards, including the California CTE Model Curriculum Standards, during the reporting year. The denominator will be the number of secondary CTE concentrators who took an end-of-program technical skill assessment during the reporting year.

Attainment of a High School Diploma, 3S1. The measurement definition for this core indicator will not change with Perkins IV. The numerator will be the number of twelfth grade CTE program completers earning a high school diploma by June 30. The denominator will be the number of twelfth grade CTE program completers for the program year ending on June 30.

CTE Student Graduation Rate, 4S1. California is expected to complete and implement its statewide longitudinal student achievement data system in the 2008–09 school year. Until that time, the state will not be able to disaggregate the CTE student graduation data requested for core indicator 4S1. Therefore, for the 2006–07 and 2007–08 program years, in accordance with the formula negotiated with the U.S. Department of Education (USDE) pursuant to NCLB, and in recognition of the fact that the State's CTE student graduation rate has historically met or exceeded the state's total student population graduation rate, the CTE graduation rate reported for core indicator 4S1 will be the state's approved NCLB four-year high school completion rate. The rate is calculated by dividing the number of high school graduates by the sum of dropouts for grades nine through twelve, respectively, in consecutive years, plus the number of high school graduates. The rate incorporates four years of data and thus is an estimated cohort rate. Put simply, this rate asks, "Of those students who have left school, what proportion has done so as graduates?" If a hypothetical graduating class began as ninth graders in Year 1, this four-year "graduation" rate would look like:

> (High school graduates Year 4) divided by [dropouts (Grade 9 Year 1 + Grade 10 Year 2 + Grade 11 Year 3 + Grade 12 Year 4) + high school graduates Year 4]

The numerator will be the number of CTE concentrators who, in the reporting year, were included as graduates in the state's computation of its graduation rate as described in Section 1111(b)(2)(C)(vi) of the ESEA. The denominator will be the number of CTE concentrators who, in the reporting year, were included in the state's computation of its graduation rate as defined in the State's Consolidated Accountability Plan pursuant to Section 1111(b)(2)(C)(vi) of the ESEA.

Placement, 5S1. The placement of twelfth grade CTE program completers will continue to be based on the status of these students six months after their exit from high school. The state will continue to rely on placement data obtained from local agencies through mailings, phone calls, and other survey-type instruments and electronically reported to the CDE through an online system. The placement numerator will be the number of the twelfth grade CTE program completers in the military, enrolled in further education or training, or employed six months after exiting the high school. The denominator will be the total number of the twelfth grade program completers who exited the high school.

Nontraditional Participation and Completion, 6S1 and 6S2. The measurement definitions for nontraditional participation and completion are unchanged from Perkins III. These indicators are calculated in the same way as the completion rate of all students but only using the students enrolled in nontraditional fields.

ADULT RESPONSE

Note: Although core indicator performance data on noncredit adult courses will not be submitted in the state's consolidated annual performance, accountability, and financial status report, CDE will require the following indicators, targets, and negotiation process for adult school agencies and ROCPs receiving Perkins IV Section 132 funds.

CTE Technical Skill Attainment, 1A1. Lacking statewide skill assessments for all career pathways, the state has determined that the most valid measure of technical skill attainment core indicator 2A1, will be the same measure used in the past. Successful program completion of programs with advisory committee-validated industry standards and content will be determined by the program instructor. CTE programs throughout the state are in the process of implementing the state's CTE Model Curriculum Standards and Framework. These standards are designed around 15 industry sectors and 58 career pathways. The standards include 11 areas of foundation standards, most of which are directly aligned with the state's core academic standards, as well as specific career pathway standards. Over the next several years, one of the priorities of the CDE is to ensure that assessments are designed or made available for and align with the 58 pathway standards. The California CTE Model Curriculum Standards and Framework were validated by business and industry representatives and approved by the state curriculum committee and the State Board of Education. The numerator for this measure will be the number of adult CTE concentrators who successfully completed a CTE program as defined by the instructor. The denominator will be the number of adult CTE concentrators enrolled in a CTE program during the reporting year.

Attainment of a Credential, Certificate, or Degree, 2A1. Students who complete a transfer program and transfer to a California public two-year or four-year institution to continue their education, or who earn a degree, certificate, or their equivalent will provide a valid and reliable assessment of those completing a program of study. The numerator for this measure will be the number of adult CTE completers who successfully completed a CTE program area and or who received a degree, certificate, or equivalent, or completed a transfer program to a California public two-year or four-year educational institution. The denominator will be the number of adult CTE program completers.

Student Retention or Transfer, 3A1. This indicator is in the development process using the work of the DQI, Perkins reauthorization, and state plan guidance from OVAE. The state will continue to develop the measure using the required collaborative development process with the eligible recipients within the adult schools through the statewide field input groups.

Student Placement, 4A1. The placement of adult CTE program completers will continue to be based on the status of these students six months after their exit from adult school. The state will continue to rely on placement data obtained from local agencies through mailings, phone calls, and other survey-type instruments and electronically reported to the CDE through our online system. The placement numerator will be the number of the adult CTE program completers in the military, enrolled in further education or training, or employed six months after exiting the adult school. The denominator will be the total number of the adult program completers who exited the adult school during the reporting year.

Nontraditional Participation and Completion, 5A1 and 5A2. The measurement definitions for nontraditional participation and completion are unchanged from Perkins III. These indicators are calculated in the same way as the completion rate of all students but only using the students enrolled in nontraditional fields. For 5A1, the numerator will be the number of adult CTE participants from underrepresented gender groups who participated in a program sequence that leads to employment in nontraditional fields during the reporting year. The denominator is the number of adult CTE participants who participated in a program sequence that leads to employment in nontraditional fields during the reporting year. The numerator for adult completion data reported under core indicator 5A2 will be the number of adult CTE concentrators from underrepresented gender groups who completed a program sequence that leads to employment in nontraditional fields during the reporting year. The denominator will be the number of adult CTE concentrators who completed a program sequence that leads to employment in nontraditional fields during the reporting year.

POSTSECONDARY RESPONSE

The California Community Colleges system maintains an electronic, relational, student-level information system that includes the Social Security number as a unique student identifier. Accordingly, the higher education system collects and reports student participation and completion data while students are enrolled in community colleges, and tracks student transitions into the California State University and University of California systems, other public and private two- and four-year institutions, and the workforce. The state also collects data on special populations participating in and completing CTE programs, adult students, and students in Tech Prep programs that are linked to other student-level data. The same data that are collected for accountability purposes are also used for funding, which contributes to the reliability of the data.

For Perkins accountability purposes, a higher education CTE program "Concentrator" is defined as a student who has, within the previous three years, completed a minimum threshold of 12 or more units of related coursework in a CTE program area (defined as a two-digit TOP[128] code) with at least one of those courses teaching job specific skills. While this criterion can be used to establish a minimum level of student participation in a program, the state has focused its analyses on different student populations for different measures, in part to address systemwide performance goals as well as to meet federal reporting requirements in the Perkins Act. A reading of the measures will provide the information needed to interpret the data.

Higher education institutions collect and report enrollment data linked to program area (TOP code). Data will be aggregated across CTE program areas to meet federal reporting requirements. However, the state will also provide information to individual institutions disaggregated to program area and special population groups within programs, including students participating in Tech Prep programs, to assist colleges in conducting internal program improvement efforts.

1P1: Technical Skill Attainment. Legislation – [Perkins IV, Section 113(b)(2)(B)(i)] Student attainment of challenging career and technical skill proficiencies, including student achievement on technical assessments, that are aligned with industry-recognized standards, if available and appropriate.

Performance Goal – The final agreed upon 2008-2009 performance level for this core indicator, determined through a process of negotiations with the U.S. Department of Education, is 92.46%. See Part C(II)(B) for the complete set of final negotiated levels.

Validity and Reliability – Students successfully completing CTE courses must attain a foundation of basic academic and career and technical skills. Since content in CTE courses must meet state standards of rigor in academic and career and technical skill areas as specified in Title 5 of the California Education Code (section 55100) as well as meet business needs and labor market demand (California Education Code section 78016), students who earn a grade of C or better in apprenticeship courses, advanced occupational courses, and clearly occupational courses (SAM[129] A-C, respectively) have attained a core set of competencies embedded in CTE programs.

The validity of this measure is based on the cumulative assessment of technical skill attainment, as measured by the tests, papers, projects, activities, demonstrations of

128 For additional information on TOP, see *California Community Colleges, Taxonomy of Programs*, Sixth Ed. (2004, November).

129 For additional information on SAM priority codes, see *California Community Colleges, Student Accountability Model, 1984*, and Appendix 10 of the 2000–2004 California State Plan.

competency, and other evaluative activities by local instructors, and reported in course grades of students to ensure that students have mastered the necessary academic and career and technical skills before they complete their postsecondary education. Student grade point average (GPA) then can be used as a valid and reliable unduplicated measure of students' technical skill attainment over their educational career.

The Technical Skill Attainment measure will use student GPA, reflective of grades indicating demonstrations of competencies attained, in "clearly occupational" (SAM "C") or higher courses that contain a level of difficulty and technical skill attainment normally associated with courses that are at least above the introductory level in a sequence of CTE courses that make up a program.

Indicator – The state will use the existing approved Perkins III technical skill attainment measure as authorized by Section 113(b)(2)(D) of Perkins IV as the percentage of students earning a GPA of 2.0 or higher in CTE courses to assess technical skill attainment.

2P1: Credential, Certificate, or Degree. Legislation – [Perkins IV, Section 113(b)(2)(B)(ii)] Student attainment of an industry-recognized credential, a certificate, or a degree.

Performance Goal – The final agreed upon 2008-2009 performance level for this core indicator, determined through a process of negotiations with the U.S. Department of Education, is 66.13%. See Part C(II)(B) for the complete set of final negotiated levels.

Validity and Reliability – Students enter community colleges for a variety of reasons, such as transfer, degree or certificate attainment, job training, skill development, or lifelong learning. These goals are dynamic over time as students persist through collegiate programs or return to upgrade skills. Students may attend college sporadically over the years as they proceed through their evolving educational goals. Expectations are different, however, for those with careers who are looking for job skill upgrading or lifelong learning and those training for a new career with no employment history.

California Education Code Section 78016 requires that programs demonstrate to local governing boards biennially that the program meets business needs, has continued labor market demand for trained students, and has demonstrated effectiveness as measured by the employment and completion success of its students. Practitioners want to know whether the students who reach a threshold of coursework in their particular vocational area complete programs, meet state-required certifications, or continue their educational careers. The focus of this measure is to assess student completion across a number of possible outcomes.

"Leavers and Completers" who complete a transfer program and become transfer prepared, or who earn a degree, certificate, or their equivalent will provide an unduplicated valid and reliable assessment of those completing a program of study.

Indicator – This measure is the percentage of "Leavers and Completers" who have successfully completed a minimum "threshold of 12 or more units of related coursework" in a CTE program area or received a vocational certificate of less than 12 units and who: 1) receive a degree, certificate, or equivalent; or 2) complete a transfer program and are classified as transfer prepared.

3P1: Student Retention or Transfer. Legislation – [Perkins IV, Section 113(b)(2)(B)(iii)] Student retention in postsecondary education or transfer to a baccalaureate degree program.

Performance Goal - The final agreed upon 2008-2009 performance level for this core indicator, determined through a process of negotiations with the U.S. Department of Education, is 82.18%. See Part C(II)(B) for the complete set of final negotiated levels.

Validity and Reliability – This indicator is based on considerations of the work of the DQI, Perkins reauthorization, and state plan guidance from OVAE. Administrative data will be used to develop student persistence within the community colleges and transfer to baccalaureate institutions through student tracking systems available to the California community college system.

The "Leavers and Completers" cohort used in 2P1 will be expanded to include those student concentrators who persisted in community colleges or four-year institutions. A measure of those who persist in a two- or four-year institution to continue their education will provide a valid and reliable assessment of student retention (i.e., persistence) and transfer.

Indicator – This measure is the percentage of CTE student concentrators who have successfully completed a minimum "threshold of 12 or more units of related coursework" in a CTE program area and who: 1) persisted in education at the community college level or 2) transferred to a four-year institution.

4P1: Student Placement. Legislation – [Perkins IV, Section 113(b)(2)(B)(iv)] Student placement in military service or apprenticeship programs or placement or retention in employment, including placement in high skill, high wage, or high demand occupations or professions.

Performance Goal – The final agreed upon 2008-2009 performance level for this core indicator, determined through a process of negotiations with the U.S. Department of Education, is 79.86%. See Part C(II)(B) for the complete set of final negotiated levels.

Validity and Reliability – This measure uses administrative data matches to identify student transitions to employment, apprenticeship, and military service. Although this indicator includes transitions to military service, no procedures are currently in place at the California community colleges that meet FERPA guidance from the U.S. Department of Education. The CCCCO will continue to pursue options to collect this data from the military and federal government employment sources.

Students who leave a higher education institution should do so with the knowledge and skills that will assist them in either pursuing additional education or in securing employment or military placement. This measure will assess the percentage of CTE program completers who have some form of positive employment placement associated with their leaving.

California community college CTE programs have required biennial evaluations that include assessing sufficient size, scope, and quality to meet business and industry needs and labor market demands (California Education Code, Section 78016). Continuation of a program depends on meeting criteria for high skill, high wage, or high demand occupations or professions.

Administrative data follow-up is conducted on program leavers and completers in the year following exit to determine whether they continued their education at a four-year university, were found employed in federal or California Unemployment Insurance (UI)-covered employment, or enlisted in the military is a valid and reliable assessment of student placement.

Indicator – This indicator is the percentage of CTE program leavers and completers who did not transfer to a two- or four-year institution and were found during one of the four quarters following the cohort year in an apprenticeship program, UI-covered employment, the federal government, or the military. Although the state currently does not perform data matches with the adult education-offered apprenticeship programs, the federal government, or the military, the state will continue to pursue those administrative data matches.

5P1 & 5P2: Nontraditional Participation and Completion. Legislation – [Perkins IV, Section 113(b)(2)(B)(v)] Student participation in, and completion of, career and technical education programs that lead to employment in nontraditional fields.

Performance Goal – The final agreed upon 2008-2009 performance levels for these core indicators, determined through a process of negotiations with the U.S. Department of Education, are 21.47% for Participation and 23.28% for Completions. See Part C(II)(B) for the complete set of final negotiated levels.

Validity and Reliability – These measures use administrative data to evaluate participation in and completion of programs leading to nontraditional employment as specified in the OVAE guidance, "Student Definitions and Measurement Approaches for the Core Indicators of Performance." The state will use the table of nontraditional program areas developed through collaborative efforts of the National Alliance for Partnership in Equity and OVAE.

Indicator – These measures are the percentages of students who enroll in courses and complete programs that lead to employment in occupations that are nontraditional for their gender.

5P1: Participation. The state will use the percentage of female concentrators participating in CTE program coursework leading to employment in occupations nontraditional for females and male concentrators participating in CTE program coursework leading to employment in occupations nontraditional for males.

5P2: Completion. The state will use the percentage of completers in programs leading to employment in nontraditional occupations that are of the underrepresented gender (i.e., female students completing programs leading to employment in occupations nontraditional for females and male students completing programs leading to employment in occupations nontraditional for males). Completion is defined as: 1) receiving a degree, certificate or equivalent; 2) completing a transfer program and being designated as transfer-prepared; 3) transferring to a two- or four-year institution; or 4) enlisting in the military.

4. **The state must describe how, in the course of developing core indicators of performance and additional indicators of performance, it will align the indicators, to the greatest extent possible, so that information substantially similar to that gathered for other state and federal programs, or for any other purpose, is used to meet the Act's accountability requirements. [Sec. 113(b)(2)(F)]**

SECONDARY AND ADULT RESPONSE

Though the state does not yet have a statewide student data system, as noted in #3, it is in the development stages of a system that will provide this type of information. The Secondary, Postsecondary, and Adult Leadership division of CDE has designated a staff member to work directly with the U.S. Department of Education's (USDE's) technical

development team to ensure compliance with the required data sets under Perkins IV and aligned with similar data gathered by other state and federal programs. It is anticipated that this data collection system will be operational in the 2008–2009 school year. Additionally, to the extent possible, the state has aligned its core indicator measures and performance levels with the USDE guidelines.

POSTSECONDARY RESPONSE

Please read the response to #1.

5. **On the forms provided in Part C of this Guide, the state must provide, for the first two years covered by the state plan (July 1, 2007 – June 30, 2008 and July 1, 2008 – June 30, 2009), performance levels for each of the core indicators of performance, except that states submitting one-year transition plans are only required to submit performance levels for part of the indicators as discussed above. For performance levels that are required, the states' performance levels, at a minimum, must be expressed in a percentage or numerical form, so as to be objective, quantifiable, and measurable; and require the states to continually make progress toward improving the performance of career and technical education students. [Sec. 113(b)(3)(A)(i)-(ii)]**

SECONDARY AND POSTSECONDARY RESPONSES

Please refer to Part C: Accountability Forms for the state's secondary and postsecondary core indicator levels of performance for 2007–08 and 2008–09.

6. **The state must describe its process for reaching agreement on local adjusted levels of performance if an eligible recipient does not accept the State-adjusted levels of performance under section 113(b)(3) of the Act. [Sec. 113(b)(4)(A)(i); sec. 122(c)(10)(B)]**

SECONDARY AND ADULT RESPONSE

The CDE's current accountability policy requires all agencies receiving Section 131 and 132 funds to meet or exceed the state-adjusted levels of performance. To facilitate this process, the accountability section of the annual application for funds includes a comparison of the LEA's core indicator performance levels for each of the past three years as well as the state performance targets. LEAs failing to meet the state performance targets in the last completed year must provide a narrative explanation of why the target was not met and the steps that will be taken during the funded year to meet or exceed the state levels. During the application review process, state staff provide the LEAs with technical

assistance, as deemed necessary, to ensure that the planned core indicator performance level improvement actions will result in the needed performance level increases.

POSTSECONDARY RESPONSE

Districts can choose to accept the state-negotiated performance target established with the Secretary or negotiate with the state to reach its own performance targets for each of the core indicators.

The negotiated performance measures will be in percentage form, require improvement over time, and be identified in the local plan. The first negotiation process will set performance targets for the first year of the Perkins IV Five-Year Plan. The second and third scheduled negotiations will occur in year two and year four of the five-year plan and will be for two years of performance. Districts may request renegotiations when an unanticipated circumstance arises as specified in Section 113 (b)(4)(A)(vi).

The agreement will require continuous improvement on the indicators of performance and shall take into account: how the negotiated performance target compares with other districts' performance levels, the characteristics of participants in CTE in that district, and the services and instruction provided in CTE in that district.

Districts will indicate on their annual application for funds whether they accept state-negotiated targets for performance, previously negotiated local targets, or request a local negotiation. Districts and colleges will have access to their own and other district reports that include the state-negotiated target for each indicator along with five years of prior performance data disaggregated by population groups and program areas. Local applications will not be approved until negotiations have been completed.

7. **The state must describe the objective criteria and methods it will use to allow an eligible recipient to request revisions to its local adjusted levels of performance if unanticipated circumstances arise with respect to an eligible recipient. [Sec. 113(b)(4)(A)(vi)]**

SECONDARY ADULT RESPONSE

LEAs that experience unanticipated circumstances as described in Section 113(b)(4)(A)(vi) will have the choice of accepting the state-negotiated performance level or negotiating with the state for an alternative performance level for each of the core indicators. The negotiated performance level will be stated as a percentage, require improvement over time, and be identified each year in the local application for funds. The agreement will require continuous improvement on the negotiated performance levels compared to the state-negotiated performance levels. The first negotiation process will establish

performance levels for 2008–09. The annual application for funds will serve as the vehicle for conducting the negotiation.

POSTSECONDARY RESPONSE

Please refer to the response provided for #6.

8. **The state must describe how it will report data relating to students participating in career and technical education programs in order to adequately measure the progress of the students, including special populations and students participating in Tech Prep programs, if applicable, and how you will ensure that the data reported to you from local educational agencies and eligible institutions, and the data that you report to the Secretary, are complete, accurate, and reliable. [Sec. 122(c)(13); sec 205]**

SECONDARY, ADULT, AND POSTSECONDARY RESPONSE

The CDE and CCCCO both use online systems for receiving and reporting CTE accountability data on all students, including special populations, and students participating in Tech Prep programs. The accountability specialists for both agencies meet separately and as a team to draft measures that are complete, accurate, and reliable, and will satisfy all of the Perkins IV accountability and reporting requirements, including those required for Tech Prep programs. Both agencies are committed to addressing the issue of accountability in ways that are mindful of the burden of data collection, useful to LEAs in improving their programs, and in compliance with the federal mandates. Additionally, as indicated in the postsecondary response to the general validity and reliability question in #3, the CCCCO uses the same student enrollment-level data for accountability that it uses for funding. This ensures that for every student used to determine a college's funding, the college is held accountable. Additionally, the use of a student enrollment-level data system provides the most accurate and reliable assessment of the college's performance.

9. **The state must describe how it plans to enter into an agreement with each consortium receiving a grant under Perkins IV to meet a minimum level of performance for each of the performance indicators described in section 113(b) and 203(e) of the Act. [Sec. 204(e)(1)]**

SECONDARY AND ADULT RESPONSE

The MOU submitted by each Section 131 and 132 consortium, and signed by each participating member, must include a statement that acknowledges the requirement that the consortium must meet the minimum level of performance for each of the core indicators, not the individual members; that each member of the consortium will

provide the consortium's fiscal agent with its annual accountability data, which will be aggregated with the accountability data received from the other members to prepare the consortium's annual accountability reports; that the consortium's annually reported levels of performance for each of the core indicators of performance must meet or exceed the state-adjusted levels of performance; and that failure to meet these minimum levels could result in the consortium's loss of the Perkins IV funds. The accountability section of the consortium's annual application for funds will identify its core indicator performance levels for the past three years and the state performance target for the current year. Consortia failing to meet the state performance targets must provide a narrative explanation of why the target was not met and the steps that will be taken to meet or exceed the state levels in the year covered by the application. During the application review process, the consortia will be provided with technical assistance required to ensure that the planned program improvements will result in the needed performance level increases.

POSTSECONDARY RESPONSE

Each consortium will be held responsible for meeting performance targets negotiated by the eligible recipient. The local application for funds submitted by each consortium will include a statement that acknowledges the requirement that the consortium as the eligible recipient must meet the minimum level of performance for each of the core indicators, not the individual members, just as a multicollege district must meet the minimum level of performance, not the individual colleges; that the consortium's annually reported levels of performance for each of the core indicators must meet or exceed 90 percent of the negotiated levels of performance; and that failure to meet these minimum levels could result in sanctions on the consortium. During the negotiation and application review process, the consortia will be provided with technical assistance required to ensure that the negotiating performance targets are reasonable and meet the criteria for performance targets for all other districts.

10. The state must describe how it will annually evaluate the effectiveness of career and technical education programs, and describe, to the extent practicable, how it is coordinating those programs with other federal programs to ensure nonduplication. [Sec. 122(c)(8)]

SECONDARY, ADULT, AND POSTSECONDARY RESPONSE

Evaluation of CTE program effectiveness occurs at every level of the state's education system, including classrooms, programs, schools, colleges, and the state. The application for funds process administered by the CDE and the CCCCO requires that local and state attention be given to the nine requirements of local programs assisted with the funds, which includes developing and implementing evaluation of the CTE programs carried out

with Perkins IV funds, including an assessment of how the needs of special populations are being met [Section 135(b)(1)]. The application for funds is also used in conjunction with the annual core indicator accountability data reported by LEAs to identify CTE programs that need improvement and to prescribe needed improvements. Monitoring processes established by both state agencies help to ensure the validity of the local application and the accountability data.

California Education Code Sections 52520, 52302.3, and 78016, require a biennial program review of all adult education, ROCP, and community college CTE programs, respectively, to ensure that these programs are of sufficient size, scope, and quality to meet labor market demand. Additionally, the state's community college accountability system, Accountability Reporting for the Community Colleges (ARCC), developed pursuant to the requirements of AB 1417 (Pacheco) [Chapter 581, Statutes of 2004], provides for the annual evaluation of the colleges' and college programs' ability to facilitate student completion of courses and programs as well as student program completer employment and earnings. The ARCC uses a system that includes benchmarking programs and colleges with themselves over time and peer benchmarking, with peers developed through cluster analysis that facilitates evaluation of system, college, and program performance by policymakers, local college faculty and officials, and elected boards. The ARCC and Perkins IV indicators have been aligned to complement each other for performance analysis. Additionally, the Perkins IV accountability system and evaluation process will be coordinated with other accountability requirements including those of the Workforce Investment Act (WIA). Local Workforce Investment Boards often use Perkins accountability measures to evaluate effective programs at community colleges when determining effective training provider programs.

Last, but not least, the Western Association of Schools and Colleges accrediting commission and accreditation process ensure that all facets of a community college, including instruction and services, have a process to assess student learning outcomes and include those assessments and improvement plans within the program review and college planning and budgeting cycles.

B. OTHER DEPARTMENT REQUIREMENTS

1. **The state must identify the program areas for which it has technical skill assessments, the estimated percentage of students who will be reported in the state's calculation of CTE concentrators who took assessments, and the state's plan for increasing the coverage of programs and students reported in this indicator in future program years.**

SECONDARY, ADULT, AND POSTSECONDARY RESPONSE

All CTE courses and programs have developed or adopted technical skill assessments based on industry standards as determined from alignment with the California CTE Model Curriculum Standards and Framework or statewide industry advisory determination. As mentioned in the validity section of the technical skill assessment indicator in question #3, the state considers the most valid form of technical skill assessment to be a comprehensive and cumulative assessment of technical skill attainment, aligned to industry standards and course and program content as measured by the tests; papers; projects; activities; demonstrations of competency, critical thinking, and problem solving; and other evaluative activities by local instructors, and reported in course grades of students to ensure that students have mastered the necessary academic and career and technical skills before they move into more advanced courses or complete their postsecondary education. Where applicable, programs may also adopt the more general industry certification assessments or more specific industry certificates to provide for enhanced employment opportunities for students completing the course.

All students who meet the CTE concentrator threshold criteria will have been assessed within their individual CTE courses. All CTE student concentrators who complete CTE programs will have completed an end-of-program assessment where available and applicable.

2. **The state must identify the program areas for which it has technical skill assessments, the estimated percentage of students who will be reported in the state's calculation of CTE concentrators who took assessments, and the state's plan for increasing the coverage of programs and students reported in this indicator in future program years.**

SECONDARY, ADULT, AND POSTSECONDARY RESPONSE

Though a number of LEAs currently use technical skill assessments for the purpose of issuing certificates of occupational proficiency and certifying program completion, the state has not yet developed or formally adopted technical skill assessments for its occupational programs. Nor has a system been developed for identifying the number of CTE program concentrators who have taken the available assessments. Prompted by the emerging accountability requirements of Perkins IV and the needed CTE assessment and accountability actions presented in Chapter Three, the state will assign high priority to the identification and implementation of a viable statewide system for assessing, certifying, and reporting CTE program concentrators who have achieved industry-recognized skill and knowledge standards. The identification process will address and deliberate a myriad of issues related to skill assessments, including but not limited to the following:

- Should the assessments be industry-specific or based on basic skills common to a career cluster?
- Should the assessments be determined at the state level or at the local level by established program advisory committees?
- May the assessment requirement be satisfied by successful completion of CTE programs based on industry-validated content?
- Should the assessments be based on student performance of required skills, demonstrated knowledge of the required skills, or both?
- Who should administer the assessments — teachers, industry advisory persons, or contracted agencies?
- Should successful completion of the assessments result in the receipt of industry-recognized and accepted certificates? If so, what information and whose signature should be on the certificates? Also, what strategies are recommended to obtain industry support for the certification process?

V. Tech Prep Programs

California will retain Tech Prep as a separate categorical program. This decision was made by the state's JACCTE at its June 7, 2007 meeting. California recognizes that Tech Prep is markedly recast in Perkins IV, with the redefinition of articulated agreements, secondary and postsecondary Tech Prep students, required data collection and reporting, and programs of study. Accordingly, the JACCTE will reevaluate the Tech Prep program at the end of the 2008–09 program year to determine if appropriate realignment has been made and what changes in future funding of local consortia should be stipulated.

The state's future Tech Prep programs will comprise programs of study that combine a minimum of two years of secondary education with a minimum of two years of postsecondary education, or with an apprenticeship program, in a nonduplicative, sequential course of study that is accountable, integrated, and articulated among the program levels and leads to technical skill proficiency, an industry recognized credential, a certificate, or a degree, in a specific career field; and leads to placement in high skill, high wage, or high demand employment, or to further education. These pathways will be academically rigorous and will provide students with the skills required for postsecondary admission and the technical skills needed for successful careers in the state's new and highly technical economy.

The future Tech Prep program delivery system will build upon the momentum, practices, infrastructure, and programs that have already been developed; that is, elements of the school-to-career system; the current Tech Prep local consortia; state funding through

the Governor's Initiative for CTE and Economic Development Pathways; ROCPs (AB 2448); and others. The delivery system will continue to have two major components: 1) state administration and leadership; and 2) Tech Prep local consortia. The effective organization of these components will ensure:

- Linkage of programs with the local, state, and regional economies
- Collaboration and systematic articulation of programs among high schools, ROCPs, and community colleges
- Development of comprehensive strategies among multiple state and federal programs to encourage joint planning and avoid unnecessary duplication of service delivery
- Funding and programmatic decisions directed toward high skill, high wage, and/or high demand industry priorities
- Focus on accountability, an infrastructure for monitoring effectiveness evaluation strategies, and evaluation strategies
- Capacity for researching and identifying effective programs and practices linked to academic and industry standards
- Focus on new and emerging technical occupational areas

CDE and CCCCO will continue to jointly administer the Tech Prep program. The two agencies will also be responsible for:

- Devising a transition plan to realign the Tech Prep program with the requirements of Perkins IV.
- Establishing state performance measures and levels as required by Perkins IV.
- Reviewing and certifying Tech Prep funding awards and distributing funds to consortia fiscal agents.
- Developing articulation guidelines that ensure systematic coordination with segmental and statewide standards.
- Providing policy guidance to local consortia in the development of strategic plans, accountability, funding, and other administrative and programmatic issues.
- Meeting and conferring regularly with representatives of local consortia.
- Reviewing and summarizing annual accountability reports submitted by the local consortia and facilitating strategies for evaluating the Tech Prep program, as necessary.
- Monitoring local consortia for fiscal and programmatic compliance.

- Producing required state and federal reports and conducting other functions as deemed necessary.
- Developing for JACCTE review and approval, a Tech Prep program improvement plan with appropriate benchmarks that will provide a basis for determining what changes in future funding of local consortia should be stipulated.

Sixty-nine percent of the State's Title II, Tech Prep grant award will continue to be allocated to local consortia by the CCCCO as described in the response to A1. The CDE will continue to reserve 31 percent of the Title II funds for Tech Prep improvement and expansion projects. These funds will be distributed to Tech Prep consortia, statewide and regionally, through an application process to develop and refine programs of study, regional articulation agreements, and to increase and strengthen collaboratives and partnerships among education, workforce development, and business and industry partners.

Additional activities for Tech Prep funding will include professional development activities that focus on all aspects of Tech Prep program development and implementation, locally, regionally, and statewide.

Title II funds will continue to be used to support statewide resource distribution through electronic medium such as a resource clearinghouse or technical assistance center. California has used a resource clearinghouse model as a venue for statewide distribution of resources and information for Tech Prep programs, and as a lending library and Internet resource site. This dissemination model has proven to be successful and will continue to provide up-to-date resources and information on best practices to schools, statewide.

A. STATUTORY REQUIREMENTS

1. The State must describe the competitive basis or formula it will use to award grants to Tech Prep consortia. [Sec. 203(a)(1)]

RESPONSE

The state's infrastructure for operating, improving, and expanding its Tech Prep programs is largely dependent on the efforts of the 81 Tech Prep local consortia, which serve all 109 of the state's community colleges and 1,252 high schools. The number of colleges included in each local consortium ranges from one to five.

The local consortia are funded on a per-college basis, meaning that each consortium's grant award is based on the aggregated amount of the awards received by its member colleges. The process used to determine the per-college awards involves reducing the CCCCO's share (69 percent) of the State's Title II, Tech Prep grant award by the 8 percent

allowed for administration and dividing the remaining amount by 109 (the number of community colleges). This formula has been maintained since the inception of Tech Prep when it was determined that all of the state's community colleges and students, rural and urban, should be afforded the Tech Prep opportunity and that a minimum allocation was necessary to run an effective consortium.

2. The state must describe how it will give special consideration to applications that address the areas identified in section 204(d) of the Act. [Section 203(a)(1)]

RESPONSE

Consortia will perform a self-assessment of these factors within their five-year plan and build a program improvement plan for one or more elements with their application that:

- Provides for effective employment placement activities or the transfer of students to a baccalaureate or advanced degree program.
- Are developed in consultation with business, industry, institutions of higher education, and labor organizations.
- Addresses effectively the issues of school dropout prevention and reentry, and the needs of special populations.
- Provides education and training in an area or skill, including an emerging technology, in which there is a significant workforce shortage based on the data provided by the eligible entity in the state under Section 118.
- Demonstrates how Tech Prep programs will help students meet high academic and employability competencies.
- Demonstrates success in, or provides assurances of, coordination and integration with eligible recipients described in Part C of Title I, of Section 131 and 132 funds.

3. The state must describe how it will ensure an equitable distribution of assistance between urban and rural consortium participants. [Section 204(f)]

RESPONSE

Please refer to the response provided for #1.

4. The state must describe how it will ensure that each funded Tech Prep program:

(a) Is carried out under an articulation agreement between the participants in the consortium, as defined in section 3(4) of the Act;

RESPONSE

CDE and CCCCO staff will provide the instruction and monitoring efforts necessary to ensure that the articulation agreements between Tech Prep consortium participants conform to the Section 3(4) requirements. Additionally, the Tech Prep consortium articulation agreements must:

- Align with standard formats and guidelines as approved by the state, and as developed by the California Community College Academic Senate's regional articulation structure. (Requests for exemptions will be considered and may be granted, if sufficient justification is provided.)
- Fully disclose all procedures, rights, responsibilities, and fees to affected teachers, faculty, and students.

Each LEA participating in a consortium must certify that its program has been aligned with the appropriate state CTE curriculum standards and provide evidence of participation in Cal-PASS (see pages 171-172).

(b) Consists of a program of study that meets the requirements of section 203(c)(2)(A)-(G) of the Act;

RESPONSE

Local consortia will be responsible for meeting all of the Tech Prep section 203(c) requirements. The joint CDE and CCCCO effort to ensure that the requirements are met will be accomplished through extensive professional development activity, refinements of the local plan, and annual application for funds documents to include required descriptions of planned consortium actions or assurances of intended compliance, a thorough review of the annual application content, and an effective monitoring process. If the state determines that performance is deficient, it may elect to require improvement plans and monitoring, technical assistance, consortia consolidation, or de-funding.

(c) Includes the development of Tech Prep programs for secondary and postsecondary education that meet the requirements of section 203(c)(3)(A)-(D) of the Act;

RESPONSE

Please refer to the response provided for (b).

(d) Includes in-service professional development for teachers, faculty, and administrators that meets the requirements of section 203(c)(4)(A)-(F) of the Act;

RESPONSE

Please refer to the response provided for (b).

(e) Provides professional development programs for counselors that meet the requirements of section 203(c)(5)(A)-(F) of the Act;

RESPONSE

Please refer to the response provided for (b).

(f) Provides equal access to the full range of technical preparation programs (including preapprenticeship programs) to individuals who are members of special populations, including the development of Tech Prep program services appropriate to the needs of special populations [Section 203(c)(6)];

RESPONSE

Please refer to the response provided for (b).

(g) Provides for preparatory services that assist participants in Tech Prep programs [Section 203(c)(7)];

RESPONSE

Please refer to the response provided for (b).

(h) Coordinates with activities under Title I. [Section 203(c)(8)]

RESPONSE

Please refer to the response provided for (b).

5. The state must describe how its state plans to enter into an agreement with each consortium receiving a grant under Perkins IV to meet a minimum level of performance for each of the performance indicators described in sections 113(b) and 203(e) of the Act. [Section 204(e)(1)]

Because the Tech Prep consortia must now report core indicator performance-level data, each community college and high school participating in the consortia will be required to join Cal-PASS (a model student tracking system).

The consortia can choose to accept the minimum core indicator performance levels established for the state, or negotiate with the state to determine its own minimum core indicator performance levels. The negotiated minimum performance levels will be

in numbers and percentages to correspond to the individual indicators of performance specified in sections 113(b) and 203(e) of the Act, will require improvement over time, and will be identified in the local plan and each subsequent application. The first negotiation process will set minimum performance levels for the first year of the five-year Tech Prep plan. Subsequent negotiations may occur in following years as applications are submitted. As specified in section 113(b)(4)(A)(vi), consortia may request renegotiations in the event that an unanticipated circumstance arises.

Each consortium's annual application for funds will indicate its acceptance of the minimum core indicator performance levels established for the state, previously negotiated performance levels, or a request to renegotiate its performance levels. Consortia will have access, where available, to their own and other consortia reports that include the state or negotiated level for each indicator along with three to five years of prior performance data disaggregated by population groups and program areas. Local applications will not be approved until negotiations have been completed.

The agreement on each consortium's continuous improvement on core indicator performance levels will consider how the negotiated performance level compares with the performance levels negotiated with other consortia; and unique factors related to the size, scope, and quality of the CTE programs conducted by the community colleges and high schools participating in the consortium.

B. OTHER DEPARTMENT REQUIREMENTS

1. **The state must submit a copy of the local application form(s) used to award Tech Prep funds to consortia and a copy of the technical review criteria used to select winning consortia, if funds are awarded competitively.**

RESPONSE

The application form(s) used to award Tech Prep funds to local consortia is available at http://www.cccco.edu/divisions/esed/cte/grants/tech_prep/tp_grants.htm.

2. **The state must provide a list of the consortia it expects to fund and the estimated or projected level of funding for each consortium.**

RESPONSE

A list of the State's Tech Prep consortia and their 2008–09 funding levels is available at http://www.cccco.edu/divisions/esed/cte/grants/cte_grants.htm.

VI. Financial Requirements

A. STATUTORY REQUIREMENTS

1. **The state must describe how it will allocate funds it receives through the allotment made under section 111 of the Act, including any funds that it chooses to consolidate under section 202 of the Act, will be allocated among career and technical education at the secondary level, or career and technical education at the postsecondary and adult level, or both, including the rationale for such allocation. [Sec. 122(c)(6)(A); Sec. 202(c)]**

RESPONSE

As noted in the response to Section IIA(b), the state will maintain the Title II, Section 202, Tech Prep funds as a separate funding category for the 2008–09 program year. Also, as noted in the responses to B4 and B5 of Section VI, the state will not use the reserve funds option presented in Section 112(c) in the 2008–09 program year. The state will revise the 2008–2012 Plan if it chooses to exercise either of these options in subsequent years.

As described in Appendix F, the Title I, Part C funds are divided between secondary and postsecondary programs based on a comparison of the CTE course enrollments at the two levels in the last completed program year (2005–06) for which enrollment data are available. This annual enrollment comparison process involves the collection and validation of the enrollments in secondary CTE courses conducted by the unified and union high school districts and ROCPs; and the enrollments in postsecondary CTE courses conducted by the community college districts, adult school agencies, and the ROCPs. Based on a comparison of the aggregated 2005–06 secondary and postsecondary CTE enrollment data, 45.0913551 percent ($49,639,992) of the 2007–08 Title I, Part C funds were directed to secondary programs and 54.908645 percent ($60,447,612) of the funds were directed to postsecondary programs. The secondary funds were distributed in accordance with the allocation formula established in Section 131 of the Act. The postsecondary funds were distributed in accordance with the state's approved Section 132 waiver described in Appendix G. Pending USDE approval of the Section 132 waiver extension request described in Section VI(5), the postsecondary funds will continue to be distributed in accordance with the approved alternative formula.

2. **The state must provide the specific dollar allocations made available by the eligible agency for career and technical education programs under section 131(a)-(e) of the Act and how these allocations are distributed to local educational agencies, area career and technical education schools, and educational service agencies within the state. [Section 131(g)]**

RESPONSE

Section 131 funds will be distributed among the state LEAs operating secondary CTE programs (unified and union high school districts, charter schools, and court and community schools administered by county offices of education) in accordance with the formula established in the Act: 30 percent based on the LEA's proportional share of the state's total K–12 population and 70 percent based on the LEA's proportional share of the state's total K–12 population with family incomes below the poverty level established by the Office of Management and Budget. Statistically updated census data will be used in the determination of the allocations. A list of the 2007–08 Section 131 eligible recipients and allocations is available at http://www.cde.ca.gov/ci/ct/pk. The 2008–09 Section 131 allocations will be posted on the Web site when available.

3. **The state must describe how it will allocate any of those funds among any consortia that will be formed among secondary schools and eligible institutions, and how funds will be allocated among the members of the consortia, including the rationale for such allocation. [Sec. 122(c)(6)(B); Sec. 202(c)]**

RESPONSE

The minimum grant award for the Section 131 funds is $15,000. The minimum grant award for the Section 132 funds is $50,000. As authorized by Section 131(c)(2), in order to meet the minimum grant award requirement an LEA may enter into a consortium with other LEAs, or may apply for a waiver of the consortium requirement if (a) located in a rural, sparsely populated area, or is a public charter school operating secondary career technical education programs; and (b) can demonstrate its inability to enter into a consortium. As authorized by Section 132(a)(3)(A)(i), in order to meet the minimum grant requirement for Section 132 funds an LEA may form into a consortium with other LEAs to meet or exceed the minimum grant award of $50,000. Each formed consortium must submit a memorandum of understanding which identifies its member agencies, the fiscal agent, and agreed-upon guidelines for developing a local plan, determining the CTE program(s) to be assisted with the annual funds, and preparing the annual application for funds, required fiscal claims, and annual accountability report. As stated in the Perkins Assurances and Certifications in Section II of the respective Section 132 and 132 local applications for 2008-2009, (a) Consortia formed to meet the minimum requirement will use funds only for purposes and programs that are mutually beneficial to all members of the consortium; and (b) Funds will not be reallocated to individual members of the consortium for purposes or programs benefiting only one member of the consortium. Local agency adherence to the restriction on reallocation will be closely monitored in the 2008-2009 local application development and approval processes. Note: Section 132 and 132 consortia formed to meet the minimum grant requirements to receive these

funds will also be closely monitored to ensure adherence to the mutually beneficial and prohibited reallocation requirements of Perkins IV.

4. **The state must describe how it will adjust the data used to make the allocations reflect any change in school district boundaries that may have occurred since the population and/or enrollment data were collected, and include local educational agencies without geographical boundaries, such as charter schools and secondary schools funded by the Bureau of Indian Affairs. [Sec. 131(a)(3)]**

RESPONSE

Annual Section 131 allocations reflect changes in school district boundaries, unifications, district reorganizations, charter schools, and secondary schools funded by the Bureau of Indian Affairs based on updated enrollment information collected and reported by the CDE Financial Accountability and Information Office.

5. **The state must provide a description of any proposed alternative allocation formula(s) requiring approval by the Secretary as described in section 131(b) or 132(b) of the Act. At a minimum, states must provide an allocation run for eligible recipients using the required elements outlined in section 131(a) and/or section 132(a)(2) of the Act, together with an allocation run using the proposed alternative formula(s). Also states must include a demonstration that the alternative secondary formula more effectively targets funds on the basis of poverty, as described in section 131(b)(1) of the Act; and/or, in the case of an alternative postsecondary formula, a demonstration that the formula described in section 132(a)(2) of the Act does not result in a distribution of funds to eligible recipients that have the highest numbers of economically disadvantaged individuals and that an alternative formula would result in such a distribution.**

RESPONSE

The state is requesting a renewal (see Appendix G), through June 30, 2013, of the Section 132 funds distribution formula waiver approved for the Perkins II and III funds and the 2007–08 State Transition Plan. The alternative formula significantly increases the number of economically disadvantaged students and CTE programs the state is able to assist with the funds. Compliance with the "more equitable distribution of funds" waiver requirement established in Section 132(b)(1) of Perkins IV is evidenced by the following summaries of the 2005–06 (latest data available) ROCP, adult school agency, and community college district economically disadvantaged CTE enrollment data used for determining the 2007–08 Section 132 allocations.

- **ROCPs.** Of the 48 ROCPs eligible for funds under the alternative formula, only 26 reported Pell Grant and/or BIA Grant recipients. Of the 52,570 economically disadvantaged adults enrolled in CTE programs conducted during the 2005–06 program year by the 48 ROCPs eligible for funds under the alternative formula, only 202 were Pell Grant recipients; only 54 were BIA Grant recipients.

- **Adult School Agencies**. Of the 91 adult school agencies eligible for funds under the alternative formula, only 24 reported Pell Grant and/or BIA Grant recipients. Of the 88,800 economically disadvantaged adults enrolled in CTE programs conducted during the 2005–06 program year by the 91 adult school agencies eligible for funds under the alternative formula, only 1,799 were Pell Grant recipients; only 14 were BIA Grant recipients.

- **Community College Districts**. As illustrated by the comparative data provided in Attachment H, distributing the Section 132 funds based on the proposed alternative formula results in a much more equitable distribution of these funds to the eligible community college district recipients that have the highest numbers of economically disadvantaged individuals than does the formula based on Pell Grant/BIA Grant eligibility. Additionally, the alternative formula enables the state to recognize and serve economically disadvantaged adult CTE students in 89 ROCPs and adult schools that would be excluded by the use of the Pell Grant/BIA Grant eligibility formula.

The alternative formula generates an unduplicated count of adults (unduplicated by period of enrollment, unduplicated by enrollment in more than one CTE course/program, and unduplicated by eligibility in more than one economically disadvantaged category) who are economically disadvantaged; in attendance at an adult school, ROCP, or community college; and enrolled in a CTE course/program. The economically disadvantaged status of the adult CTE students is determined by their participation in one of the following public assistance programs or one of the evidences of a personal or family income below the poverty level:

- Board of Governors Grant (BOGG)
- Pell Grant
- California Work Opportunity and Responsibility to Kids (CalWORKS)
- Workforce Investment Act (WIA)
- Supplemental Security Income (SSI)
- General/Public Assistance
- Bureau of Indian Affairs (BIA)
- Eligibility for economic public assistance or student aid

» Annual income level below poverty level as determined by county of residence

» Self-declaration by adult

The determination of Section 132 allocations involves the following steps: 1) calculating the per-student allocation amount by dividing the total amount of Section 132 funds available for distribution by the sum of the economically disadvantaged adults reported by the eligible recipients (adult schools, ROCPs, and community college districts); and 2) calculating each eligible recipient's allocation by multiplying the determined per-student allocation amount by the number of economically disadvantaged adult CTE students reported by the recipient.

The determination of Section 132 allocations involves 1) calculating the per-student allocation amount by dividing the total amount of Section 132 funds available for distribution by the sum of the economically disadvantaged adults reported by the eligible recipients (adult schools, ROCPs, and community college districts); and 2) calculating each eligible recipient's allocation by multiplying the determined per-student allocation amount by the number of economically disadvantaged adult CTE students reported by the recipient.

B. OTHER DEPARTMENT REQUIREMENTS

1. The state must submit a detailed project budget, using the forms provided in Part B of this guide.

RESPONSE

Detailed budgets for the 2008–09 Perkins IV, Title I and Title II funds are provided in Part B.

2. The state must provide a listing of allocations made to consortia (secondary and postsecondary) from funds available under sections 112(a) and (c) of the Act.

RESPONSE

Lists of the 2008–09 Section 112(a)(2)(A), Section 131 allocations and the Section 132 allocations to the adult school agencies and ROCPs, including consortia allocations, are available at http://www.cde.ca.gov/ci/ct/pk. A list of 2008–2009 Section 132 allocations to the community college districts is available at: http://www.cccco.edu/divisions/esed/cte/grants/perkins_1c/ perkins_1c.htm. As noted in the responses to B4 and B5, the state will not exercise the reserve funds option in the 2008–09 program year.

3. **The state must describe the secondary and postsecondary formulas used to allocate funds available under section 112(a) of the Act, as required by section 131(a) and 132(a) of the Act.**

RESPONSE

Please refer to the description of the Section 131 (secondary) allocation formula in the response to A2 and the description of the Section 132 (postsecondary) allocation formula in the response to A5.

4. **The state must describe the competitive basis or formula to be used to award reserve funds under section 112(c) of the Act.**

RESPONSE

The state will not exercise the reserve funds option in the 2008–09 program year.

5. **The state must describe the procedures used to rank and determine eligible recipients seeking funding under section 112(c) of the Act.**

RESPONSE

This is not applicable because as noted in the response provided for B4, the state will not exercise the reserve funds option in the 2008–09 program year.

6. **The state must include a description of the procedures used to determine eligible recipients in rural and sparsely populated areas under section 131(c)(2) or 132(a)(4) of the Act.**

RESPONSE

The state applies the following four rural categories defined by the National Center for Education Statistics (NCES) to identify the eligible recipients in rural and sparsely populated areas required by Sections 131(c)(2) and 132(c)(2) of the Act:

33 – Town, Remote: territory inside an urban cluster that is more than 35 miles from an urbanized area

41 – Rural, Fringe: census-defined rural territory that is less than or equal to 5 miles from an urbanized area, as well as rural territory that is less than or equal to 2.5 miles from an urban cluster

42 – Rural, Distant: census-defined rural territory that is more than 5 miles but less than or equal to 25 miles from an urbanized area, as well as rural territory that is more than 2.5 miles but less than or equal to 10 miles from an urban cluster

43 – Rural, Remote: census-defined rural territory that is more than 25 miles from an urbanized area and is also more than 10 miles from an urban cluster

Part A: EDGAR Certifications and Other Assurances

EDGAR CERTIFICATIONS AND EXECUTIVE ORDER 12372

I hereby certify:

1. That the State Board of Education is eligible to submit the 2008–2012 California State Plan for the Carl D. Perkins Career and Technical Education Improvement Act of 2006, Public Law 109-270. [34 CFR 76.104(a)(1)]

2. That the State Board of Education has authority under state law to perform the functions of the State under this program. [34 CFR 76.104(a)(2)]

3. That the State legally may carry out each provision of the plan. [34 CFR 76.104(a)(3)]

4. That all provisions of the plan are consistent with state law. [34 CFR 76.104(a)(4)]

5. That Jack O'Connell, Superintendent of Public Instruction, has authority under state law to receive, hold, and disburse Federal funds made available under the plan. [34 CFR 76.104(a)(5)]

6. That Patrick Ainsworth, State Director of Career Technical Education, has authority to submit the plan. [34 CFR 76.104(a)(6)]

7. That the State Board of Education, on March 12, 2008, adopted and formally approved the plan. [34 CFR 76.104(a)(7)]

8. That the plan is the basis for state operation and administration of the program. [34 CFR 76.104(a)(8)]

9. That a copy of the plan was placed into the State Intergovernmental Review Process. [Executive Order 12372; 34 CFR 79]

CALIFORNIA STATE BOARD OF EDUCATION

Date: March 27, 2008

Ted Mitchell, President
California State Board of Education

B. OTHER ASSURANCES

1. **The state must submit a copy of the state plan into the State Intergovernmental Review Process. [Executive Order 12372; 34 CFR 79]**

RESPONSE

Completed. See item 9 of the signed EDGAR certification document.

2. **The state must provide a complete and signed ED Form 80-0013 for certifications regarding lobbying; debarment and suspension, and other matters; and drug-free workplace requirements.**

[See http://www.ed.gov/policy/fund/guid/gposbul/gpos12.html]

RESPONSE

See Appendix I.

3. **The state must provide a complete and signed Assurance for Non-Construction Programs Form. [See http://wdcrobiis08/doc_img/sf424b.doc]**

RESPONSE

See Appendix J.

4. **The state must provide a signed assurance that it will comply with the requirements of the Act and the provisions of the state plan, including the provision of a financial audit of funds received under the Act which may be included as part of an audit of other Federal or State programs. [Sec. 122(c)(11)]**

RESPONSE

See item #1 of the signed Assurances of Compliance with the Requirements of the Carl D. Perkins Career and Technical Education Improvement Act of 2006 attached in this Section.

5. **The state must provide a signed assurance that none of the funds expended under the Act will be used to acquire equipment (including computer software) in any instance in which such acquisition results in a direct financial benefit to any organization representing the interests of the acquiring entity or the employees of the acquiring entity, or any affiliate of such an organization. [Sec. 122(c)(12)]**

RESPONSE

See item #2 of the signed Assurances of Compliance with the Requirements of the Carl D. Perkins Career and Technical Education Improvement Act of 2006 attached in this Section.

6. **The state must provide a signed assurance that it will waive the minimum allocation as required in section 131(c)(1) in any case in which the local educational agency is located in a rural, sparsely populated area or is a public charter school operating secondary school career and technical education programs and demonstrates that it is unable to enter into a consortium for purposes of providing services under the Act. [Section 131(c)(2)]**

RESPONSE

See item #3 of signed Assurances of Compliance with the Provisions of the Carl D. Perkins Career and Technical Education Improvement Act of 2006 attached in this Section.

7. **The state must provide a signed assurance that it will provide, from non-Federal sources for the costs the eligible agency incurs for the administration of programs under this Act, an amount that is not less than the amount provided by the eligible agency from non-Federal sources for such costs for the preceding fiscal year. [Sec. 323(a)]**

RESPONSE

See item #4 of signed Assurances of Compliance with the Requirements of the Carl D. Perkins Career and Technical Education Improvement Act of 2006 attached in this Section.

8. **The state must provide a signed assurance that it and eligible recipients that use funds under this Act for in-service and preservice career and technical education professional development programs for career and technical education teachers, administrators, and other personnel shall, to the extent practicable, upon written request, permit the participation in such programs of career and technical education secondary school teachers, administrators, and other personnel in nonprofit private schools offering career and technical secondary education programs located in the geographical area served by such eligible agency or eligible recipient. [Sec. 317(a)]**

RESPONSE

See item #5 of signed Assurances of Compliance with the Requirements of the Carl D. Perkins Career and Technical Education Improvement Act of 2006 attached in this Section.

9. **The state must provide a signed assurance that, except as prohibited by State or local law, an eligible recipient may, upon written request, use funds made available under this Act to provide for the meaningful participation, in career and technical education programs and activities receiving funds under this Act, of secondary school students attending nonprofit private schools who reside in the geographical area served by the eligible recipient. [Sec. 317(b)(1)]**

RESPONSE

See item #6 of signed Assurances of Compliance with the Requirements of the Carl D. Perkins Career and Technical Education Improvement Act of 2006 attached in this Section.

10. **The state must provide a signed assurance that eligible recipients that receive an allotment under this Act will consult, upon written request, in a timely and meaningful manner with representatives of nonprofit private schools in the geographical area served by the eligible recipient regarding the meaningful participation, in career and technical education programs and activities receiving funding under this Act, of secondary school students attending nonprofit private schools. [Sec. 317(b)(2)]**

RESPONSE

See item #7 of signed Assurances of Compliance with the Requirements of the Carl D. Perkins Career and Technical Education Improvement Act of 2006 attached in this Section.

C. ASSURANCES OF COMPLIANCE WITH THE REQUIREMENTS OF THE CARL D. PERKINS CAREER AND TECHNICAL EDUCATION IMPROVEMENT ACT OF 2006

I hereby certify:

1. That the State will comply with the requirements of the Act and the state plan, including the provision of a financial audit of funds received under the Act which may be included as part of an audit of other Federal or State programs. [Section 122(c)(11)]

2. That none of the funds expended under the Act will be used to acquire equipment (including computer software) in any instance in which such acquisition results in a direct financial benefit to any organization representing the interests of the acquiring entity or the employees of the acquiring entity, or any affiliate of such an organization. [Section 122(c)(12)]

3. That the State will waive the minimum allocation as required in Section 131(c)(1) in any case in which the local educational agency is located in a rural, sparsely populated area or is a public charter school operating secondary school career and technical education programs and demonstrates it is unable to enter into a consortium for purposes of providing services under the Act. [Section 131(c)(2)]

4. That the State will provide, from non-Federal sources for the costs the eligible agency incurs for the administration of programs under this Act, an amount that is not less than the amount provided by the eligible agency from non-Federal sources for such costs for the preceding fiscal year. [Section 323(a)]

5. That the State and eligible recipients that use funds under this Act for in-service and preservice career and technical education professional development programs for career and technical education teachers, administrators, and other personnel shall, to the extent practicable, upon written request, permit the participation in such programs of career and technical education secondary teachers, administrators, and other personnel in nonprofit private schools offering career and technical secondary education programs located in the geographic area served by such eligible agency or eligible recipient. [Section 317(a)]

6. That, except as prohibited by State or local law, an eligible recipient may, upon written request, use funds made available under this Act to provide for the meaningful participation, in career and technical education programs and activities receiving funds under this Act, of secondary school students attending nonprofit private schools who reside in the geographical area served by the eligible recipient. [Section 317(b)(1)]

7. That eligible recipients that receive an allotment under this Act will consult, upon written request, in a timely and meaningful manner with representatives of nonprofit private schools in the geographical area served by the eligible recipient regarding the meaningful participation, in career and technical education programs and activities receiving funding under this Act, of secondary school students attending nonprofit private schools. [Section 317(b)(2)]

8. That no funds received under the Act will be used to provide career and technical education programs prior to the seventh grade, except that equipment and facilities purchased with funds under this Act may be used for such students. [Section 315]

9. That no funds made available under this Act will be used to require any secondary school student to choose or pursue a specific career path or major; or to mandate that any individual participate in a career and technical education program, including a career and technical education program that requires the attainment of a federally funded skill level, standard, or certificate of mastery. [Section 314(1)&(2)]

10. That all of the funds made available under this Act shall be used in accordance with the requirements of this Act. [Section 6]

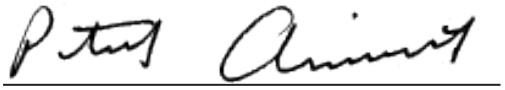
11. That the funds made available under this Act for career and technical education activities shall supplement and shall not supplant, non-Federal funds expended to carry out career and technical education activities and Tech Prep program activities. [Section 311]

12. That no funds provided under this Act shall be used for the purpose of directly providing incentives or inducements to an employer to relocate a business enterprise

from one state to another state if such relocation will result in a reduction in the number of jobs available in the state where the business enterprise is located before such incentives or inducements are offered. [Section 322]

13. That the State will comply with the provisions of Section 112(a)(1) in that not less than 85 percent of the funds made available under Title I, part A of the Act will be distributed to eligible recipients pursuant to such title and approved waivers for Section 131 and 132.

CALIFORNIA STATE BOARD OF EDUCATION



Date: March 27, 2008

Patrick Ainsworth, EdD
Assistant Superintendent and
State Director of Career Technical Education

Part B: Budget Forms

PERKINS IV BUDGET TABLE – PROGRAM YEAR 1

(FOR FEDERAL FUNDS TO BECOME AVAILABLE BEGINNING ON JULY 1, 2008)

I. TITLE I: CAREER AND TECHNICAL EDUCATION ASSISTANCE TO STATES

A.	Total Title I Allocation to the State	$ 128,508,264
B.	Amount of Title II Tech Prep Funds to Be Consolidated with Title I Funds	$ 0
C.	Total Amount of Combined Title I and Title II Funds to be distributed under section 112 (Line A + Line B)	$ 128,508,264
D.	Local Formula Distribution *(not less than 85 percent) (Line C x 85 percent)*	$ 109,232,024
	1. Reserve (*not more than 10 percent of Line D*)	$ 0
	a. Secondary Programs (0 percent of *Line D*)	$ 0
	b. Postsecondary Programs (0 percent of Line D)	$ 0
	2. Available for formula allocations (*Line D minus Line D.1)*	$ 109,232,024
	a. Secondary Programs (45 percent of *Line D.2*)	$ 47,071,470
	b. Postsecondary Programs (55 percent of *Line D.2*)	$ 62,160,554
E.	Leadership (not more than 10 percent) (*Line C x 10 percent)*	$ 11,415,744
	a. Nontraditional Training and Employment ($150,000)	
	b. Corrections or Institutions ($1,285,083)	
F.	State Administration (not more than 5 percent) (*Line C x 5 percent*)	$ 6,425,413
G.	State Match (from non-federal funds)[130]	$ 6,425,413

130 The eligible agency must provide non-Federal funds for State administration of its Title I grant in an amount not less than the amount it provided in the preceding year.

PERKINS IV BUDGET TABLE — PROGRAM YEAR 1

(For Federal Funds to Become Available Beginning on July 1, 2008)

II. TITLE II: TECH PREP PROGRAMS

A. Total Title II Allocation to the State	$	11,251,821
B. Amount of Title II Tech Prep Funds to Be Consolidated with Title I Funds	$	0
C. Amount of Title II Funds to Be Made Available for Tech Prep (*Line A less Line B*)	$	11,251,821
D. Tech Prep Funds Earmarked for Consortia	$	10,351,676
a. Percent for Consortia: 92 percent (*Line D divided by Line C*)		
b. Number of Consortia: 81		
c. Method of Distribution (*check one*): _X_ Formula ____ Competitive		
E. Tech Prep Administration		
a. Percent for Administration: 8 percent (*Line E divided by Line C*)	$	900,145

Part C: Accountability Forms

I. STUDENT DEFINITIONS

A. Secondary Level

Participant – A secondary CTE participant is a student who has completed the equivalent of a conventional 50-minute class taken five times per week for 180 school days, or approximately 150 hours of instruction in a state-recognized CTE sequence or program.
Concentrators – A secondary CTE concentrator is a student who has completed 50 percent of a planned program sequence (in hours or credits) in a state-recognized CTE sequence and is enrolled in the next course in that sequence, or has completed 50 percent of a single, state-recognized, multi-hour course and is enrolled in the second half of that course.

B. Adult Level (Adult Schools and ROCPs)

Participant – An adult CTE participant is an adult student who has completed the equivalent of 20 hours of instruction in a state-recognized CTE program sequence.
Concentrators – An adult CTE concentrator is a student who has completed 50 percent of a planned program sequence (in hours or credits) in a state-recognized CTE sequence and is enrolled in the next course in that sequence, or has completed 50 percent of a single, state-recognized, multi-hour course and is enrolled in the second half of that course.

C. Postsecondary Level (Community Colleges)

Concentrator – For Perkins accountability purposes, a higher education CTE program "Concentrator" is defined as a student who has, within the previous three years, completed a minimum threshold of 12 or more units of related coursework in a CTE program area (defined as a two-digit TOP code) with at least one of those courses teaching job-specific skills. While this criteria can be used to establish a minimum level of student participation in a program, the state has focused its analyses on different subsets of that student population for different measures to allow evaluation of outcomes within appropriate populations. This subset methodology allows community colleges to address both systemwide performance goals and requirements of the Act by measuring success against an appropriate population. The criterion used for inclusion in each of the measures is provided in detail in the Community College measures section of chapter four of the state plan.

II. FINAL AGREED-UPON PERFORMANCE LEVELS FORM (FAUPL)

A. SECONDARY LEVEL

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Indicator & Citation	Measurement Definition	Measurement Approach	Baseline (Indicate Year)	Year One 7/1/07-6/30/08	Year Two 7/1/08-6/30/09
1S1 Academic Attainment – Reading/ Language Arts 113(b)(2)(A)(i)	**Numerator:** Sum of 12th grade CTE concentrators with valid scores who have met the proficient or advanced level on the **reading/language arts** portion of the CAHSEE and who left secondary education in the reporting year. **Denominator:** Sum of 12th grade CTE concentrators with valid scores on the **reading/language arts** portion of the CAHSEE and who left secondary education in the reporting year.	State and Local Administrative Records	B: 2007-08	L: 22.3% A:	L: 23.0% A:
1S2 Academic Attainment - Mathematics 113(b)(2)(A)(i)	**Numerator:** Sum of 12th grade CTE concentrators with valid scores who have met the proficient or advanced level on the reading **mathematics** portion of the CAHSEE and who left secondary education in the reporting year. **Denominator:** Sum of 12th grade CTE concentrators with valid scores on the **mathematics** portion of the CAHSEE and who left secondary education in the reporting year.	State and Local Administrative Records	B: 2007-08	L: 20.9% A:	L: 22.0% A:
2S1 Technical Skill Attainment 113(b)(2)(A)(ii)	**Numerator:** Sum of secondary CTE concentrators who completed a CTE program with a grade of "C" or better or received an industry recognized certification. **Denominator:** Sum of secondary CTE concentrators enrolled in CTE courses during the reporting year.	State and Local Administrative Records	B: 2007-08 will be the first year this data is collected.	L: A:	L: 53.0% A:

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Indicator & Citation	Measurement Definition	Measurement Approach	Baseline (Indicate Year)	Year One 7/1/07-6/30/08	Year Two 7/1/08-6/30/09
3S1 Secondary School Completion 113(b)(2)(A)(iii)(I-III)	**Numerator:** Sum of 12th grade CTE concentrators earning a regular secondary school diploma, earned a General Education Development (GED) certificate, or other state-recognized equivalent (including recognized alternative standards for individuals with disabilities), or earning a proficiency credential, certificate, or degree, in conjunction with a secondary school diploma during the reporting year. **Denominator:** Sum of 12th grade CTE concentrators who left secondary education during the reporting year.	State and Local Administrative Records	B: 2007-08 85.0%	L: A:	L: 85.5% A:
4S1 Student Graduation Rates 113(b)(2)(A)(iv)	**Numerator:** Sum of 12th grade CTE concentrators who, in the reporting year, were included as graduated in the state's computation of its graduation rate as described in Section 1111(b)(2)(C)(vi) of the ESEA. **Denominator:** Sum of 12th grade CTE concentrators who, in the reporting year, were included in the state's computation of its graduation rate as defined in the state's Consolidated Accounting Plan pursuant to Section 1111(b)(2)(C)(vi) of the ESEA.	State and Local Administrative Records	B: 2007-08	L: 83.0%	L: 83.2%
5S1 Secondary Placement 113(b)(2)(A)(v)	**Numerator:** Sum of CTE concentrators who left secondary education during the reporting year and were placed in postsecondary education or advanced training, military service, or employment six months following the program year in which they left secondary. **Denominator:** Number of CTE concentrators who left secondary education during the reporting year.	State and Local Administrative Records	B: 2007-08 75.0%	L: A:	L: 78.0% A:

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Indicator & Citation	Measurement Definition	Measurement Approach	Baseline (Indicate Year)	Year One 7/1/07-6/30/08	Year Two 7/1/08-6/30/09
6S1 Nontraditional Participation 113(b)(2)(A)(vi)	**Numerator:** Sum of CTE participants from underrepresented gender groups enrolled in a program sequence that leads to employment in nontraditional fields during the reporting year. **Denominator:** Sum of CTE participants enrolled in a program sequence that leads to employment in nontraditional fields during the reporting year.	State and Local Administrative Records	B: 2007–08 The formula for this measure is new beginning the 2007-08 year.	L: A:	L: 18.0% A:
6S2 Nontraditional Completion 113(b)(2)(A)(vi)	**Numerator:** Sum of CTE concentrators from underrepresented gender groups who completed a program sequence that leads to employment in nontraditional fields during the reported year. **Denominator:** Sum of all CTE concentrators from underrepresented gender groups enrolled in a program sequence that leads to employment in nontraditional fields during the reporting year.	State and Local Administrative Records	B: 2007–08 The formula for this measure is new beginning the 2007-08 year.	L: A:	L: 23.0% A:

B. ADULT LEVEL: Adult School and ROCP adult performance levels are available at http://www.cde.ca.gov/ci/CT/PK

C. POSTSECONDARY LEVEL

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Indicator & Citation	Measurement Definition	Measurement Approach	Baseline (2006–07)	Year One 7/1/07-6/30/08	Year Two 7/1/08-6/30/09
1P1 Technical Skill Attainment 113(b)(2)(B)(i)	**Numerator:** Unduplicated count of students enrolled in SAM A-C courses who have earned a GPA of 2.0 or above in those SAM A-C courses only. **Denominator:** All concentrators.	State and Local Administrative Records	B: 2007-08 92.46%	L: A:	L: 92.46% A:

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Indicator & Citation	Measurement Definition	Measurement Approach	Baseline (2006–07)	Year One 7/1/07-6/30/08	Year Two 7/1/08-6/30/09
2P1 Credential, Certificate, or Degree 113(b)(2)(B)(ii)	**Numerator**: The number of CTE concentrators in the denominator who earned an industry-recognized credential, a certificate, a degree, or who completed the transfer program and were classified as transfer prepared. **Denominator**: The number of CTE concentrators who were postsecondary leavers or completers.	State and Local Administrative Records	B: Three year average 2005-06 through 2007-08 66.13%	L: A:	L: 66.13% A:
3P1 Student Retention or Transfer 113(b)(2)(B)(iii)	**Numerator**: The number of CTE concentrators in the denominator who persisted in the California community college system or transferred to another two- or four-year institution. **Denominator**: The number of CTE concentrators who did not leave with a degree or hold a degree from a prior year (unless they transferred).	State Administrative Records	B: Three year average 2005-06 through 2007-08 82.18%	L: A:	L: 82.18%* A:
4P1 Student Placement 113(b)(2)(B)(iv)	**Numerator**: The number of CTE concentrators in the denominator who were found during one of the four quarters following the cohort year in UI-covered employment, or an apprenticeship program, the federal government, or the military in the year following the cohort year. **Denominator**: The number of CTE concentrators who were leavers (did not continue in any institution) or completers.	State and Local Administrative Records	B: Three year average 2005-06 through 2007-08 79.86%	L: A:	L: 79.86%* A:
5P1 Nontraditional Participation 113(b)(2)(B)(v)	**Numerator**: The number of CTE concentrators in the denominator who were of the underrepresented gender. **Denominator**: The number of CTE concentrators in programs deemed nontraditional for either gender.	State and Local Administrative Records	B: 2007-08 21.47%	L: A:	L: 21.47%* A:

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Indicator & Citation	Measurement Definition	Measurement Approach	Baseline (2006–07)	Year One 7/1/07-6/30/08	Year Two 7/1/08-6/30/09
5P2 Nontraditional Completion 113(b)(2)(B)(v)	**Numerator**: Nontraditional concentrators in nontraditional programs earning a certificate or degree or transferring to a four-year university. **Denominator**: All concentrators in nontraditional programs earning a certificate or degree or transferring to a four-year university.	State and Local Administrative Records	B: 2007-08 23.28%	L: A:	L: 23.28%* A:

* See comments following the postsecondary table for the logic for setting the proposed target.

COMMENTS

1S1 and 1S2. The respective baselines for these two core indicators were derived from the 2007-08 CA High School Exit Exam results for all students. It is not currently possible to disaggregate the testing results of CTE students from the results of the total student population because the state's student data collection system does not collect testing information. That problem will be resolved in the 2010-11 program year by the statewide implementation of the two new student data systems: the California Student Information System (CSIS), which will provide a unique and confidential identifier for students, enabling the system to follow students' progress from one program, district, or educational system to another; and the California Pupil Achievement Data System (CALPADS), a relational database which will collect student-level data on demographics, program participation, and course completion. In the interim, the state's Perkins data collection system is being modified to initiate the collection of the individual CTE student academic data for the 2007-08 program year. The results of the latter effort should provide the basis for establishing reasonable performance-level baselines for both core indicators.

2S1. The 2007-08 will be the first year this data is collected. Consequently, we have no data with which to establish a baseline at this time.

4S1. California currently does not have a universal student information system to track students as they change schools, drop out, or graduate; therefore, a four-year completion rate is used, for graduation rate based on the definition established by the National Center for Education Statistics (NCES). This rate includes information on high school completers (e.g., high school graduates who receive a diploma or other type of certificate of completion from high school) and high school dropouts, aggregated over a four-year period. Federal requirements define high school "completers" in the same way as high school "graduates" is defined in the California Basic Educational Data System (CBEDS). Lacking a statewide data collection system to track students over time, it will be impossible for California to provide the U.S. Department of Education with a graduation rate calculated in the same manner just for CTE students. Consequently, we will calculate this indicator using the same measure as 3S1 until the comprehensive statewide data collection system is implemented in 2010-11.

5S1. Data for this measure is collected after December each year and covers a six-month period after graduation. In the past, this data was submitted to OVAE as part of the following year's CAR along with the enrollment data from the prior year. This process causes a situation where the data submitted covers a two-year period with enrollment data from one year and placement data from the prior year. Beginning with the 2008

CAR, the California Department of Education will submit the enrollment data and the placement data covering the same instructional year.

1P1. As the jobless recovery of the early 2000's began to open up jobs in recent years, males in particular began to increasingly leave school for employment, often leaving mid-term and eroding their GPAs. As the economy peaked in 2006 and employment begins to fall and shutdown opportunities through current months in 2008 in California, students in the beginning of their careers will be impacted. Maintaining this high level of performance will be a continuing challenge over the next few years.

2P1. Program completions have continued to increase as the economy grew with about a two-year lag in the period from mid-2003 through mid-2006. The California economy then began a continuous decline through March 2008. We can expect that the economically disadvantaged students, which make up a large percentage of community college students, will be unable to continue their education as the state moves closer to recessionary characteristics. We are therefore proposing that a three-year average be set as the performance target. Achieving that average will present California with a significant challenge to maintain that high level as the economy declines rapidly.

3P1. While the students in the state have persisted at high rates during these rough economic times, levels of persistence decline slightly as the economy contracts and increases slightly as the economy expands. As the California economy started to contract in 2006-07 (the 2007-08 program year), the community colleges were challenged to maintain the high levels of student persistence, especially among the economically disadvantaged as students left college for necessary employment. As a result, the data will unlikely remain at the same high levels as prior years. The California Community Colleges (CCC) propose maintaining the high levels of performance with a target based on the average performance over the last three years (82.18%).

4P1. Employment rates for the populations served by the CCC, specifically, lower- and mid-skilled workers including high percentages of economically disadvantaged students, respond rapidly to changing economic opportunities. CCC student employment rates are an exaggerated replica of the California employment rate – as employment in the state declines, lower- and mid-skilled workers lose employment faster than average and as employment increases, those same groups have increased employment faster than average. Employment in California began to fall in the last half of 2006 and continues to decline through 2008. Along with this declining statewide employment, the California Community Colleges propose setting the target at the three-year average (79.86%) to take into consideration the challenge institutions face in finding employment for their students in a declining economy.

5P1. As the economy expands, economically disadvantaged students often follow employment. A large percentage of those students are in nontraditional programs but represent the traditional gender in the associated occupations (e.g., men in auto, women in childcare or food service). More importantly, as the economy contracts, students who are economically disadvantaged are less likely to risk enrolling in programs that are nontraditional for their gender. As California employment began to fall in 2006, the numbers of students accumulating units in programs nontraditional for their gender began to decline, resulting in lower participation rates. California Community Colleges propose that maintaining the participation rate of 21.47% will be a considerable challenge. Additionally, the increasing diversity of students attending CCC presents an additional challenge to maintain these rates as institutions make efforts to modify college experiences to provide occupational information acceptable within cultural differences of students.

5P2. Similarly, the completions in nontraditional programs have declined as the economy contracted. Students were less likely to risk enrolling or continuing in programs leading to employment in areas nontraditional for their gender during a period of sparse employment. And, although completion rates are higher than participation rates, indicating continued progress once students are in the program, the state proposes that maintaining the completion rate of 23.28% will be a considerable challenge for the CCC.

CHAPTER FIVE
STATE POLICIES ON THE ADMINISTRATION AND USE OF THE PERKINS IV FUNDS

This chapter provides established policies for the administration and use of the Perkins IV funds at the state and local levels. The policies have been approved by the Joint Advisory Committee on Career Technical Education (JACCTE) and adopted by the Board of Governors of the California Community Colleges and the California State Board of Education.

The policies have two primary purposes: to clarify the state's position on critical Perkins IV administration and use of funds issues, and to ensure that the state and local agencies are maximizing the potential benefit of these limited but critical funds.

Some of the policies are applicable to all secondary, adult, and community college agencies receiving Perkins IV funds. Others, as noted, are applicable to only selected levels. Requests for exemptions of individual policies will be considered in those instances in which an eligible recipient of the funds can provide, in writing, compelling evidence that a policy does not apply to its particular administration or use of funds, and can provide an approvable alternative.

Exemption requests will be reviewed and approved or denied by the California Department of Education (CDE) or California Community Colleges Chancellor's Office (CCCCO) based on established criteria. Local agencies choosing to appeal the denial of an exemption may submit to the appropriate agency (CDE or CCCCO) a written request that the decision be forwarded for review by the JACCTE. The decision of the JACCTE will be final.

Policies Related to State Administration

1. Division of the Title I, Part C (Local Assistance) Funds Between Secondary and Postsecondary Programs

Policy. The formula for dividing the Title I, Part C funds between secondary (Section 131) and postsecondary (Section 132) programs will be determined annually by the JACCTE. The distribution of funds formula approved for the 2000–2004 State Plan and 2007–2008 State Transition Plan was approved by the JACCTE for the 2008–2009 program year. A representative field committee will be convened by the CDE and the CCCCO in the Spring of 2008 to identify and examine alternative options for distributing these funds in subsequent years.

Explanation. Please refer to State Distribution of the Perkins IV Funds in Appendix F for a complete description of the division of funds criteria and process.

2. Alternative Formula for Distributing the Title I, Part C, Section 132 (postsecondary) Funds

Policy. A waiver request submitted to the USDE, if approved, will authorize the state to continue to use an alternate formula for distributing the Section 132 (postsecondary) funds. The alternate formula, which was approved for the Perkins II and III funds, is based on the number of economically disadvantaged adults enrolled in CTE programs during the last completed year, as opposed to the formula prescribed in the Act that would distribute the funds based on Pell Grant recipients and students receiving Bureau of Indian Affairs assistance.

Explanation. As evidenced by a comparison of the results of distributing the funds based on the formula prescribed in the Act and the alternative formula, the alternative formula provides for a more equitable distribution of the funds among economically disadvantaged adults. The alternative formula also enables the state to recognize and serve economically disadvantaged adults enrolled in CTE programs conducted by adult school agencies and regional occupational centers and programs in addition to those enrolled in programs conducted by the community colleges. A complete description of the Section 132 waiver request is provided in Appendix G. A comparison of the results of distributing the funds based on the prescribed and alternative formulas is provided in Appendix H.

3. Accountability System Framework (Not applicable to community college districts)

Policy. Each local educational agency (LEA) receiving Perkins funds must, as a condition of receiving these funds, accept the state's agreed-upon annual statewide performance levels for the core indicators established in the Act, or negotiate with the state to reach agreement on annual performance levels that are based upon prior year performance and performance targets that demonstrate an agreed upon annual improvement rate. LEAs falling below 90 percent on any agreed upon performance level will be considered *Needs Improvement Agencies* and will be required to submit a program improvement plan that identifies the planned strategies and activities the agency will employ during the upcoming year to bring its level(s) to the 90 percent compliance rate. LEAs falling below 90 percent on three or more agreed upon annual performance levels *or* below 60 percent on any agreed upon annual performance level will be considered *Priority Improvement Agencies* and will be required to submit a detailed action plan that describes the

strategies to be implemented for bringing the agency to the 90 percent performance level within two years. LEAs scoring in the lowest percentage of overall performance as determined by a composite ranking of all measures will be considered *Monitored Agencies* and will be subject to Perkins Program Monitoring as specified annually by the JACCTE. Ultimately, LEAs that fail to submit the required program improvement plans and/or fail to make the required improvements are subject to sanctions that could result in the loss of a portion or all of their allocated funds.

Explanation. A complete description of the Accountability System Framework is provided in Appendix K.

Policies Related to Local Administration and Use of Funds by All Eligible Recipients of Perkins IV Funds Other Than the Community College Districts

1. Required Local Educational Agency Use of Section 131 and 132 Funds

Policy. No less than 85 percent of the LEA's Section 131 or 132 allocation must be expended to improve or expand CTE programs and courses approved in the local plan and annual application for funds. Appropriate expenditures of these funds include:

- Costs incurred in program-related planning, development, validation, and accountability activities
- Curriculum development activities
- Professional development activities, including industry internships for teachers
- Instructional equipment and material purchases
- Providing programs for special populations
- Providing mentoring and student support services
- Providing resources designed to strengthen and support academic and technical skill attainment
- Providing professional development activities that address the integration of academic and CTE
- Providing activities to support entrepreneurship education and training
- Providing support for the consumer and family studies program (as delineated in the California CTE Model Curriculum Standards and Framework and the Family Studies Standards Implementation Resource Guide, Grades Seven Through Twelve)

- Additional instructor costs incurred by the expansion of existing programs or addition of new programs (3-year limitation on these costs)
- Staff and other necessary operational costs incurred in providing for state and nationally recognized career technical education student organizations (CTSOs) and work-based learning experiences
- Other instructional activities and services that are directly related to the improvement and expansion of the local agency's approved CTE programs

Up to 5 percent of the allocation may be charged to direct or indirect costs for expenditures incurred in activities required to administer the grant.

Up to 10 percent of the allocation may be expended to support other CTE activities that are consistent with the purpose of the Act. These activities include, but are not limited to the following:

- Involving parents, businesses, and labor organizations as appropriate, in the design, implementation, and evaluation of the CTE programs assisted with the funds
- Providing career guidance and academic counseling for students participating in CTE programs
- Developing and expanding program offerings for adults at times and in formats that are accessible for students, including working students
- Developing and supporting small, personalized, career-themed learning communities
- Providing CTE programs for adults and school dropouts to complete secondary education, or update the technical skills of the adults and school dropouts
- Providing CTE program completers and leavers with placement assistance in jobs and advanced education and training
- Supporting training and activities such as mentoring and outreach in nontraditional fields

Explanation. This local use of funds policy is consistent with the General Authority for local uses of Section 131 and 132 funds, as cited in Section 135(a) of Perkins IV, which states, "Each eligible recipient that receives funds under this part shall use such funds to improve CTE programs"; with Section 135(d), which limits to 5 percent the amount of Section 131 and 132 funds local agencies may use for administrative costs; and with Section 135(c), which lists the permissive uses of the funds. The policy is also critical to the development of the high-quality programs envisioned in Chapter Three.

2. Requirements of Local Educational Agency CTE Programs Assisted with Section 131 and 132 Funds

Policy. Each CTE program assisted with Section 131 or 132 funds must incorporate the nine requirements established in Section 135(b) of Perkins IV, including a sequence of courses that provides students with coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills, and the following planning, organization, and instructional elements determined by the state to be critical to high-quality CTE programs:

- Be staffed by qualified CTE teachers, meaning teachers who 1) possess a standard secondary, single-subject or designated-subject credential which authorizes the teaching of the CTE course(s) to which assigned, and 2) can document employment experience, outside of education, in the career pathway addressed by the program or other evidence of equivalent proficiency. The minimum qualifications for community college CTE teachers are established in Title 5 of the CA Administrative Code.
- Focus on current or emerging high skill, high wage or high demand occupations.
- Be aligned with the state's CTE Model Curriculum Standards and Framework.
- Have extensive business and industry involvement, as evidenced by not less that one annual business and industry advisory committee meeting and planned business and industry involvement in program activities as described in the Guidelines for the 2008–2012 Local Plan for Career Technical Education and instructions for the annual application for funds.
- Provide for certification of students who achieve industry-recognized skill and knowledge requirements.
- Be aligned with applicable feeder and advanced-level instruction in the same career pathway.
- Integrate the development of CTE and academic skills in order to prepare students for immediate employment upon graduation and for further education or training.
- Provide practical applications and experiences through actual or simulated work-based learning assignments.
- Provide for equitable access and needed support services of all students, including special populations and those preparing for nontraditional occupations.
- Include planned career awareness and exploration experiences.
- Provide for the development of student leadership skills through an established career technical student organization or an alternate strategy that incorporates this instruction in all of the courses that make up the sequence.

- Use annual evaluation results, including achieved core indicator performance levels, to determine needed program improvements, modifications, and professional development activities for staff.

- Have a systematic plan for promoting the program to all concerned groups, including, but not limited to, students, parents, counselors, site and district administrators, and postsecondary educational agencies.

3. Requirements of Sequences of Courses for CTE Programs

Policy. Sequences of courses for CTE programs assisted with Perkins IV funds must:

- Consist of not less than two full-year CTE courses with a combined duration of not less than 300 hours; or a single, multiple-hour course which provides sequential units of instruction and has a duration of not less than 300 hours.

- Be coherent, meaning that the sequence may only include those CTE courses with objectives and content that have a clear and direct relationship to the occupation(s) or career targeted by the program.

- Include sufficient introductory and concentration CTE courses to provide students with the instruction necessary to develop the skill and knowledge levels required for employment and postsecondary education or training.

4. Requirements of Courses Assisted with Perkins IV Funds

Policy. Courses assisted with Perkins IV funds must:

- Be integral to an approved CTE sequence of courses.

- Be explicitly designed to prepare students with career skills that lead to employment. (Employment could be at the completion of high school, community college, apprenticeship, or 4-year college or university.)

- Have no less than 50 percent of course curriculum and content directly related to the development of career knowledge and skills. (The California CTE Model Curriculum Standards and Framework can be useful tools in ensuring and validating that there is sufficient CTE content (embedded in the curriculum.)

- Have business and industry involvement in the development and validation of the curriculum.

- Be taught by a teacher who meets the CTE teacher credential and occupational experience qualifications.

5. Program of Study Requirement

Policy. As mandated by Section 122(c)(1)(A) of Perkins IV, each LEA receiving Section 131 or 132 funds must provide at least one program of study that incorporates secondary and postsecondary elements; includes coherent and rigorous content aligned with challenging academic standards and relevant CTE in a coordinated, non-duplicative progression of courses that align secondary education with postsecondary education to adequately prepare students to succeed in postsecondary education; and leads to an industry-recognized credential or certificate at the postsecondary level, or an associate or baccalaureate degree. In addition, programs of study must also satisfy the organization and operation requirements specified in policies 2, 3, and 4. Programs of study developed by districts receiving Section 131 funds must include not less than one district-funded course.

Explanation. Section 134(b)(3)(A) of Perkins IV requires each recipient of the Section 131 and 132 funds to provide not less than one CTE program of study as described in Section 122(c)(1)(A). As described in Chapter Three of this state plan, improved alignment and articulation of secondary and postsecondary courses and programs, increased integration of academic and CTE instruction, and improved academic and career guidance are among the major actions needed to improve California's CTE system. Because programs of study provide a unique and effective medium for incorporating these elements, LEAs are encouraged to develop and implement as many programs of study as is practical. The CDE is examining funding alternatives to support this effort.

6. Middle School Participation in the Perkins IV Funds

Policy. Middle school (grades 7 and 8) CTE courses may be assisted with Section 131 funds only if integral to approved sequences of courses conducted by a high school.

Explanation. Though Section 315 of Perkins IV allows the use of Section 131 funds to assist CTE instruction in grades 7 and 8, Section 131(d)(1) restricts the allocation of these funds to LEAs who serve secondary school students, (i.e., unified and union high school districts and county offices of education). As a consequence, middle school participation in the funds is dependent on two factors: the alignment of the "introductory" CTE instruction provided in grades 7 and 8 with a sequence of high school district (including ROCP) CTE courses approved for the use of the funds, and the high school district's acknowledgement of the alignment as evidenced by the commitment of a portion of its allocated funds to the middle school instruction.

7. Regional Occupational Center and Program Participation in the Perkins IV Section 131 Funds

Policy (a). ROCPs may receive funds directed to county offices of education. Beginning with the 2008–09 program year, each county office of education will receive a Section 131 allocation to improve its CTE programs:

- 30 percent of the allocation will be based on the county office's proportional share of the state's total K–12 enrollment, as reported in the annual October report;
- 70 percent of the allocation will be based on the county office's proportional share of the state's total K–12 enrollment, as reported in the annual October report, whose families are economically disadvantaged, as evidenced by free and reduced lunch data.

Note: This is the formula established in the Act for distributing the Section 131 funds.

Because the use of these funds is limited to the improvement of CTE programs, it is assumed that some or all of the county offices of education's allocation will be directed to the ROCP. It is also assumed that the ROCP will collaborate with the county's court and community school programs to ensure that these students are served, to the extent possible, in programs assisted with the funds.

Explanation. Section 131 allocations to county offices of education will no longer be restricted to court and community school use. Since the mid-seventies, many of the county offices of education have received Perkins Act funds to assist CTE programs conducted by their court and community schools. Most have since discontinued their pursuit of these funds because of low funding levels, problems related to required consortium participation, and changes initiated in the last two Acts that have increased the requirements for programs to be assisted with the funds and the accountability and reporting requirements. This action is not expected to alter the conditions that have reduced court and community school eligibility for the funds. It should provide the county offices with a slight increase in their annual allocations and an opportunity to use some or all of the allocation for ROCP program improvements, which could include the design of programs for court and community school students.

Policy (b). Districts may choose to direct their allocated funds to a consortium which has an ROCP as the fiscal agent. An ROCP may also become an eligible recipient of Section 131 funds in any instance in which one or more districts served by the ROCP determines that its allocation is insufficient to warrant the required administrative activities, or is not providing at least one district-funded CTE course, and chooses to transfer these funds to the ROCP. In these instances, as authorized by Section 131(e)(1) and (2) of the Act, the ROCP may form a consortium with the effected district(s) for the purpose of receiving the sum of the transferred Section 131 funds. The consortium's memorandum

of understanding (MOU) must list the participating districts and provide the appropriate administrative signatures, identify the ROCP as the fiscal agent, describe the consortium's organization and operation as a single entity, and include agreed upon actions for administering and using the funds.

Explanation. This option is particularly advantageous to smaller districts, many of which are already in consortia because they have allocations of less than $15,000. These districts could expect to benefit from the CTE leadership provided by the ROCP and almost complete relief from the required Perkins planning, application, claim, and accountability reports.

Policy (c). ROCP courses that are integral to coherent sequences of courses conducted by eligible recipients of Section 131 funds (unified and union high school districts) may be assisted with the funds allocated to their member districts.

Explanation. Permitting a district to use its allocated Section 131 and 132 funds to assist all of the (district and ROCP) courses in programs that serve its students should enhance the quality of the program and the alignment of the instruction between the two providers. It is important to note that as the eligible recipients of the funds, the districts have the prerogative of deciding if and what ROCP courses will be assisted.

8. Local Funds Required in District Programs Assisted with Section 131 Funds

Policy. As a condition of receiving Section 131 funds, unified and union high school districts must be actively involved in the delivery of CTE programs, meaning that the districts must provide at least one CTE sequence of courses that includes at least one district-funded course. Additionally, the districts must provide at least one course in each industry sector assisted with the funds. The course may be introductory or advanced, and though not necessarily integral to the sequence of courses being assisted with the funds, must be clearly integral to one or more of the sequences of courses offered in the industry sector. While it is expected that most districts will be able to comply with these requirements in the 2008–2009 program year, full implementation of the requirement will be delayed until the 2009–2010 program year to provide districts with the additional time needed to add additional courses or revise existing courses.

Explanation. This policy is consistent with the Perkins IV definition of CTE; the intent of these funds to improve CTE programs, as defined in Section 135. It is also consistent with the Section 135(8) requirement that assisted programs provide services and activities that are of sufficient size, scope, and quality.

9. Allocations to Section 131 and 132 Consortiums May Not be Redistributed to Individual Members for Purposes or Programs that Benefit Only One Member

Policy. In accordance with Sections 131(f)(2) and 132(a)(3)(B) of Perkins IV, funds allocated to a consortium formed to meet the minimum allocation requirement may be used only for purposes and programs that are mutually beneficial to all members of the consortium. These funds may not be reallocated to individual members of the consortium for purposes or programs benefiting only one member of the consortium.

10. Use of Allocated Section 131 and 132 Funds to Support Work Experience Education

Policy. Exploratory and Vocational Work Experience Education activities may be assisted with Section 131 and 132 funds if they are a planned and listed component of a CTE program, are integral to one or more of the approved sequences of courses in the LEA's local plan and annual application for funds, and comply with applicable State and federal regulations. Section 131 and 132 funds may not be used to assist General Work Experience Education.

Explanation. As noted in Policy #3, Section 135(b) of Perkins IV requires a coherent sequence of courses for each CTE program assisted with the funds. Though General Work Experience Education provides students with valuable and practical work-related skills, knowledge, habits, and attitudes, it lacks the specific occupation or career preparation focus required of the courses that comprise approvable CTE program sequences.

11. Local Board Approval of Applications for Perkins IV Funds

Policy. Local Board approval, as evidenced by a current year approval date, is required on all Section 112, 131, and 132 applications, other than those submitted by county offices of education and signed by the county superintendent of schools.

Explanation. Local Board approval of the Section 112, 131, and 132 applications evidences the local governing board's awareness of the level, intent, and requirements of the funds, as well as the commitment being made by the LEA in its receipt of the funds.

2008-2012
California State Plan
For
Career Technical Education

APPENDICES

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APPENDIX A

Essential Skills Enumerated by Recognized Initiatives, Including the California CTE Model Curriculum Standards Foundation Standards, the National Career Development Guidelines, Partnership for 21st Century Skills, SCANS, and Equipped for the Future

CTE Model Curriculum Standards Foundation Standards	National Career Development Guidelines	Partnership for 21st Century Skills	SCANS	Equipped for the Future Work Readiness Skills
1. Academics 2. Communications 3. Career Planning and Management 4. Technology 5. Problem Solving and Critical Thinking 6. Health and Safety 7. Responsibility and Flexibility 8. Ethics and Legal Responsibilities 9. Leadership and Teamwork 10. Technical Knowledge and Skills 11. Demonstration and Application	Personal and Social Development • Build and maintain positive self-concept • Develop interpersonal skills including respect for diversity • Integrate personal growth and change into career development • Balance personal, leisure, community, learner, family and work roles Educational Achievement and Lifelong Learning • Attain educational achievement & performance levels needed to reach personal and career goals • Participate in ongoing lifelong learning experiences Career Management • Create and manage a career plan that meets career goals • Use a process of decision-making as one component of career development • Use accurate, current and unbiased career information during career planning and management • Master academic, occupational, and general employability skills • Integrate changing employment trends, societal needs, & economic conditions into career plans	Core English, reading, or language arts; mathematics; science; foreign languages; civics; government; economics; arts; history; and geography 21st Century Content • Global awareness • Financial, economic, business, and entrepreneurial literacy • Civic literacy • Health literacy Learning and Innovation Skills • Creativity and innovation skills • Critical thinking and problem-solving skills • Communication and collaboration skills Information and Media Literacy Skills • Information literacy • Media literacy • Information and communications technology (ICT) literacy Life and Career Skills • Leadership • Ethics • Accountability • Adaptability • Personal Productivity • Personal Responsibility • People Skills • Self-Direction • Social Responsibility 21st Century Assessments Assessments must measure all results that matter (the skills above)	A Three-Part Foundation 1. Basic Skills: Reads, writes, performs arithmetic and mathematical operations, listens and speaks 2. Thinking Skills: Thinks creatively, makes decisions, solves problems, visualizes, knows how to learn, and reasons 3. Personal Qualities: Displays responsibility, self-esteem, sociability, self-management, and integrity and honesty Five Workplace Competencies 1. Resources: • Identifies, organizes, plans, and allocates resources 2. Interpersonal: • Works with others 3. Information: • Acquires and uses information 4. Systems: • Understands complex inter-relationships 5. Technology: • Works with a variety of technologies	EFF Skills 1. Speak so others can understand 2. Listen actively 3. Solve problems and make decisions 4. Cooperate with others 5. Resolve conflicts and negotiate 6. Observe critically 7. Take responsibility for learning 8. Read with understanding 9. Use math to solve problems Entry-level Tasks 1. Acquire & use information 2. Use technology 3. Use systems • Understand systems • Monitor & correct performance 4. Work with others • Diversity • Negotiate • Serve clients 5. Integrity 6. Know how to learn 7. Responsibility 8. Allocate resources 9. Solve problems 10. Self-management EFF Roles 1. Worker 2. Citizen and community member 3. Parent and family member

APPENDIX B
Public Hearings

For the purpose of allowing public review and recommendations regarding the plan, California conducted four public hearings, three of which were broadcasted on the Internet.

On August 21, 2007, the CTE state plan public input period officially opened and the CTE state plan Web site (http://www.wested.org/cteplan) went live on the Internet. Beyond notifications posted on the Web site, individuals were informed of their opportunities to provide input on the state plan through public notices (a sample notice is included as Attachment 1), email notification through all pertinent listservs, and an extensive network of professional organizations as listed below and in Chapter Four of the plan.

E-mail notifications were sent to:

- The CTE project listserv
- The CDE high school listserv
- CCCCO listservs
- All county offices of education (for distribution to districts)
- The Chancellor's Office of the California Community Colleges (for distribution to interested staff and faculty)
- The Chancellor's Office of the California State University (for distribution to interested staff and faculty)
- The University of California Office of the President (for distribution to interested staff and faculty)
- The California State PTA (for inclusion in its calendar and publications)
- The California School Boards Association (for distribution to members)
- Business and industry organizations suggested by the Joint CDE-CCCCO state plan Steering Committee
- CTE professional associations and organizations

In addition to notifications of the public hearings posted on the CTE state plan Web site, reminder notices indicating the location, date, time and parking information for each hearing site were sent to the lists above as well as to individuals who signed up for email updates and notices via the CTE state plan Web site. The email announcements also directed readers to information on the Web site about how to access and view the public hearings via Webcast.

Between September 7 and 24, on-site public hearings were conducted at four locations throughout California: (1) Los Angeles County Office of Education (LACOE), Downey, September 7; (2) Ohlone Community College, Fremont, September 14; (3) Fresno City College, Fresno, September 17; (4) California Department of Education, Sacramento, September 24. (A list of the public hearing sites and attendance levels is included in Attachment 2.) The LACOE, Ohlone Community College and Fresno City College public hearings were broadcast on the Web and archives of the hearings can be found under the public hearings tab on the CTE state plan Web site.

During the hearings and Webcasts, the presentations included a brief overview of the plan, public hearing speaking guidelines, and information on important dates with regard to the plan development process. Attendees were asked to sign in and complete an index card with their name and affiliation. Then index cards were collected throughout the hearing session and brought to the speaker's panel where individuals were called to the podium to present testimony. Attendees who wished to comment on the plan also submitted written testimony through forms handed out at each hearing.

The public also had the opportunity to provide input to the plan at the JACCTE meetings held on November 1, 2006, February 22, 2007, and throughout 2007 on April 9, June 6, October 16, and November 27.

In addition to the public hearings, California obtained public input through the state plan Web site. The Web site offered an online submission form into which individuals could submit testimony while the public hearing period was open. The Web site also features background information about the plan, a downloadable draft, a schedule with pertinent dates for plan development and review, and archived public hearings. (See Attachment 3 for screen shots of the state plan Web site.)

A summary of the comments and recommendations is included in Appendix C. The state staff considered all recommendations and they were either integrated into the draft plans for consideration by the policy boards or not included when inconsistent with the Perkins Act requirements.

Attachment 1

Notices of Public Hearings Per the Bagley-Keene Open Meeting Act
(Summary Cover Memos, Approval Forms, and Agendas)

California Department of Education
EXE-100 (Rev. 03/02/05)

Division/Branch No:	C/B/3528
Executive Office No.	

RECEIVED
OCT 19 2006
C & I Branch

SUMMARY COVER MEMO

Prepared by	
Name:	Wallace Payne
Phone:	319-0499

Manager Reviewed/Approved	
Name:	Paul Gussman
Date:	10/16/06
Signature:	for PG

Director Reviewed/Approved	
Name:	Patrick Ainsworth
Date:	10-17-06
Signature:	

Other Reviewed/Approved	
Name:	
Date:	
Signature:	

Deputy Reviewed/Approved	
Name:	Sue Stickel
Date:	10/20/06
Signature:	

General Counsel Review/Approval	
Date:	
Signature:	

Government Affairs Director Review/Approval	
Date:	
Signature:	

Chief Deputy Approved	
☐	For Digital signature
☐	For JO's Signature
☐	With Edits
☐	For Web Posting
☐	And Reviewed
Date:	
Signature:	

Date: 10-16-06

To: Sue Stickel

From: Lee Murdock

Subject: JACCTE Public Meeting Notice

Sign	Approve	Review	Handle	Draft a Response	For Your Files	Information

Summary of Contents

The Joint Advisory Committee on Career Technical Education Technical Education will be holding a Public Meeting on Wednesday, November 1, 2006. Attached is the Public Meeting Notice for the meeting.

Please sign and return so this notice can be posted on the CDE Web site.

MUST BE POSTED BY 10/25/06 pCw

A-5

CALIFORNIA DEPARTMENT OF EDUCATION
EXE-002 (Rev. 07/04)

APPROVAL FORM FOR FINAL PUBLICATION DRAFT (for new publications and existing publications needing revisions)

This cover form is to be signed by the unit manager and submitted with (1) the previously approved Publication Proposal Worksheet (not necessary for conference materials, flyers, and Web documents of fewer than 1,000 words, or approximately two single-spaced pages); and (2) the completed draft of the new (double-spaced) or revised document or CD-ROM or videotape. If the completed draft is significantly different from that described in the Proposal Worksheet, attach a copy of an updated cost estimate from CDE Press (for print publications).

Title of publication Public Meeting Notice - Joint Advisory Committee on Career Technical Education	
Web document location or topic Curriculum and Instruction: ci/ct/sf/	Subtopic Career and Technical
CDE contact person Wallace Payne	Telephone 319-0499

☒ **For new publications/Web documents: I verify that I have read the attached draft.** I believe that the draft is accurate and ready for editing by CDE Press.

☐ **For existing publications needing revisions or** ☐ **material for Web migration:** I believe that they are accurate and ready for editing by CDE Press.

☐ **For CD-ROMs or videotapes: I verify that I have reviewed the attached material.** I believe it is ready to be finalized.

Name of Unit Manager *(Please type or print.)* Paul Gussman	Date approved 10/16/06
Signature ▶ Chris Rury for PG	
Name of Division Director *(Please type or print.)* Patrick Ainsworth	Date approved 10-17-06
Signature ▶	
Name of Branch Deputy *(Please type or print.)* Sue Stickel	Date approved 10/20/06
Signature ▶	
Superintendent's Publications Adviser *Jan Agee*	Date approved
Signature ▶	
Other signatures as required ▶	Date
	Date

In the event of returned, unapproved drafts from the Superintendent's Publications Adviser: The *new* draft is submitted. *Both the old and new drafts* are included with pages tabbed, when feasible, in both drafts to indicate the passages where edits were requested and incorporated.

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For documents to be posted only on the CDE Internet site: The Superintendent's Publications Adviser may route an approved draft directly to the division for posting.

If a report must be submitted to the Legislature, the Governor, or both: The program office provides to the Government Affairs Office a copy of the published report, a one-page Executive Summary of it, and the contact information for staff who can answer any questions. The Government Affairs Office notifies the program office of the total number of copies required for distribution.

A-6

CALIFORNIA
DEPARTMENT OF
EDUCATION

1430 N STREET
SACRAMENTO, CA
95814-5901

JACK O'CONNELL
State Superintendent of
Public Instruction
PHONE: (916) 319-0800

MEETING NOTICE

Schedule of Meeting
Wednesday, November 1, 2006
9:30 a.m. to 3:30 p.m.

Location
California Community College
Chancellor's Office
Third Floor, Rooms 3B & 3C
1102 Q Street
Sacramento, CA 95814

AGENDA

9:30 a.m.	Welcome, Introductions and Election of Chairperson
10:00 a.m.	Review of Committee Purpose and Memorandum of Understanding
10:30 a.m.	Reports on Current Status of Career Technical Education in California
Noon	Lunch
1:00 p.m.	Overview of the New Carl D. Perkins Career and Technical Education Improvement Act of 2006
1:45 p.m.	Review of State Plan Development Process
2:45 p.m.	Concluding Remarks and Determination of Next Meeting Date and Site
3:00 p.m.	Public Comments
3:15 p.m.	Adjournment

A-7

California Department of Education
EXE-100 (Rev. 03/02/05)

Division/Branch No:	CIB15111
Executive Office No.	

RECEIVED
MAR 19 2007
C & I Branch

SUMMARY COVER MEMO

Prepared by	
Name:	Lloyd McCabe
Phone:	445-1710

Manager Reviewed/Approved	
Name:	Paul Gussman
Date:	3/19/07
Signature:	

Director Reviewed/Approved	
Name:	Patrick Ainsworth
Date:	
Signature:	

Other Reviewed/Approved	
Name:	
Date:	
Signature:	

Deputy Reviewed/Approved	
Name:	Gavin Payne
Date:	
Signature:	

General Counsel Review/Approval	
Date:	
Signature:	

Government Affairs Director Review/Approval	
Date:	
Signature:	

Chief Deputy Approved	
☐	For Digital signature
☐	For JO's Signature
☐	With Edits
☐	For Web Posting
☐	And Reviewed
Date:	
Signature:	

CH 3-21-07

Date: March 15, 2007

To: ~~Gavin Payne, Chief Deputy Superintendent~~ Anthony Monreal Curriculum and Instruction Branch

From: Lloyd McCabe, Education Consultant
Secondary, Post Secondary and Adult Leadership Division

Subject: JACCTE Public Meeting Notice

Sign	Approve	Review	Handle	Draft a Response	For Your Files	Information
X						

Summary of Contents

The Joint Advisory Committee on Career Technical Education will be holding a Public Meeting on Monday, April 9, 2007.

Attached is the Public Meeting Notice for the meeting.

Please sign and return so that this notice can be posted on the CDE Web site.

If you have further questions please call Lloyd McCabe at 445-1710.

3/20/07 request corrected agenda - CH

A-8

CALIFORNIA DEPARTMENT OF EDUCATION
EXE-002 (Rev. 07/04)

APPROVAL FORM FOR FINAL PUBLICATION DRAFT (for new publications and existing publications needing revisions)

This cover form is to be signed by the unit manager and submitted with (1) the previously approved Publication Proposal Worksheet (not necessary for conference materials, flyers, and Web documents of fewer than 1,000 words, or approximately two single-spaced pages); and (2) the completed draft of the new (double-spaced) or revised document or CD-ROM or videotape. If the completed draft is significantly different from that described in the Proposal Worksheet, attach a copy of an updated cost estimate from CDE Press (for print publications).

Title of publication Public Meeting Notice - Joint Advisory Committee on Career Technical Education	
Web document location or topic Curriculum and Instruction: ci/ct/sf/	Subtopic Career and Technical
CDE contact person Lloyd McCabe	Telephone 445-1710

☒ **For new publications/Web documents: I verify that I have read the attached draft.** I believe that the draft is accurate and ready for editing by CDE Press.

☐ **For existing publications needing revisions** or ☐ **material for Web migration:** I believe that they are accurate and ready for editing by CDE Press.

☐ **For CD-ROMs or videotapes: I verify that I have reviewed the attached material.** I believe it is ready to be finalized.

Name of Unit Manager *(Please type or print.)* Paul Gussman	Date approved 3/19/07
Signature ▶ Paul Gussman	
Name of Division Director *(Please type or print.)* Patrick Ainsworth	Date approved 3-19-07
Signature ▶ P. Ainsworth	
Name of Branch Deputy *(Please type or print.)* Gavin Payne	Date approved
Signature ▶	
Superintendent's Publications Adviser *Jan Agee*	Date approved
Signature ▶	
Other signatures as required ▶	Date
	Date

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A-9

Joint Advisory Committee for Career Technical Education (JACCTE)

Tentative Agenda

April 9, 2007
2:00 – 3:00 p.m.
Conference Call Participant Detail
> Dial your telephone conference line: 866-316-1517
> Enter your pass code: 782062

2:00 p.m.	Welcome & Call to Order – Kay Albiani, Chairperson
	Roll Call
	Review and Adoption of Minutes
	Review & Adoption of Perkins Transition Plan - Lee Murdock
	Request to Extend Perkins Waiver of Section 132 Funds - Lee Murdock
	Review of Work Accomplished by CTE Resource Group - Svetlana Darche
	Review of Governor's Summit on CTE - Staff
2:50 p.m.	Concluding Remarks and Determination of Next Meeting Date
2:55 p.m.	Public Comments
3:00 p.m.	Adjournment

California Department of Education
EXE-100 (Rev. 03/02/05)

Division/Branch No:	
Executive Office No.	

SUMMARY COVER MEMO

Prepared by	
Name:	Lloyd McCabe
Phone:	445-1710

Manager Reviewed/Approved	
Name:	Paul Gussman
Date:	
Signature:	

Director Reviewed/Approved	
Name:	Patrick Ainsworth
Date:	
Signature:	

Other Reviewed/Approved	
Name:	
Date:	
Signature:	

uty Reviewed/Approved	
Name:	
Date:	
Signature:	

General Counsel Review/Approval	
Date:	
Signature:	

Government Affairs Director Review/Approval	
Date:	
Signature:	

Chief Deputy Approved	
☐	For Digital signature
☐	For JO's Signature
☐	With Edits
☐	For Web Posting
☐	And Reviewed
Date:	
ature:	

Date: May 15, 2007

To: Anthony Monreal, Deputy Superintendent
Curriculum and Instruction Branch

From: Lloyd McCabe, Consultant
Secondary, Postsecondary, and Adult Leadership Division

Subject: JACCTE Public Meeting Notice

Sign	Approve	Review	Handle	Draft a Response	For Your Files	Information

Summary of Contents

The Joint Advisory Committee on Career Technical Education will be holding a Public Meeting on Thursday, June 7, 2007.

Attached is the Public Meting Notice for the meeting.

Please sign and return so that this notice can be posted on the CDE Web site.

If you have further questions on this matter, please call Lloyd McCabe at 445-1710.

A-11

CALIFORNIA DEPARTMENT OF EDUCATION
EXE-002 (Rev. 07/04)

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Title of publication Public Meeting Notice - Joint Advisory Committee on Career Technical Education	
Web document location or topic Curriculum and Instruction: ci/ct/sf/	Subtopic Career Technical
CDE contact person Lloyd McCabe	Telephone 445-1710

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☐ **For CD-ROMs or videotapes: I verify that I have reviewed the attached material.** I believe it is ready to be finalized.

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Signature ▶	
Name of Division Director *(Please type or print.)* Patrick Ainsworth	Date approved
Signature ▶	
Name of Branch Deputy *(Please type or print.)* Anthony Monreal	Date approved
Signature ▶	
Superintendent's Publications Adviser *Jan Agee*	Date approved
Signature ▶	
Other signatures as required ▶	Date
	Date

In the event of returned, unapproved drafts from the Superintendent's Publications Adviser: The *new* draft is submitted. *Both the old and new drafts* are included with pages tabbed, when feasible, in both drafts to indicate the passages where edits were requested and incorporated.

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A-12

Joint Advisory Committee for Career Technical Education (JACCTE)

Tentative Agenda

June 7, 2007
9:30 a.m. – 3:00 p.m.
Board Room 3C
California Community College Chancellor's Office
1102 Q Street
Sacramento, CA 95814

9:30 a.m.	Welcome & Call to Order – Kay Albiani, Chairperson
	Roll Call
	Review and Adoption of Minutes
	Proposed Amendment to Memorandum of Understanding – Kay Albiani • Dispute Resolution Process
	Information Item - Briefing of Split of Funds between Secondary & Postsecondary – Staff
	Key questions that need to be addressed include: • Regarding funding, what are the elements? • What's counted and why? • How do we know what the funds are supporting? • Does a formula support state priorities? • In a situation of constrained community college enrollments, does an enrollment formula capture how we should target? • What might be alternatives? • If a change should occur, what type of transition strategy might be used?
	Policy Issues – Tech Prep & 10% Reserve
	CTE Resource Group Report – Svetlana Darche
2:45 p.m.	Concluding Remarks and Determination of Next Meeting Date
2:50 p.m.	Public Comments
3:00 p.m.	Adjournment

A-13

California Department of Education
EXE-100 (Rev. 03/02/05)

Division/Branch No:	16686
Executive Office No.	

SUMMARY COVER MEMO

Prepared by	
Name:	Lloyd McCabe
Phone:	445-1710

Manager Reviewed/Approved	
Name:	Paul Gussman
Date:	8-16-07
Signature:	Paul Gussman (by)

Director Reviewed/Approved	
Name:	Patrick Ainsworth
Date:	8-16-07
Signature:	P. Ainsworth

Other Reviewed/Approved	
Name:	
Date:	
Signature:	

Deputy Reviewed/Approved	
Name:	Jr Monreal
Date:	
Signature:	

General Counsel Review/Approval	
Date:	
Signature:	

Government Affairs Director Review/Approval	
Date:	
Signature:	

Chief Deputy Approved	
☐	For Digital signature
☐	For JO's Signature
☐	With Edits
☐	For Web Posting
☐	And Reviewed
Date:	
Signature:	

Date: August 16, 2007

RECEIVED
Aug 17 2007
C & I Branch

To: Anthony Monreal, Deputy Superintendent
Curriculum and Instruction Branch

From: Lloyd McCabe, Consultant
Secondary, Postsecondary, & Adult Leadership Division

Subject: Public Hearings for 2008-2012 California State Plan for Career Technical Education

Sign	Approve	Review	Handle	Draft a Response	For Your Files	Information

Summary of Contents

The draft California State Plan for Career Technical Education has been developed in accordance with the federal Carl D. Perkins Career and Technical Education Improvement Act of 2006, which requires States to submit newly formulated State Plans in order to be eligible for federal career technical education funds. California receives approximately $140 million in Perkins funding annually which is divided by formula between the California Department of Education and California Community College Chancellor's Office.

The draft State CTE Plan was developed over a six-month period under the auspices of the Joint Advisory Committee for Career Technical Education (JACCTE) with critical input from a 55-member State CTE Resource Group representing stakeholder groups from government, industry, business, and education.

The Plan can be viewed and downloaded at: www.wested.org/cteplan. The site is designed to allow direct input on the plan. It also provides background information on the development of the plan and the list of JACCTE and Resource Group members. The site will be open for comment by the public from August 20, 2007 until September 30, 2007.

In addition, the CDE & CCCCO will be holding four joint hearings throughout California to receive public testimony and input. The hearings will be held at:

- Los Angeles County Office of Education: September 7th, 9:00–12:00 noon
- Ohlone Community College in Fremont: September 14th, 1:00–4:00 p.m.
- Fresno City Community College: September 17th, 1:00–4:00 p.m.
- California Department of Education in Sacramento: September 24th, 2:00–5:00 p.m.

Attached is the draft State CTE Plan for your inspection.

FORNIA DEPARTMENT OF EDUCATION
E-002 (Rev. 07/04)

APPROVAL FORM FOR FINAL PUBLICATION DRAFT (for new publications and existing publications needing revisions)

This cover form is to be signed by the unit manager and submitted with (1) the previously approved Publication Proposal Worksheet (not necessary for conference materials, flyers, and Web documents of fewer than 1,000 words, or approximately two single-spaced pages); and (2) the completed draft of the new (double-spaced) or revised document or CD-ROM or videotape. If the completed draft is significantly different from that described in the Proposal Worksheet, attach a copy of an updated cost estimate from CDE Press (for print publications).

Title of publication Public Hearings - 2008-2012 California State Plan for Career Technical Education	
Web document location or topic Curriculum and instruction: ci/ct/sf/	Subtopic Career Technical
CDE contact person Lloyd McCabe	Telephone 445-1710

☒ **For new publications/Web documents: I verify that I have read the attached draft.** I believe that the draft is accurate and ready for editing by CDE Press.

☐ **For existing publications needing revisions or ☐ material for Web migration:** I believe that they are accurate and ready for editing by CDE Press.

☐ **For CD-ROMs or videotapes: I verify that I have reviewed the attached material.** I believe it is ready to be finalized.

Name of Unit Manager *(Please type or print.)* Paul Gussman	Date approved 8-16-07
Signature ▶ Paul Gussman (jj)	
Name of Division Director *(Please type or print.)* Patrick Ainsworth	Date approved 8-16-07
Signature ▶	
Name of Branch Deputy *(Please type or print.)* Anthony Monreal	Date approved 8/21/07
Signature ▶	
Superintendent's Publications Adviser *Jan Agee*	Date approved
Signature ▶	
Other signatures as required ▶	Date
	Date

In the event of returned, unapproved drafts from the Superintendent's Publications Adviser: The *new* draft is submitted. *Both the old and new drafts* are included with pages tabbed, when feasible, in both drafts to indicate the passages where edits were requested and incorporated.

On approval of draft: The contact person is notified and delivers the draft and approval form to CDE Press.

For new publications: The contact person provides CDE Press with *a disk copy of the draft, double-spaced, and in Microsoft Word.*

For revisions to existing publications: Minor changes may be written on the hard copy of the existing publication, and new text of a paragraph or longer must be provided *both in hard copy and on disk (Microsoft Word)* and clearly noted where the new text is to be inserted.

For documents to be posted only on the CDE Internet site: The Superintendent's Publications Adviser may route an approved draft directly to the division for posting.

If a report must be submitted to the Legislature, the Governor, or both: The program office provides to the Government Affairs Office a copy of the published report, a one-page Executive Summary of it, and the contact information for staff who can answer any questions. The Government Affairs Office notifies the program office of the total number of copies required for distribution.

A-15

CALIFORNIA DEPARTMENT OF EDUCATION
EXE-002 (Rev. 07/04)

APPROVAL FORM FOR FINAL PUBLICATION DRAFT (for new publications and existing publications needing revisions)

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Title of publication Public Meeting Notice - Joint Advisory Committee on Career Technical Education	
Web document location or topic Curriculum and Instruction: ci/ct/sf/	Subtopic Career Technical Education
CDE contact person Lloyd McCabe	Telephone 445-1710

☒ **For new publications/Web documents: I verify that I have read the attached draft.** I believe that the draft is accurate and ready for editing by CDE Press.

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☐ **For CD-ROMs or videotapes: I verify that I have reviewed the attached material.** I believe it is ready to be finalized.

Name of Unit Manager *(Please type or print.)* Paul Gussman	Date approved 9/17/07
Signature ▶ Paul Gussman	
Name of Division Director *(Please type or print.)* Patrick Ainsworth	Date approved 9/17/07
Signature ▶	
Name of Branch Deputy *(Please type or print.)* Anthony Monreal	Date approved 9/24/07
Signature ▶	
Superintendent's Publications Adviser *Jan Agee*	Date approved
Signature ▶	
Other signatures as required ▶	Date
	Date

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A-16

Public Hearing Notice – 2008-2012 California State Plan for Career Technical Education

The California Department of Education and California Community College Chancellor's Office jointly announce that their draft State Career Technical Education (CTE) Plan is now available for public review and comment.

The Plan has been developed in accordance with the federal Carl D. Perkins Career and Technical Education Improvement Act of 2006, which requires States to submit newly formulated State Plans in order to be eligible for federal career technical education funds. California receives approximately $140 million in Perkins funding annually which is divided by formula between the California Department of Education and California Community College Chancellor's Office.

The draft State CTE Plan was developed over a six-month period under the auspices of the Joint Advisory Committee for Career Technical Education (JACCTE) with critical input from a 55-member State CTE Resource Group representing stakeholder groups from government, industry, business, and education.

The Plan can be viewed and downloaded at: www.wested.org/cteplan. The site is designed to allow direct input on the plan. It also provides background information on the development of the plan and the list of JACCTE and Resource Group members. The site will be open for comment by the public until September 30, 2007.

In addition, the CDE & CCCCO will be holding four joint hearings throughout California to receive public testimony and input. The hearings will be held at:

- September 7, 2007 – 9:00-12:00 noon
  Los Angeles County Office of Education, Room 281
  9300 Imperial Hwy.
  Downey, CA 90242

- September 14, 2007 – 1:00-4:00 p.m.
  Ohlone Community College in Fremont, Smith Center Theatre
  43600 Mission Blvd.
  Fremont, CA 94539

- September 17, 2007 – 1:00-4:00 p.m.
  Fresno City Community College, Staff Dining Room
  1101 East University Ave.
  Fresno, CA 93741

- September 24, 2007 – 2:00-5:00 p.m.
  California Department of Education, State Board Room
  1430 N Street
  Sacramento, CA 95814

The hearings will also be webcast for access from personal computers.

For additional information on the hearings or webcasts, please check the Web site or email cteplan@wested.org. For further information on the draft CTE State Plan, contact either Dean Smith at dsmith@cccco.edu or Lee Murdock at lmurdock@cde.ca.gov.

California Department of Education
EXE-100 (Rev. 03/02/05)

Division/Branch No:	CAB 16923
Executive Office No:	

SUMMARY COVER MEMO

Prepared by	
Name:	Lloyd McCabe
Phone:	445-1710

Manager Reviewed/Approved	
Name:	Paul Gussman
Date:	9/17/07
Signature:	

Director Reviewed/Approved	
Name:	Patrick Ainsworth
Date:	9/17/07
Signature:	

Other Reviewed/Approved	
Name:	
Date:	
Signature:	

Deputy Reviewed/Approved	
Name:	A. Monreal
Date:	
Signature:	

General Counsel Review/Approval	
Date:	
Signature:	

Government Affairs Director Review/Approval	
Date:	
Signature:	

Chief Deputy Approved	
☐	For Digital signature
☐	For JO's Signature
☐	With Edits
☐	For Web Posting
☐	And Reviewed
Date:	
Signature:	

Date: September 17, 2007

RECEIVED
SEP 1 [illegible] 7
C & I Branch

To: Dr. Anthony Monreal, Deputy Superintendent
Curriculum and Instruction Branch

From: Dr. Lloyd McCabe, Education Consultant
Secondary, Postsecondary, and Adult Leadership Division

Subject: JACCTE Public Meeting Notice

Sign	Approve	Review	Handle	Draft a Response	For Your Files	Information

Summary of Contents

The Joint Advisory Committee on Career Technical Education (JACCTE) will be holding a Public Meeting on Tuesday, October 16, 2007 at the California Community College Chancellor's Office from 9:30 a.m. to 3:30 p.m.

Attached is the Public Meeting Notice and Agenda for the meeting.

Please sign and return so that this notice can be posted on the CDE Web site.

If you have further questions about this matter, please contact Lloyd McCabe, Consultant, Secondary, Postsecondary, and Adult Leadership Division at (916) 445-1710 or lmccabe@cde.ca.gov.

Pat's signature is missing on form. He signed the folder, so they will have him sign upon return to division. LM

Joint Advisory Committee on Career-Technical Education

October 16, 2007
Community College Chancellor's Building
Third Floor, Board Rooms 3B & 3C
1102 Q Street
Sacramento, CA 95814

DRAFT AGENDA

9:30 a.m.	Welcome	Kay Albiani, Chairperson

Introductions

Roll Call of JACCTE Members

Adoption of Minutes of JACCTE Meeting of June 7, 2007

Review of Process:
- Public Hearings
- On-line Input
- JACCTE Formulates Final Recommendations

Review of State CTE Plan Public Hearings & Online Testimony
- Summary of Input
- Recommendations from Staff
- Final Recommendations from JACCTE

State CTE Plan Review and Approval:
- Chapter 1 – Career Technical Education in California
- Chapter 2 – Context for career Technical Education in California
- Chapter 3 – Building a High-Quality CTE System: A Vision of the Future
- Chapter 4 – Responses to the USDE Guide for the Submission of the 2008-2012 State Plan for the Perkins IV Funds
- Chapter 5 – State Policies on the Administration and Use of the Perkins IV Funds

12:00 noon Lunch – Hosted by Foundation for California Community Colleges

01:00 p.m. Next Steps for State CTE Plan:
- WestEd & CCCCO/CDE Staff will Finalize Draft by November 20th
- State CTE Plan will be submitted to BOG and SBE in January
- State CTE Plan will be Adopted by BOG and SBE in March
- State CTE Plan will be sent to USDE on April 15th

Establish Next Meeting Date & Site

03:30 p.m. Adjournment

A-20

California Department of Education
EXE-100 (Rev. 11/01/2007)

Division/Branch No.	CIB 17360
Executive Office No.	

SUMMARY COVER MEMO

RECEIVED
NOV 9 5 2007
C & I Branch

Prepared by	
Name:	Lloyd McCabe
Phone:	445-1710

Division Web Coordinator	
Name:	Bill Martin
Phone:	323-5040

Date: November 7, 2007

To: Anthony Monreal, Deputy Superintendent
Curriculum and Instruction Branch

From: Dr. Lloyd McCabe, Policy Consultant
Secondary, Postsecondary, and Adult Leadership Division

Subject: JACCTE Public Meeting Notice

Approval

Manager Approved	
Signature:	
Phone:	319-0669

Director Approved	
Date:	11-9-07
Signature:	

Deputy Approved	
Date:	
Signature:	

General Counsel Approved	
Date:	
Signature:	

Other Approved	
Name:	
Date:	
Signature:	

Chief Deputy Approved	
☐	For Digital signature
☐	For JO's Signature
☐	With Edits
☐	Approved
Date:	
Signature:	

Correspondence Unit Completed	
☐	E-mailed from JO
Date:	
Signature:	

Summary of Contents

The Joint Advisory Committee on Career Technical Education (JACCTE) will be holding a Public Meeting on Tuesday, November 27, 2007 at the California Community College Chancellor's Office from 9:30 a.m. to 3:30 p.m.

Attached is the Public Meeting Notice and Agenda for the meeting.

Please sign and return so that this notice can be posted on the CDE Web site.

If you have further questions about this matter, please contact Lloyd McCabe, Consultant, Secondary, Postsecondary, and Adult Leadership Division at (916) 445-1710 or lmccabe@cde.ca.gov.

A-21

CALIFORNIA DEPARTMENT OF EDUCATION
EXE-002 (Rev. 07/04)

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Title of publication Public Meeting Notice - Joint Advisory Committee on Career Technical Education	
Web document location or topic Curriculum and Instruction: ci/ct/sf/	Subtopic Career Technical Education
CDE contact person Lloyd McCabe	Telephone 445-1710

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☐ **For CD-ROMs or videotapes: I verify that I have reviewed the attached material.** I believe it is ready to be finalized.

Name of Unit Manager *(Please type or print.)* Paul Gussman	Date approved 11/7/07
Signature ▶ Paul Gus	
Name of Division Director *(Please type or print.)* Patrick Ainsworth	Date approved 11/9/07
Signature ▶ P. Clint	
Name of Branch Deputy *(Please type or print.)* Anthony Monreal	Date approved 11/26/07
Signature ▶ AM	
Superintendent's Publications Adviser *Jan Agee*	Date approved
Signature ▶	
Other signatures as required ▶	Date
	Date

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A-22

CALIFORNIA
DEPARTMENT OF
EDUCATION

1430 N STREET
SACRAMENTO, CA
95814-5901

JACK O'CONNELL
State Superintendent of
Public Instruction
PHONE: (916) 319-0800

MEETING NOTICE

Schedule of Meeting:
Tuesday, November 27, 2007
9:30 a.m. to 3:30 p.m.

Location:
California Community College
Chancellor's Office
Third Floor, Rooms 3B & 3C
1102 Q Street
Sacramento, CA 95814

AGENDA

09:30 a.m.	Welcome	Kay Albiani, Chairperson
	Roll Call of JACCTE Members	Dean Smith
	Adoption of Minutes of JACCTE Meeting of October 16, 2007	
	Old Business:	
	• MOU Amendment: • Funding Distribution Committee Formation Report • Tech Prep Benchmarks	
	New Business:	
	Steering Committee Proposal	
	Review of Modifications to State CTE Plan as per JACCTE • Policies:	
	Adoption of State CTE Plan	
12:00 noon	Lunch – Hosted by Foundation for California Community Colleges	
01:00 p.m.	Next Steps for State CTE Plan	
03:15 p.m.	Public Comment	
03:30 p.m.	Adjournment	

A-23

Joint Advisory Committee on Career-Technical Education

November 27, 2007
Board Room 3B & C
California Community College Chancellor's Office
1102 Q Street
Sacramento, CA 95814

Conference Call Participant Detail
> Dial your telephone conference line: (888) 886-3951
> Enter your pass code: 4106443

AGENDA TENTATIVE
Revised 11/08/07

09:30 a.m. Welcome — Kay Albiani, Chairperson

Introductions

Roll Call of JACCTE Members — Dean Smith

Adoption of Minutes of JACCTE Meeting of October 16, 2007

Old Business:

- MOU Amendment:
  - Dispute Resolution
- Funding Distribution Committee Formation Report
  (July 2008 deadline to submit funding options or proposals to JACCTE)
- Tech Prep Benchmarks

New Business:

Steering Committee Proposal (see attachment)

Review of Modifications to State CTE Plan as per JACCTE:

- Policies:
  - State Subject Matter Specialists
  - Advisory Committees
  - Student Leadership Organizations
  - District Funded Courses
- Non-policies (**No Action Required – FYI Only**):
  - Work Experience
  - Adult Schools
  - Stronger reference to non-traditional careers

- Better delineation of what Adult Schools, Community College, ROCP's and high school districts do with regard to CTE
- Expanding Text on the Community College Delivery system
- Cal-PASS
- Access to CTE
- Other Non-policy Issues

Adoption of State CTE Plan (which includes Chapters 1-5 as listed below):

- Chapter 1 – Career Technical Education in California
- Chapter 2 – Context for Career Technical Education in California
- Chapter 3 – Building a High-Quality CTE System: A Vision of the Future
- Chapter 4 – Responses to the USDE Guide for the Submission of the 2008-2012 State Plan for the Perkins IV Funds
- Chapter 5 – State Policies on the Administration and Use of the Perkins IV Funds

12:00 noon Lunch – Hosted by Foundation for California Community Colleges

01:00 p.m. **Next Steps for State CTE Plan:**

- State CTE Plan will be submitted to BOG and SBE in January
- State CTE Plan will be adopted by BOG and SBE in March
- State CTE Plan will be sent to USDE on April 1st

03:15 p.m. Public Comment

Establish Next Meeting Date

03:30 p.m. Adjournment

Attachment 2
List of Public Hearing Locations and Attendance Levels

LOCATIONS

Date: Friday, September 7, 2007
Location: Los Angeles County Office of Education (LACOE), Room 281
9300 Imperial Hwy.
Downey, CA 90242
9:00 AM - 12:00 PM

Date: Friday, September 14, 2007
Location: Ohlone Community College (Fremont), Smith Center Theater
43600 Mission Boulevard
Fremont, CA 94539-0390
1:00 PM - 4:00 PM

Date: Monday, September 17, 2007
Location: Fresno City College, Staff Dining Room
1101 East University Ave.
Fresno, CA 93741
1:00 PM - 4:00 PM

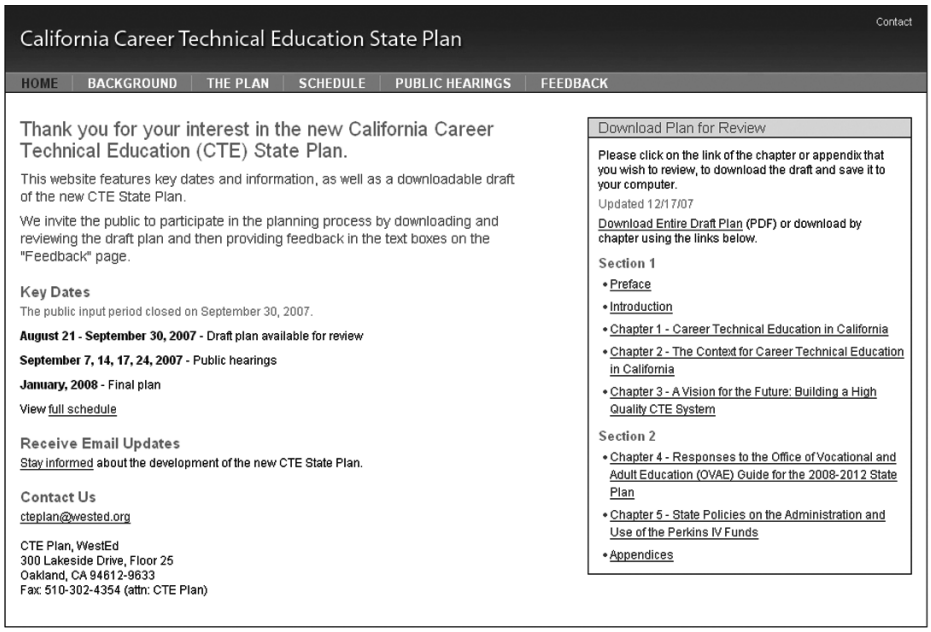
Date: Monday, September 24, 2007
Location: California Department of Education, State Board Room
1430 N Street
Sacramento, CA 95814
2:00 PM – 5:00 PM

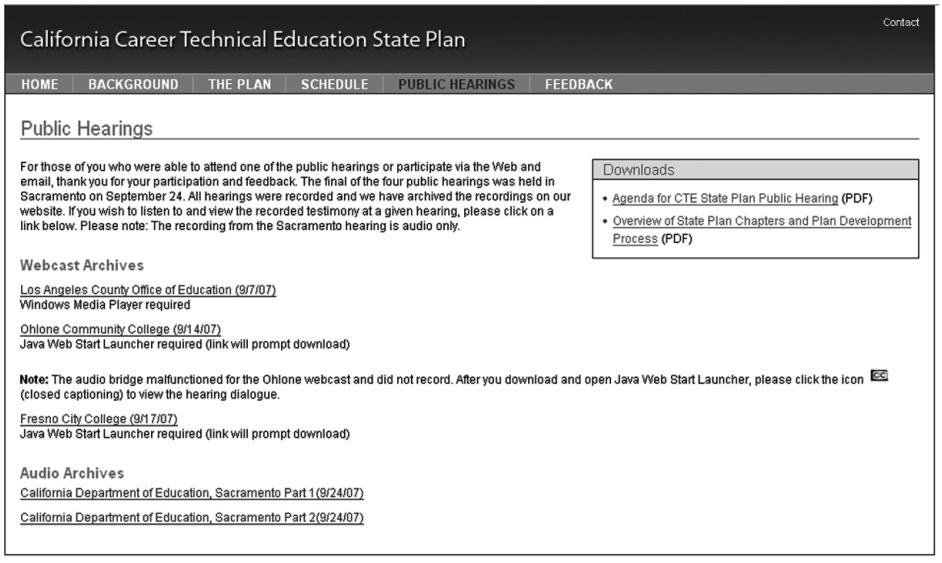
ATTENDANCE

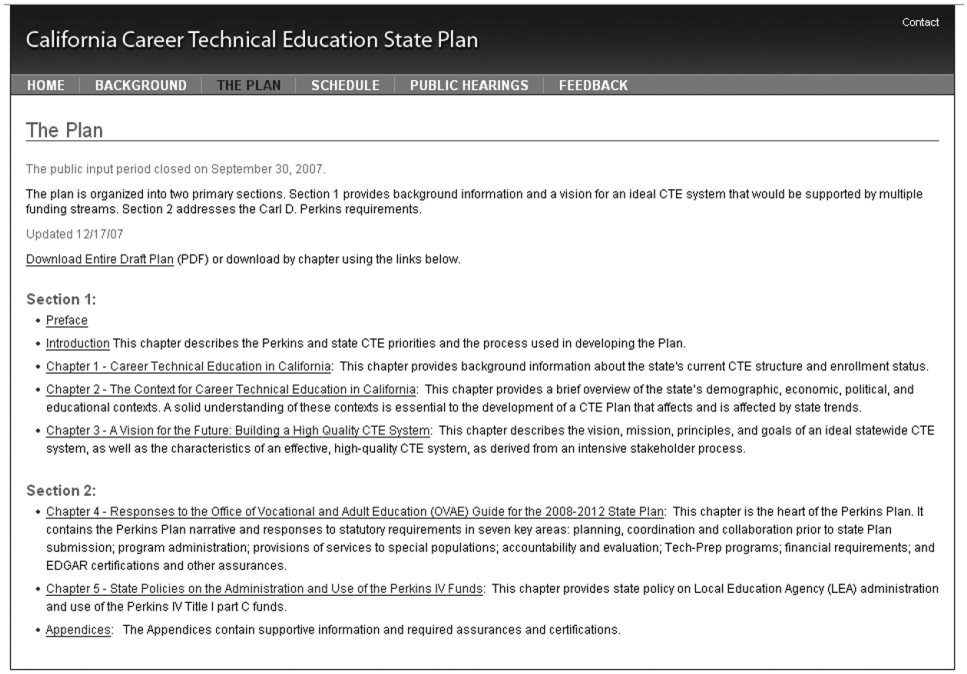
Channel/Venue	Attended/ No Testimony	Attended/ Gave Testimony	Viewed Webcast	TOTAL
LACOE	79	30	34	143
Ohlone	22	5	6	33
Fresno	25	4	13	42
Sacramento	57	19	n/a	76
Website	n/a	147	n/a	147
E-mail	n/a	41	n/a	41
TOTAL	183	246	53	482

Attachment 3
Screenshots of the CTE state plan Web site

To view this Web site, go to the URL: http://www.wested.org/cteplan







California Career Technical Education State Plan

Contact

HOME | BACKGROUND | THE PLAN | SCHEDULE | PUBLIC HEARINGS | FEEDBACK

The Plan

The public input period closed on September 30, 2007.

The plan is organized into two primary sections. Section 1 provides background information and a vision for an ideal CTE system that would be supported by multiple funding streams. Section 2 addresses the Carl D. Perkins requirements.

Updated 12/17/07

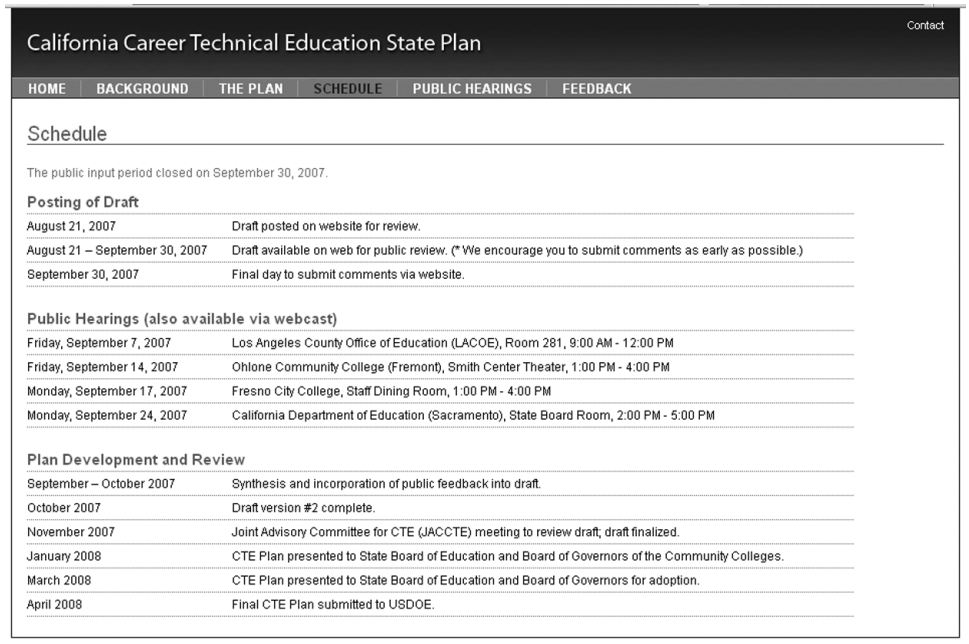
Download Entire Draft Plan (PDF) or download by chapter using the links below.

Section 1:

- Preface
- Introduction This chapter describes the Perkins and state CTE priorities and the process used in developing the Plan.
- Chapter 1 - Career Technical Education in California: This chapter provides background information about the state's current CTE structure and enrollment status.
- Chapter 2 - The Context for Career Technical Education in California: This chapter provides a brief overview of the state's demographic, economic, political, and educational contexts. A solid understanding of these contexts is essential to the development of a CTE Plan that affects and is affected by state trends.
- Chapter 3 - A Vision for the Future: Building a High Quality CTE System: This chapter describes the vision, mission, principles, and goals of an ideal statewide CTE system, as well as the characteristics of an effective, high-quality CTE system, as derived from an intensive stakeholder process.

Section 2:

- Chapter 4 - Responses to the Office of Vocational and Adult Education (OVAE) Guide for the 2008-2012 State Plan: This chapter is the heart of the Perkins Plan. It contains the Perkins Plan narrative and responses to statutory requirements in seven key areas: planning, coordination and collaboration prior to state Plan submission; program administration; provisions of services to special populations; accountability and evaluation; Tech-Prep programs; financial requirements; and EDGAR certifications and other assurances.
- Chapter 5 - State Policies on the Administration and Use of the Perkins IV Funds: This chapter provides state policy on Local Education Agency (LEA) administration and use of the Perkins IV Title I part C funds.
- Appendices: The Appendices contain supportive information and required assurances and certifications.



California Career Technical Education State Plan

Contact

HOME | BACKGROUND | THE PLAN | SCHEDULE | PUBLIC HEARINGS | FEEDBACK

Schedule

The public input period closed on September 30, 2007.

Posting of Draft

August 21, 2007	Draft posted on website for review.
August 21 – September 30, 2007	Draft available on web for public review. (* We encourage you to submit comments as early as possible.)
September 30, 2007	Final day to submit comments via website.

Public Hearings (also available via webcast)

Friday, September 7, 2007	Los Angeles County Office of Education (LACOE), Room 281, 9:00 AM - 12:00 PM
Friday, September 14, 2007	Ohlone Community College (Fremont), Smith Center Theater, 1:00 PM - 4:00 PM
Monday, September 17, 2007	Fresno City College, Staff Dining Room, 1:00 PM - 4:00 PM
Monday, September 24, 2007	California Department of Education (Sacramento), State Board Room, 2:00 PM - 5:00 PM

Plan Development and Review

September – October 2007	Synthesis and incorporation of public feedback into draft.
October 2007	Draft version #2 complete.
November 2007	Joint Advisory Committee for CTE (JACCTE) meeting to review draft; draft finalized.
January 2008	CTE Plan presented to State Board of Education and Board of Governors of the Community Colleges.
March 2008	CTE Plan presented to State Board of Education and Board of Governors for adoption.
April 2008	Final CTE Plan submitted to USDOE.

APPENDIX C
Responses to Field Recommendations from Web Site and Statewide Hearings

Topic 1: Vision and Goals

Recommendation: In considering the vision for California's CTE system, the emphasis shouldn't be on "getting a job" that "makes a lot of money," but also include the idea that purposeful life includes many other distinctions and it is bigger than workforce preparation.

» Vision and mission statements expanded to include these concepts. (Pg. 51)

Recommendation: CTE needs to be more clearly defined and linked to the broader education system, as opposed to being discussed as a separate system.

» Added clause in Preface highlighting salient features of CTE. (Pg. xi)

» Added paragraph in the beginning of Chapter Three (Pg. 50) that discusses CTE as a strategy that is integrated within the fabric of our educational system, for the benefit of all students. (Pg. 50)

» Changed "CTE students" to "students in CTE programs." (Pgs. 26, 70, 79, 83, 84, and throughout the document)

» Stressed the role of CTE in student engagement, in addition to workforce development. (Pgs. 52, 57, 63, 85, 131 and throughout the document) (Pgs. 2, 5, 10, 15, 16 and throughout the document)

Topic 2: Skills/Degrees Needed

Recommendation: The plan needs to more adequately address and include "soft skills," academic achievement/skills, as well as innovation, creativity, and entrepreneurship in foundation competencies, and ensure that there is a common definition for "readiness."

» These soft skills were reinforced. In addition, 21st Century Partnership skills were updated in Chapter Three, as well as "Career Guidance" (Pg. 72), and reference was added to the CTE Model Curriculum Standards' "foundation standards." (Pg. 13, 66, 73, 77)

Recommendation: The plan seems to emphasize students completing a four-year degree as a formal objective for all high school students. The plan should also refer to other concepts, such as ways that students productively contribute to society without having a four-year degree.

» Ensured that text emphasizes preparation for both employment and postsecondary education and avoided the concept of "college" in favor of "postsecondary education" to convey that all forms of postsecondary education are encouraged, not only four-year degree programs. (Pgs. vii, 2, 6, 7, 13, 31 and throughout the document)

Topic 3: Needs of Rural Counties

Recommendation: There should be stronger rural representation in the plan to avoid policies driven by the urban model.

» Included the need for innovative delivery strategies, including greater use of distance education, to serve rural counties. (Pg. 34)

» Cited the need for attention to faculty recruitment in rural areas. (Pgs. 114, 149)

» Expanded the definitions used for "rural" to identify the eligible recipients in rural and sparsely populated areas required by Sections 131(c)(2) and 132(c)(2) of the Act to include 33 – Town, Remote: Territory inside an urban cluster that is more than 35 miles from an urbanized area. (Pg. 200)

Topic 4: The CTE Delivery System

ADULT SCHOOLS/ADULT EDUCATION

Recommendation: Adult schools and Adult Education should have a stronger representation in the plan and be given greater recognition for its contribution to CTE and be included as a prominent educational delivery system.

» In consultation with the CDE Director of Adult Education, adult schools were added as a delivery mechanism throughout the plan, as appropriate. (Pgs. 5, 8, 9, 41, 51 and throughout the document)

Recommendation: Clearly define adult schools and Adult Education, and include more examples of this type of education in the plan.

» Changed "Adult Education" to "adult schools," to distinguish this delivery system from that offered to adults through the community colleges. (Pgs. 5, 8, 9, 41, 51 and throughout the document)

Recommendation: Throughout Chapters One through Three, K-12 should be replaced with K-Adult or PreK-Adult.

» Changed K-12 to K-Adult in various places in the plan. (Pgs. 78, 148)

WORK EXPERIENCE EDUCATION

Recommendation: The plan should highlight the importance of Work Experience Education in providing students with the SCANS skills and with exposure to "all aspects of the industry."

» Text added to highlight both of these on pages 6 and 7.

Recommendation: The plan should highlight the importance of connecting Work Experience Education to related classroom curriculum.

» Text included in Chapter Three, "High-Quality CTE" (Pg. 70), to highlight the need for connection of work-based learning to classroom curriculum. Expand classroom-linked work-based learning and work experience education opportunities through strengthened industry partnerships, effective coordination with ROCP, adult schools, Work Experience Education, Co-operative Work Experience Education programs, and a systematic review of policies and practices that create barriers to access, including insurance, liability, and other issues.

» Added text in Chapter Five, as follows: **Proposed State Policy**. Exploratory and Vocational Work Experience Education activities may be assisted with Section 131 and 132 funds if they are a planned and listed component of a CTE program, are integral to one or more of the approved sequences of courses in the LEA's local plan and annual application for funds, and comply with applicable state and federal regulations. Section 131 and 132 funds may not be used to assist General Work Experience Education. (Pg. 228)

REGIONAL OCCUPATIONAL CENTERS AND PROGRAMS (ROCPs)

Recommendation: The importance of ROCPs should be recognized more visibly as a major delivery method for CTE and as a program that serves all high school students.

» ROCPs referenced throughout the plan as a key provider of CTE. (Pg. 6, 8, 10, 28, 48 and throughout the document)

Recommendation: The plan should address the challenges in sequencing when there are middle schools involved. ROCPs cannot serve middle school students, so they will not have the ability to develop sequences or provide introductory courses at that level.

» The following text was added: **Proposed State Policy.** Middle (grades seven through eight) school CTE courses may be assisted with Section 131 funds only if integral to approved sequences of courses conducted by a high school. Explanation. Though Section 315 of Perkins IV allows the use of Section 131 funds to assist CTE instruction in grades seven through eight, Section 131(d)(1) restricts the allocation of these funds to LEAs who serve secondary school students, i.e. unified and union high school

districts and county offices of education. As a consequence, middle school participation in the funds is dependent on two factors: the alignment of the "introductory" CTE instruction provided in grades seven through nine with a sequence of high school district (including ROCP) CTE courses approved for the use of the funds, and the high school district's acknowledgement of the alignment as evidenced by the commitment of a portion of its allocated funds to the middle school instruction. (Pg. 225)

OTHER PARTICIPANTS IN THE CTE DELIVERY SYSTEM

Recommendation: The state needs to consider how it can use the county office of education to support or advise a CTE position that works in partnership with ROP to be a conduit for information from the state, support the local districts in the full development of their programs of study, and be a vehicle for the coordination of a network for CTE K-12 that connects to higher-level education.

» Highlighted the importance of county offices of education as a broker of CTE services. (Pgs. 7, 11, 67, 98)

Recommendation: It is strongly recommended that community-based organizations (CBOs) be added to the plan as the main entity to provide the soft skills training that the California workforce will require. It is often community-based nonprofit organizations that have been successful at providing soft skills and are able to deal with people on the fringe of society and who need guidance as to how they can become financially secure, taxpaying citizens.

» Highlighted the importance of CBOs in providing key career exploration and preparation services as part of the overall CTE delivery system. (Pg. 21)

Topic 5: Leadership

Recommendation: Reinstate subject matter units with specific qualifications, including practical experience in the field, in each of the traditional CTE subject matter areas. Specialists are needed to keep the field abreast of new standards, initiatives, funding opportunities, professional development activities, as well as providing technical assistance and support.

» Language added in Chapter Three under "Leadership" to clarify the role of subject matter specialists and to propose the additional "needed action": (Pg. 61)

  » Allocate resources specifically to qualified "subject-matter" (career area) specialists at both the California Department of Education and the California Community College Chancellor's Office to provide leadership and facilitate communication and coordinate peer-to-peer learning, professional development, advocacy, and industry engagement efforts within their career area; to conduct and coordinate review processes for accountability purposes; and to provide

subject-matter technical assistance directly to the field when necessary to strengthen program area instruction.
    - Establish agreements with higher education to ensure that leadership in CTE is included within the courses of study required for administrative credentials.

- Language added under "System Responsiveness to Changing Economic Demands": (Pg. 111)

    - Provide additional operational funds to support and expand CTE subject area expertise in the CDE and CCCCO in order to provide state leadership and technical assistance to the field on maintaining a demand-driven system.

Topic 6: High-Quality Instruction

Recommendation: There should be an interdisciplinary approach to programs of study and they should be defined as comprehensive pathways of academic and technical study organized around broad industry themes. Create incentives for quality programs as well as emphasize true pathway development.

- The following text was added to Chapter Three: High-quality curriculum and instruction in CTE includes the intentional reinforcement of the cognitive, academic, and technical rigor inherent in CTE and the alignment of CTE with academic and industry standards. It also includes the integration of CTE and academic content through a variety of strategies that foster complementary approaches to teaching and learning — strategies that draw on the best of what both CTE and non-CTE disciplines have to offer. (Pg. 62)

- **Recommendation**: Add a "needed action" to improve the UC/CSU system for reviewing and approving CTE classes to meet "a-g" requirements. This "needed action" should also include requirements to provide sufficient feedback when classes do not meet "a-g" requirements so that the submitter can determine whether the changes required will be made.

- Added text as requested, as follows: Continue to strengthen the communication between the University of California Office of the President and high schools and ROCPs on the requirements for "a-g" approval of CTE programs, with a focus on providing specific guidance and feedback to CTE faculty on their course proposals. (Pg. 71)

Topic 7: Career Guidance

Recommendation: Cite the importance of career guidance and CTE training, and strengthen dissemination of nontraditional employment for secondary (including junior high) and postsecondary students, so that it consists of something more than reinforcing the "a-g" message. In addition, AB 1802 should be more prescriptive in the balance of

CTE information with other elements and have a greater emphasis on career preparation rather than supplemental instruction.

» Ensured that the Career Guidance section and reference to Assembly Bill 1802 addressed the need for guidance in the area of careers and not just academic counseling. (Pg. 48)

Topic 8: Special Populations

Recommendation: Strengthen the focus and reference to nontraditional careers and be more specific regarding nontraditional recruitment and retention strategies so that more attention is paid to improving the access and success of both males and females in nontraditional roles. All approaches and attempts to improve nontraditional students seem to focus on females in male-dominated professions.

» Text added to ensure that reference to nontraditional careers included mention of male students in high demand careers such as nursing. (Pg. 80)

Recommendation: Allow students in continuation, court and community schools, and those incarcerated by the California Division of Juvenile Justice, especially those in Community Day School programs, to be given attendance/credit hours for the time they spend at jobs/internships.

» This "needed action" was already in the plan (Chapter Three, "Student Support and Student Leadership Development," Pg. 85): Explore opportunities to serve the needs of students in continuation schools, court and community schools, and juvenile correctional facilities by linking students to open-entry/open-exit programs in local ROCPs, adult schools, and community colleges and providing career guidance and exploration opportunities, including internship opportunities and mentorships.

Recommendation: The plan should describe how the state would allocate additional state leadership funds to provide professional development for LEAs in serving ALL categories of special population students, including funds to provide assistance to LEAs in understanding the new data requirements, interpreting data, and identifying gaps in performance for special populations, provide guidance and support to LEAs in implementing strategies to address performance gaps and serve special populations, encourage students to consider nontraditional careers, and provide LEAs with strategies for nontraditional recruitment and retention.

» Text was added in "needed actions" under Chapter Three, "Professional Development," as follows: Provide professional development to faculty in differentiating instruction and working with special populations. (Pg. 85)

» Text was added to Chapter Four about the use of state leadership funds for professional development activity and technical assistance as recommended by the Joint Special Population Advisory Committee (JSPAC). (Pg. 153)

Recommendation: Do not support Vocational English as a second language as there is too much opportunity for abuse.

» Clarified that this "needed action" pertained to VESL programs connected to specific CTE programs. (Pg. 85)

Topic 9: Student Support and Student Leadership Development/CTSO

Recommendation: Expand and strengthen the student leadership section so that there is equity in funding across all industry sectors, there's a more diverse listing of student organizations for career-related services (for example, list the Future Farmers of America), and that CTSOs are required of all industry sectors at each high school receiving Perkins funds.

» Expanded the CTSO section and included the need for additional funding and support from industry, as is received by the Future Farmers of America. (Pg. 86)

» In Chapter Five, included "staff and other necessary operational costs incurred in providing for state and nationally recognized CTE student organizations (CTSOs) and work-based learning experiences" as an allowable use of Section 131 and 132 Perkins funds. (Pg. 222)

Topic 10: Industry Partnerships

Recommendation: Strengthen and clarify the section on advisory committees and industry partnerships so that advisory committees are composed primarily of industry and business representatives in addition to being required members, each subject area has an active industry advisory group to evaluate programs, there is flexibility on how they can convene (for example, virtual meetings, subcommittees), and they're held accountable by providing evidence that they meet regularly.

» Text added to Chapter Five, as follows: Have extensive business and industry involvement, as evidenced by no less that one annual business and industry advisory committee meeting and planned business and industry involvement in program activities as described in the Guidelines for the 2008-2012 Local Plan for CTE and instructions for the annual application for funds. (Pg. 223)

Recommendation: Reduce the number of advisory committee meetings from two meetings to one meeting. Requiring two annual advisory committee meetings will tax the time commitment of business partners.

» See response to previous recommendation.

Recommendation: Designate a CTE advisory committee or a certain number of seats on the advisory committee for adult education members. (Pg. 89)

Topic 11: Career Pathways and Programs of Study

Recommendation: There should be an interdisciplinary approach to programs of study and they should be defined as comprehensive pathways of academic and technical study organized around broad industry themes. Create incentives for quality programs as well as emphasize true pathway development.

» High-quality curriculum and instruction in CTE includes the intentional reinforcement of the cognitive, academic, and technical rigor inherent in CTE and the alignment of CTE with academic and industry standards. It also includes the integration of CTE and academic content through a variety of strategies that foster complementary approaches to teaching and learning — strategies that draw on the best of what both CTE and non-CTE disciplines have to offer. (Pg. 62)

» Programs of study and pathways defined in both Chapter Three, "System Coherence and Alignment" and Chapter Five. (Pg. 89 and Chapter 5)

Recommendation: Foundation or introductory courses in every career pathway or "Program of Study" should be a district-sponsored course and required prior to CTE capstone courses on the secondary level if not available in middle school. Perkins funds should not be available to those career pathways or Program of Study that are made up only of ROCP courses.

» Emphasis placed on the importance of CTE in grades 9 and 10 for the purpose of engaging students. (Pg. 92)

» Emphasized in "Program of Study Requirement," that each program of study must include "not less than one district-funded course." (Pg. 225)

» Emphasized in "Local funds required in programs assisted with Section 131 funds": "LEA must provide at least one CTE sequence of courses that includes at least one district-funded course, as follows: "Additionally, LEAs must provide at least one course in each industry sector assisted with the funds. The course may be introductory or advanced, and though not necessarily integral to the sequence of courses being assisted with the funds, must be clearly integral to one or more of the sequences of courses offered in the industry sector. While it is expected that most LEAs will comply with these requirements in the 2008-2009 program year, full implementation of the requirement will be delayed until the 2009-2010 program year to provide districts with the additional time needed to add additional courses or revise existing courses." (Pg. 227)

Topic 12: System Coherence and Alignment

Recommendation: Deemphasize the early childhood years, as elementary teachers have little knowledge in CTE and most of CTE occurs in grades 9 through 12.

» In discussing both the emphasis of the plan on "lifelong learning" and in describing the CTE delivery structure within the K-12 system, early childhood and elementary education are cited as the points of departure for learning and awareness of possibilities. While students are not learning technical skills in these early years, in view of CTE as an authentic learning strategy embedded within the overall educational delivery system, the Resource Group insisted that the foundation for student success must be laid when children are young. That being said, CTE viewed primarily as a technical skill development strategy pertains to the high school and community college years and is discussed in that context. (Pgs. 2, 3, 4, 5, 8 and throughout the document)

Recommendation: In order to qualify for Perkins funding, there should be active, current articulations between all programs from 7-14 and that yearly agreements are in place, including coordination with the industry sector advisory committees and delivery systems between the high school and community colleges to ensure more direct alignment in the programs of study, a focus on Course-to-Course instead of Teacher-to-Teacher agreements to allow for portability, and a systemic, statewide, portable dual-credit system for secondary students.

» A number of the "needed actions" under "System Coherence and Alignment" speak to these suggestions: (Pg. 100)

  » Encourage and promote the development of coherent career pathways that foster complementary and integrated CTE and academic content, faculty collaboration, and secondary to postsecondary transitions.
  » Provide sufficient time for faculty to build cross-segmental and cross-disciplinary collaborations aimed at aligning curricula and programs, as well as models, tools, and professional development to facilitate pathway development.
  » Define a sequence of CTE foundation courses that begin in middle school, continue through grade 10, and are aligned to secondary and postsecondary career pathways.
  » Facilitate program-to-program articulation and use model articulation agreements to promote consistency and minimize duplication of effort.
  » Expand the number of community college CTE programs that articulate to four-year university programs.
  » Examine concurrent enrollment and "credit by exam" efforts to identify promising opportunities for expansion as well as CTE growth.

» Chapter Five provides for the following "Proposed State Policy": Each CTE program assisted with Section 131 or 132 funds must incorporate the nine requirements established in Section 135(b) of Perkins IV, including a sequence of courses that

provides students with coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills…" The following planning, organization, and instructional elements determined by the state to be critical to high-quality CTE programs are particularly relevant to the suggestion made: (Pg. 223)

  - Have extensive business and industry involvement, as evidenced by no less than one annual business and industry advisory committee meeting and planned business and industry involvement in program activities as described in the Guidelines for the 2008-2012 Local Plan for Career Technical Education and instructions for the annual application for funds;
  - Be aligned with applicable feeder and advanced-level instruction in the same career pathway;
  - Integrate the development of CTE and academic skills in order to prepare students for immediate employment upon graduation and for further education or training;

- Chapter Five also provides for the following "Proposed State Policy": Each LEA receiving Section 131 or 132 funds must provide at least one program of study, as defined in Section 122(c)(1)(A) of Perkins IV, that includes not less than one district-funded course. Programs of study must incorporate secondary and postsecondary elements in a coordinated and aligned, non-duplicative progression of courses that lead to an industry-recognized credential or certificate at the postsecondary level, or an associate or baccalaureate degree. Programs of study must also satisfy the organization and operation requirements specified in policy #3. (Pg. 225)

Recommendation: There needs to be a better delineation of what Adult Ed, Community College, ROCPs, and high school districts do with regard to CTE to avoid unnecessary duplication of CTE courses.

- In addition to describing the roles of various agencies and segments in Chapter One, the following was included as a "needed action" under System Coherence and Alignment: Specify the respective roles of school districts, ROCPs, adult schools, community colleges, apprenticeships, and four-year colleges in the CTE system. (Pg. 100)

Recommendation: Mention basic CTE course of study requirements with regard to Education Code 51220, and specify program coordination with ESEA/NCLB or the state-required Single Plan for Student Achievement.

- Education Code 51220 cited and alignment with the state required Single Plan for Student Achievement added in both the System Coherence and Alignment section and in the Evaluation and Accountability section. (Pg. 64)

Topic 13: Tech Prep

Recommendation: The accountability and assessment of Tech Prep needs to be reviewed so the program can be improved or eliminated. More data is needed in order to evaluate Tech Prep performance, but the plan needs to extend the improvement period and allow colleges enough time to get data and information for determination of success and further needs, as well as indicate how the additional data necessitated by the performance indicators will be collected from participants and when it should begin.

» Tech Prep will remain as a separate funding stream, with benchmarks established to monitor system improvement. The use of Cal-PASS is mandated to facilitate collection of data. (Pgs. 94, 192)

Topic 14: Organizational Design

Recommendation: Include distance learning options for ROCPs. The plan addresses the need for outreach efforts and it also discusses the need to expand distance learning as an instructional strategy for high school and adult students who have multiple claims on their time.

» Expanded "needed action" under Chapter Three, "Effective Organizational Design," as follows: Promote greater use of technology-assisted and distance learning in all programs, including elementary, middle, and high schools, adult schools, ROCPs, and community colleges. (Pg. 107)

Recommendation: Clarify open-entry/open-exit because open-entry/open-exit classes do not work within the comprehensive school system and the ADA funding method of school financing.

» Added "where feasible" to the "needed action" regarding open-entry/open-exit classes, as follows: Explore the expansion of open-entry/open-exit strategies where feasible, in ways that maintain the integrity of CTE courses and course sequences and comply with industry requirements; structure and sequence curriculum in modules or "chunks" tied to jobs with multiple entry and exit points, with multiple levels of industry-recognized credentials built into the sequencing of the pathway. (Pg. 107)

Topic 15: Skilled Faculty and Professional Development

Recommendation: Address the need for recruiting and retaining CTE teachers, including having coordinated efforts in credential preparation programs with California State Universities.

» The following "needed action" is listed under Skilled Faculty and Professional Development": Expand and promote effective and innovative models of CTE teacher preparation to meet the CTE teacher shortage, including the expansion of teacher

preparation programs in the community colleges, articulated with the California State University system. (Pg. 116)

Recommendation: Require a bachelor's degree for all CTE faculty to eliminate a "two-tiered" system; require industry experience.

» "Needed action" under "Skilled Faculty and Professional Development" stresses the importance of both industry experience and pedagogical skill. (Pg. 116)

Recommendation: The plan must continue to include credential qualifications not only for CTE teachers, but also administrative staff at all levels – district and state; local coordinators of CTE must have a background in one of the five CTE subject matters or the industry sectors.

» "Needed action" added as follows: Include counselors, non-CTE faculty, and both CTE and non-CTE administrators in CTE professional development whenever possible to foster mutual understanding and alignment of efforts toward the common goal of preparing all students for success. (Pg. 117)

» Chapter Five: Requirements of Local Educational Agency CTE Programs Assisted with Section 131 and 132 Funds: Each CTE program assisted with Section 131 or 132 funds must incorporate the nine requirements established in Section 135(b) of Perkins IV..., and the following planning, organization, and instructional elements determined by the state to be critical to high-quality CTE programs: Be staffed by qualified CTE teachers, meaning teachers who 1) possess a standard secondary, single-subject or designated-subject credential that authorizes the teaching of the CTE course(s) to which assigned, and 2) can document employment experience, outside of education, in the career pathway addressed by the program *or* other evidence of equivalent proficiency; must meet the minimum qualifications for community college CTE teachers that are established in Title 5 of the CA Administrative Code. (Pg. 223)

Recommendation: Address the need for professional development regarding the implementation of work-based learning and the use of data for program improvement.

» These are included in the "needed actions" under "Skilled Faculty and Professional Development." (Pg. 115)

Recommendation: In order to qualify for Perkins funding, there should be active membership by the program instructor in a professional CTE organization each school year that funding is granted, instructors should attend a state conference for professional CTE teachers each school year that funding is granted, instructors should have proof of professional trade training in the skill area being taught during the year that funding is granted, and instructors should have their qualifiers on file in the principal's office for public inspection.

» The plan focuses on the qualifications — including both technical/workplace experience and pedagogical skills for effective instruction in CTE — and the types of professional development required, including peer collaboration (to help bridge the academic/CTE divide) and teacher externships (to provide powerful first-hand experience in the current workplace), as well as the conferences the CTE instructors already attend. In addition, as described, the California Commission on Teacher Credentialing is currently reviewing CTE teacher credentialing requirements. (Pgs. 22, 111, 113, 116)

Topic 16: Accountability, Data, and Student Assessment

Recommendation: Use this plan as an opportunity to test (and study) the potential gains of results-based funding formulas, strategies, and incentives. The plan could provide base funding for programs based on the traditional measure of enrollments, but provide incentive funding for successful demonstration of results.

» The federal Perkins grant is based on allocations. Accountability is based on student outcomes. There is no provision in the Perkins Act for performance-based funding. (Pg. 195)

» The Section 131 and, to a large degree, Section 132 allocation formulas are established in the Perkins regulations. (Pg. 220)

» Under Perkins IV, LEAs who fail to meet established performance levels risk the loss of a portion or all of their allocated funds. (Pg. 223)

Recommendation: Strengthen and identify accountability for the Community Colleges or the Chancellor's Office. Accountability should be the same for CTE programs receiving funding at the community college level as they are for schools at the secondary level.

» The Perkins Act has specific requirements for accountability that are different for secondary and postsecondary. Both secondary and postsecondary have developed new accountability systems that respond to the accountability requirements in the Act as described in Chapter Four. (Pg. 167-188)

Recommendation: Increase transparency and accountability in the use of Perkins funds and view accountability systems as tools for program improvement. Monitor districts that may be using Perkins as an entitlement program, make documents public electronically, and provide technical assistance.

» Focused and restricted use of the Perkins funds, accompanied by accountability, including monitoring and program improvement, is a key feature of this plan, as required by the Perkins Act and effective practice. The section on Evaluation, Accountability, and Program Improvement stresses the importance of accountability for program improvement, not just compliance. (Pg. 117; see also "Required LEA Use of Funds" on Pgs. 223-224)

» The plan indicates that the CDE and CCCCO will provide technical assistance to local education agencies concerning local receipt, administration, use, and accountability of the Perkins funds and the elements, content, design, instruction, accountability, funding, and success of CTE pathways in the schools and colleges. (Pg. 153)

Recommendation: Avoid redundant data collection systems.

» The Evaluation, Accountability, and Program Improvement section stresses the importance of building on existing data collection systems. (Pg. 117)

» Under the Accountability and Evaluation section of Chapter Four, the plan indicates the state's continuing efforts to improve and expand its statewide data collection system, including improving the quality of secondary-level student data and coordination of the exchange of information across education and workforce systems. (Pg. 170)

Recommendation: Minimize the grantees' data collection burden.

» The plan requires the collection of data that are mandated by the federal Perkins Act. The plan also discusses the need to support grantees in data collection and analysis, including alignment of systems, provision of tools and guidelines, provisions of technical assistance and professional development, and allocation of resources. (Pgs. 128, 169)

Recommendation: Clarify the definitions of indicators to be used; clarify the titles of CTE courses.

» The plan discusses the importance of clarifying indicators, discusses CTE course criteria (pgs. 122, 123), and sets the stage for the state to address data-related issues.

Recommendation: Clarify the definition of program "completers."

» The definition of a "completer" is embedded in each of the "Final Agreed Upon Performance Levels Forms" for secondary and postsecondary levels. (See Pgs. 175-185 for the definition of completers.)

Recommendation: Ensure that indicators provide valid measures of outcomes sought and ensure access to timely and reliable data.

» The plan discusses the importance of identifying indicators that measure outcomes in CTE and highlights the need for sufficient funding for system development, data collection, data analysis, and professional development in the use of data for program improvement. (Pgs. 123, 167-168)

Recommendation: Strengthen access to data across segments for core indicators "since secondary and postsecondary systems don't talk with their data system"; implement Cal-PASS.

» The plan specifically emphasizes the need for data collection systems to facilitate cross-segmental data collection. (Pgs. 53, 118, 128)

» Cal-PASS implementation will be required of all Tech Prep grantees. (Pgs. 169, 170, 192)

» The plan also emphasizes the need for professional development in the use of data. (Pgs. 170, 177)

Recommendation: The third-party technical skill assessments at the secondary level are an area of concern, as it is unclear what form they will take.

» Technical skill will be measured by assessments aligned with industry-recognized standards, including the California CTE Model Curriculum Standards; third-party assessments will not be implemented statewide. (Pgs. 78, 175)

» For secondary education, the state has determined the measure used for technical skill assessments will be the same measure used under Perkins III. In accordance with the Perkins accountability determinations, local agencies will be encouraged to use industry-recognized certifications. (Pg. 125)

Recommendation: The testing requirement needs to be revisited. For data to be consistent across the state, subject-area, course-specific tests need to be developed that address the standards for each course. Not only would this provide reliable data, but it will also give CTE instructors additional guidance with what should be taught, further unifying what is taught throughout the state in CTE.

» The plan describes model assessment tasks that are featured in the CTE Model Curriculum Framework; the CTE Model Curriculum Standards will also serve as the basis for the development of technical skill assessments. (Pgs. 12, 46, 65, 67, 70 and throughout the document)

Topic 17: CTE Promotion

Recommendation: Strengthen message about role of CTE in academic achievement.

» Enhanced text to emphasize the need to promote CTE as a means to improve student outcomes. (Pgs. 2, 55, 130)

Recommendation: In order to bring CTE to the level it has the potential to be, much of this will need a change in perspective for stakeholders and that will require a well thought-out public relations campaign involving all parties.

» The "needed actions" in the Promotion section call for improved communication to all stakeholders about the benefits of CTE and the need for a clear and compelling message that will galvanize support. (Pg. 130)

Topic 18: Distribution of Funds

Recommendation: Reevaluate the split of funds and include the formula and how it was derived in the plan.

» The formula for distributing secondary funds is defined in Section 131 of Perkins IV. There is no provision for obtaining a waiver of this formula. (Pg. 196)

Recommendations: Make the distribution of Title I funds more equitable by including a secondary distribution formula similar to that for community colleges - based on the number of CTE students meeting economic disadvantage criteria. The funding split between secondary schools and community colleges needs to be shifted. More funds need to be spent at the secondary level where real CTE improvement is desperately needed.

» As described in Appendix F, the Title I, Part C funds are divided between secondary and postsecondary programs based on a comparison of the CTE course enrollments at the two levels in the last completed program year (2005-06) for which enrollment data are available. This annual enrollment comparison process involves the collection and validation of the enrollments in secondary CTE courses conducted by the unified and union high school districts and ROCPs; and the enrollments in postsecondary CTE courses conducted by the community college districts, adult school agencies, and the ROCPs. Based on a comparison of the aggregated 2005-06 secondary and postsecondary CTE enrollment data, 45.0913551 percent ($49,639,992) of the 2007-08 Title I, Part C funds were directed to secondary programs and 54.908645 percent ($60,447,612) of the funds were directed to postsecondary programs. The secondary funds were distributed in accordance with the allocation formula established in Section 131 of the Act. The postsecondary funds were distributed in accordance with the state's approved Section 132 waiver described in Appendix G. Pending USDE approval of the Section 132 waiver extension request described in Section VI(5), the postsecondary funds will continue to be distributed in accordance with the approved alternative formula.

Topic 19: State Policies on Administration and Use of Perkins IV Funds

Recommendation: Increase funding allocations for staff support/staff time and for counseling and guidance.

» Up to 10 percent of the LEA's Section 131 and 132 allocations may be expended for guidance and counseling for students participating in CTE programs. (Pg. 222)

Recommendation: Regarding the use of Section 131 and 132 funds, change the proposed 15 percent and 85 percent to 45 percent and 55 percent, because to decrease the cost associated with implementing the grant would mean that many school districts would not be able to continue to provide students the support they need to successfully continue in their programs.

» Up to 85 percent of the allocation must be expended for costs incurred in program-related activities. Student support services are included among these allowable costs. (Pg. 221)

Recommendation: The plan should more strongly support the position that Perkins funds should be used for CTE programs and staff, and funding spent on support should be limited and monitored closely.

» This was the purpose of the policy regarding the required LEA use of Section 131/132 funds on pages 222-223.

Recommendation: CTE funding should not be used to support ROCP programs and there needs to be more explanation of the MOU process and implications of 131 funds going to ROCP.

» As a regional educational agency, the ROCP is an eligible recipient of Section 131 funds. Alternatives for ROCP participation in the funds are described on pages 226-227.

Recommendation: Allow ROCPs to access Perkins 131 funds and provide alternative methods for accessing those funds.

» As a regional educational agency, the ROCP is an eligible recipient of Section 131 funds. Alternatives for ROCP participation in the funds are described on pages 226-227.

Topic 20: Funding

Recommendation: Invest substantially more dollars and resources into CTE in both the community college and secondary systems, including lengthening the high school day and investing more funds on the most current equipment so student can learn the current industry skill standards.

» The subsection on Effective Organizational Design (Pg. 106) provides a "needed action" related to a longer school day, as follows: "Provide resources and assistance to schools in reorganizing school schedules into 'blocks' or seven- or eight-period days to enable students to enroll in CTE beginning in the ninth grade and to facilitate enrollment in integrated programs." The subsection on System Responsiveness to Changing Economic Demands discusses the need for adequate funding for equipment. (Pgs. 106-107)

Overall, a major objective of Chapters One through Three was to present needed CTE system improvements. The next step will be to prioritize the needed improvements and develop specific recommendations for funding support, as suggested on Pg. 131.

APPENDIX D
State Plan Resource Group
(Group, Organization, Industry, or Population Represented in Parenthesis)

Jim Abrams
President & CEO
California Hotel and Lodging Association
(Hospitality & Lodging Industry)

Laurel Adler
Director, East San Gabriel ROP
(ACSA & ROCP Administrators)

Don Averill
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Barbara Baran
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Carol Bertotto
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CA Home Economics Teachers' Assn.
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Gerald Blackburn
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Janice Buehler
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Maureen Fitzpatrick
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Darlene Gilles
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Karen Humphrey
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Dr. Santiago Jackson
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Nicolas Kremer
Dean, Occupational Education
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(CC CTE Administrators)

Moreen Lane
CA Workforce Investment Board
(WIB)

Roger Magyar
Executive Director, SBE
(State Board of Education)

Phyllis McGuire
Administrator, San Francisco CCD
(Eligible Recipients of Postsecondary Funds)

Linda Miles
Principal, Einstein Education Center &
President, CALCP
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Kathleen Milnes
President & CEO, Entertainment Economy Institute
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Marc Munkres
Work Experience Coordinator, Granada Hills Charter School
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Jason Murphy
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Barbara Nemko
Superintendent, Napa County Office of Education
(County Education Administrators)

Tom Oliver
President, LA Pierce College (Retired)
(CC Administrators)

Dennis Petrie (Sub. Bonnie Graybill)
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Tim Rainey
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California Federation of Labor
(Labor)

David Rattray
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Ursula Wagstaff
President, California Botana
(Pharmaceutical Manufacturing)

Paul Watters
Director, Butte County ROP
(CAROP)

Dick Zappa, Jr.
Field Iron Workers Apprenticeship
(Labor)

*Special Guests

APPENDIX E

Memorandum of Understanding Between the State Board of Education and the Board of Governors of the California Community Colleges Regarding the Establishment and Operation of the Joint Advisory Committee on Career Technical Education (JACCTE)

Introduction

Collaboration and cooperation between the State Board of Education (SBE) and the Board of Governors (BOG) of the California Community Colleges under the provisions of a Memorandum of Understanding (MOU) will ensure efficient and effective use of resources and services available to eligible recipients as a result of the Carl D. Perkins Career and Technical Education Improvement Act of 2006 (Public Law 109-207).

Upon approval by the SBE and the BOG, this MOU, as provided in Education Code Section 12053, will become effective. The MOU facilitates the articulation and coordination of federally funded career technical education (CTE) programs and services. In addition, it delegates to the BOG, in consonance with the requirements of the federal Act and regulations, responsibility for administration, operation, and supervision of policies and procedures related to community college CTE programs as provided for in the Perkins Act.

This document describes the planning process between the two agencies (SBE and BOG) and a timeline for division of funds. The division of dollars in the state plan will be in compliance with the state plan and the Perkins Act, and mutually agreed upon state priorities and criteria. Upon execution of the MOU, no previous MOU between the parties is of any force or effect. This MOU replaces and supersedes any and all previous MOUs between the parties and embodies the totality of the agreement between the parties.

Joint Advisory Committee on Career Technical Education (JACCTE)

The California Education Code has established the JACCTE, which is comprised of equal members of the SBE and the BOG. It serves as the joint policy-recommending body that makes recommendations to the BOG and the SBE regarding all aspects of the coordinated delivery of CTE in the State including strengthening, improving, expanding, and evaluating programs and services.

A. AUTHORITY

California Education Code Section 12053 provides that:

(a) "The State Board of Education is designated as the state board of vocational education, which is the sole state agency responsible for the administration or the supervision of the state's vocational education program, as required by the Carl D. Perkins Vocational Education Act (Public Law 98-524), the Carl D. Perkins Vocational

and Applied Technology Education Act Amendments of 1990 (Public Law 101-392), and any acts amending or succeeding those acts. The State Board of Education is granted all necessary power and authority to carry out those provisions of federal law.

(b) In recognition of the need for coordinated delivery of vocational education and training in California, the State Board of Education and the Board of Governors of the California Community Colleges shall enter into a memorandum of understanding which shall do all of the following:

1. Provide for an advisory committee comprised of an equal number of members of each board;
2. Assure shared planning and coordination; and
3. Delegate to the Board of Governors of the California Community Colleges, in keeping with the requirements of federal law, the maximum responsibility in administration, operation and supervision of policies and procedures related to community college career technical education programs provided for in federal law.

(c) In carrying out the provisions of federal law, the State Board of Education, prior to taking final action on any proposed policies, procedures, or allocations of funds, shall consider recommendations, if any, of the Board of Governors of the California Community Colleges and make a record of review and comment on the proposed policies, procedures, or allocations of funds."

B. FUNCTIONS

The Joint Advisory Committee on Career Technical Education will:

1. Facilitate coordination in the planning, development, and implementation of the state plan for the Perkins Act funds and/or amendments to the plan;

2. Distribute federal funds between the SBE and the BOG in accordance with the state plan, the MOU, and the Perkins Act;

3. Verify compliance with the state plan and federal requirements in regard to evaluation of programs and services, data collection, and fiscal and performance reports;

4. Provide a forum for discussion of issues and concerns on CTE programs and services supported by the shared federal funds;

5. Facilitate collaborative, long-range planning among various interested persons and entities to meet the education and employment needs of California, including emerging occupations, applications of new technologies, and high skill, high wage, or high demand occupations; and

6. Provide for programs for special populations that lead to high skill, high wage, and high demand careers.

C. OPERATIONAL PROCEDURES

Members of the JACCTE are appointed or replaced annually by the presidents of their respective boards. Individual members may serve more than one term. The chair and vice chair of the Committee rotate each year between representatives of the SBE and the BOG. The SBE representative will serve on even years.

The JACCTE will meet four times a year with additional meetings called as necessary. A meeting may be called at the request of representatives of either Board. Meetings may be held via teleconference if deemed appropriate by the Committee members. For voting purposes, a quorum will be defined as four members (two from each Board). All meetings will be conducted in accordance with Roberts Rules of Order and the Bagley-Keene Open Meeting Act (Government Code Sections 11120-11131). In accordance with Section 11125, notice will be given at least 10 days in advance of the meeting.

A draft agenda and meeting notice will also be distributed at least 30 days prior to each meeting. An annotated agenda with item enclosures will be distributed to the JACCTE members no later than 10 working days prior to each meeting.

Should a committee member be unable to participate in a scheduled meeting, a designee may be assigned as a replacement by the appropriate Board Chairperson.

The State Superintendent of Public Instruction and the Chancellor of the California Community Colleges annually designate staff to provide support for the Committee. Staff from both education agencies will cooperatively prepare agendas, reports, minutes, and other necessary materials for Committee meetings.

II. Guiding Principles

The SBE and BOG will observe the following guiding principles for CTE in the oversight of the Carl D. Perkins Career and Technical Education Improvement Act of 2006 funds and regulations:

A. CTE is designed to increase education and career options for all students through career awareness, exploration, and occupational training programs;

B. CTE is deliberately intended to be available and accessible to all students, including college-bound and career-bound students, students learning English, and students facing diverse challenges to economic success;

C. CTE is uniquely linked to the world of work, and requires the direct participation of, and partnership with, business, industry, and labor to maximize program quality and work-based learning opportunities for all students;

D. CTE programs are based on locally validated industry standards and curricular content, are responsive to labor market conditions, and provide all students with transferable skills necessary for success in future occupations;

E. CTE integrates academic and technical skills to maximize all students' educational and career outcomes;

F. CTE programs provide opportunities for applied, contextual learning that increases student engagement and supports improved achievement for all students;

G. CTE offers integrated curricula through sequenced courses, in multiple pathways, bridging educational segments, which prepare all students for both further education and career entry;

H. CTE programs develop student leadership, career management, and entrepreneurial skills;

I. CTE is dependent on comprehensive career guidance systems (K–16 and beyond) that inform and connect all students with the best possible career technical education opportunities;

J. CTE provides students, including incumbent workers, with instructional programs for employment and success in postsecondary education, as well as lifelong learning opportunities to maintain or upgrade their technical knowledge and skills;

K. CTE requires highly prepared instructors, administrators, and staff who are supported by sustained, high-quality, and relevant professional learning, including preservice, inservice, and ongoing professional development;

L. CTE is sustained through ongoing state, federal, and local investments, based on student participation and proven labor market and local workforce needs, that provides funds and resources to ensure CTE programs have modern industry standard facilities, equipment, instructional materials, and competitively paid CTE instructors; and

M. CTE is accountable through measuring and reporting student course participation, completion of CTE courses and pathways, student and program certification, transition to postsecondary education, completion of postsecondary certificates and degree programs, short-term and long-term employment outcomes, and other measures necessary to ensure program quality.

III. Shared Planning and Coordination

This section defines and delineates the cooperative working relationships and the roles and responsibilities of staff of both agencies (SBE and BOG) as they pertain to the administration and operation of shared federally funded CTE programs and services.

A Perkins Joint Management Team (PJMT) comprised of staff from the California Department of Education (CDE) and the California Community Colleges Chancellor's Office (CCCCO) will cooperatively and collaboratively carry out these responsibilities. The team members are jointly appointed by the State Director of Vocational Education and the lead CTE administrator in the Chancellor's Office, and are directly involved in the management of the Perkins grant. The PJMT will:

A. meet on a regular basis to cooperatively plan and discuss items of mutual concern relating to the administration and operation of federally funded career technical education programs and services;

B plan and coordinate support services to the JACCTE, including preparation of agendas, minutes of meetings, reports, and staff recommendations;

C participate in the planning, development, dissemination, implementation, and evaluation phases of the state plan. Provide districts and agencies information on the process and specific timelines to develop and/or amend the state plan;

D. establish procedures for addressing local performance;

E. plan and coordinate data collection and statistical and narrative information for annual fiscal and performance reports as required by federal regulations;

F. evaluate the state's performance in reaching outcome goals;

G. develop operational definitions and methods of verification for core indicators, division of funds, program review, program compliance, and fiscal and performance reporting;

H. recommend committee appointments as needed to assure compliance with the state plan in accordance with CDE policy;

I. address other topics of mutual concern and interest pertaining to federally funded career technical education programs and services; and

J. serve as staff to the Committee.

IV. Development and Implementation of the State Plan and/or Amendments

The state plan shall be developed in compliance with Section 122 of the 2006 Perkins Act and any acts amending or succeeding this Act. The process shall include broad field input from practitioners, educators, business, industry, labor, and government. The California Workforce Investment Board shall be invited to provide input. The state plan shall describe the estimated distribution of funds for each type of institution listed by instructional level, as required in Section 122(c)(6)(A)&t(B) of the Act, and related state priorities as identified by the SBE and the BOG.

A. PROCESS FOR ADOPTION OF STATE PLAN

Two or more public hearings shall be held to allow comments and recommendations on the state plan. Public notice procedures of the SBE shall be followed. A panel representing the SBE, the BOG, agency staff, and field practitioners will be convened to hear public testimony on the proposed plan. Every effort will be made to schedule public hearings on the state plan to provide maximum access to individuals wishing to testify before the panel. Written input may be submitted as directed in the Public Hearing notice. A summary of the testimony and the hearing panel's recommendations will be prepared following the hearings.

B. ANNUAL REVIEW

Annually, the SBE and the BOG will review the progress of the major efforts for the CTE programs and services of the CDE and the CCCCO. This review will also include the major focus and plans for the next year. Available funds will be directed to the CDE and the CCCCO in compliance with the state plan, this MOU, and the Perkins Act.

C. REPORTS

In compliance with the state plan and Perkins Act, prepare on an annual basis interagency agreements to transfer federal career technical education funds to the BOG according to the approved process for division of funds.

The CDE uses a "first in-first out" method of billing and accounting for federal funds; and therefore, annually, after financial records are reconciled, carryover funds generated by the CCCCO shall revert to the BOG through an amendment to the Interagency Agreement between CDE and the CCCCO. A specific timeline has been mutually established for the development and approval of the Interagency Agreement to assure a timely flow of funds to all eligible districts and agencies. Timelines are dependent upon the timely submission of reports and invoices.

The following steps in the Interagency Agreement process must begin by April of each year with final approval by June 15:

1. Draft agreement(s) jointly developed;
2. Final draft(s) submitted for interagency agreement approval process; and
3. Approval of interagency agreement by June 15.

Amendments to reflect any increase or decrease in funds from the U.S. Department of Education and any carryover funds from prior years will be finalized by November 30 for the purposes of reporting to the Joint Legislative Budget Committee and the Director of

Finance (Budget Act 6110-166-0890). A copy of the completed report shall be submitted to the JACCTE.

D. AMENDMENTS

The need to amend the state plan may arise at any time during the year when changes in program conditions, labor market conditions, funding, or other factors require substantial amendment of an approved state plan. Any individual, eligible recipient, organization, state agency representative, or member of the SBE or the BOG may suggest amendment(s) to the state plan. The SBE will refer the proposed amendment(s) to the JACCTE and staff of the two agencies for review and research and provide an appropriate mechanism for field input and discussion. The California Workforce Investment Board will be invited to review and comment on proposed amendments.

V. Procedures for Resolving Differences

The SBE and the BOG recognize that a coherent CTE program is in the best interests of California. To that end, they have established the JACCTE to assure cooperation and collaboration in planning, implementing, and evaluating federally aided programs under the Perkins Act.

However, given that the SBE and BOG has a vested responsibility for different educational segments, it is reasonable to expect that occasional differences may occur. If differences occur, they shall be resolved as follows:

STEP 1:

Should the JACCTE fail to reach agreement of a recommendation to their respective Boards, or should recommendation(s) from this group be accepted by one Board and rejected by the other, the Presidents of each Board shall meet to discuss the issue(s) and develop a recommendation to resolve the issue(s).

STEP 2:

Should the Presidents of the two Boards not reach an acceptable compromise, then the two Boards may meet jointly to discuss the issue(s). Either Board may request a joint meeting.

STEP 3:

If a resolution to the issue(s) that is acceptable to both Boards cannot be reached, then the SBE shall make the decision. The SBE's decision, along with a record of review and comment on the issue(s), shall be forwarded to the U.S. Department of Education.

VI. Modification

If any modification or amendment of the MOU is proposed by one of, or either, the SBE or the BOG, a thirty (30) day written notice shall be provided to the other agency. The modification or amendment shall be incorporated into the agreement by mutual consent of the two agencies.

VII. Termination

The MOU may be terminated by either party with a written notice to the non-initiating party and the JACCTE thirty (30) days prior to the effective date of the termination. The written notification shall state the reasons for the termination. If the agreement is terminated, the partner agencies shall have ninety (90) days to execute a new MOU.

APPENDIX F
State Distribution of the Annual Perkins IV Funds

California's annual Perkins IV career technical education grant award is comprised of funds from two titles of the Act: Title I, Career and Technical Education Assistance to States; and Title II, Tech Prep Programs. Section 112 of the Act, which describes the required within-state distribution of the Title I funds, specifies that:

- Not more than 5 percent, or $250,000—whichever is greater—may be used for state-level activities related to the administration of the state's Perkins IV grant award. These "state administration" funds are the only part of the total grant award that requires a state match. The match must be on a dollar-for-dollar basis;
- Not more than 10 percent may be used to carry out state leadership activities, of which not more than 1 percent of the state's total grant award shall be made available to serve individuals in state institutions, such as state correctional institutions and institutions that serve individuals with disabilities; and not less than $60,000 and not more than $150,000 shall be available for services that prepare individuals for nontraditional fields; and
- Not less than 85 percent must be distributed to local educational agencies (LEAs) through Section 131 (secondary) and Section 132 (postsecondary) allocations.

Section 202 of the Act authorizes the state to consolidate all, or a portion of the Title II, Tech Prep funds with the funds received under Title I. Section 203 specifies that any of the Tech Prep funds not consolidated with the Title I funds must be awarded to Tech Prep Consortiums on a competitive or formula basis determined by the state.

Within State Allocation of the Title I Funds

STATE ADMINISTRATION

Five percent of the Title I funds will be allocated for state-level activities related to the administration of the state plan. The CDE and CCCCO mutually agree on the following division of these funds:

CDE	64 percent
CCCCO	36 percent

Rationale for the division: The CDE has additional responsibilities as the support agency for the SBE, which is the sole state agency responsible for the administration of the Perkins IV funds. The CDE also serves a much greater number of LEAs than does the CCCCO.

STATE LEADERSHIP

Slightly less than 9 percent of the Title I funds will be allocated for state leadership activities. These funds will be divided between the CDE and CCCCO on the following basis:

CDE	51 percent
CCCCO	49 percent

The basis of the division is unchanged from prior years.

STATE INSTITUTIONS

One percent of the Title I funds will be evenly divided between the CDE and CCCCO for distribution to state institutions, including correctional institutions, which offer secondary and postsecondary CTE programs. The CDE distributes these funds to assist secondary CTE programs administered by the Department of Corrections, Schools for the Blind in Fremont and Riverside, and School for the Deaf in Fremont. The CCCCO distributes these funds to assist adult CTE programs administered by the Department of Corrections.

NONTRADITIONAL TRAINING AND EMPLOYMENT

$150,000 will be directed to the CCCCO to support the nontraditional training state leadership activities conducted by the Joint Special Populations Advisory Committee for the state's secondary and postsecondary CTE programs.

PART C (LOCAL ASSISTANCE) FUNDS BETWEEN SECONDARY AND POSTSECONDARY PROGRAMS

In accordance with a 1991 distribution of funds policy adopted by the State's Joint Advisory Committee on Career Technical Education (JACCTE), the annual Title I, Part C funds will be distributed between secondary and postsecondary programs based on a comparison of the CTE course enrollments at the two levels in the last completed program year for which enrollment data is available.

The CDE and CCCCO have agreed to apply the following enrollment criteria-based formula for determining the distribution of these funds:

- Student enrollment counts are to be consistent and comparable for each education program and between agencies. Every effort will be made by the CDE and CCCCO to ensure that data are comparable;
- The count is to be based on CTE course enrollment in high schools, regional occupational centers and programs (ROCPs), adult education agencies, and community colleges;

- Secondary students are counted if they are enrolled in programs administered by the high schools and/or ROCPs. Postsecondary students are counted if they are enrolled in programs administered by community colleges, or are adults and are enrolled in programs administered by ROCPs or adult education agencies;
- A "duplicated" count will be used, meaning that a student enrolled in more than one CTE course will be counted in each course in which enrolled;
- Fall semester enrollment figures will be used;
- The enrollment figures available for the most recent year will be used;
- Enrollment data will be collected and elements will be reviewed and updated each year;
- A technical committee with representation from CDE, CCCCO, secondary districts, ROCPs, adult education agencies, and community colleges will be appointed by the two state agencies to annually review and make suggestions regarding the continual improvement of the formula and the data collected for this purpose. The agencies are mutually committed to ensuring the accuracy, comparability, and reliability of the data and the notion that the data collected be clearly understandable;
- Data collection efforts will aim at minimizing the administrative burden for the state and local agencies; and
- In any year in which this formula, or a new formula, for distributing the Title I, Part C funds results in a dramatic change in the secondary and postsecondary funding levels, the CDE and CCCCO have agreed that the secondary/postsecondary distribution of these funds will not vary by more than 3 percent of the prior year's distribution.

The annual mid-October California Basic Education Data System (CBEDS) report will be used to collect the fall semester high school CTE course enrollment. The CDE 21 administered by the CDE will be used to collect the fall semester ROCP secondary, ROCP adult, and adult education agency adult CTE course enrollments. The CCCCO's Management Information System (MIS) will be used to collect the fall semester community college CTE student enrollments in standard-length credit courses; other than standard-length credit courses; non-credit and lab courses; independent study and occupation-specific work experience education; and fee-based community service courses.

The following chart illustrates how the 2005–06 secondary and postsecondary CTE course enrollment data was used for the distribution of the 2007–08 funds.

2005–06 Secondary Enrollment	
High School	1,026,880
Regional Occupational Centers and Programs	259,102
Total	1,285,982
2005–06 Postsecondary Enrollment	
Community College	1,398,111
Regional Occupational Centers and Programs	84,083
Adult Education Agencies	83,772
Total	1,565,966
Total 2005–06 Enrollment in CTE Courses	2,851,948
Percent of 2005–06 Enrollment Attributable to Secondary Programs	45.091355
Percent of 2005–06 Enrollment Attributable to Postsecondary Programs	54.908645

Allocation of Secondary Program Funds

These funds will be allocated in accordance with the formula established in Section 131 of Perkins IV: 30 percent based on the LEA's proportional share of the state's total K–12 population, and 70 percent based on the LEA's proportional share of the state's total K–12 population with family incomes below the poverty level established by the Office of Management and Budgets. Statistically updated census data will be used annually in the determination of the allocations. Participating LEAs include unified and union high school districts, charter schools, and county offices of education.

Allocation of Postsecondary Program Funds

The state will request a renewal of the Section 132 funds distribution formula waiver approved by the USDE for the Perkins III funds. As evidenced in Appendix H, the alternative formula provides for a more equitable distribution of the funds among economically disadvantaged adult students than does the formula established in the Section which is based on Pell Grant recipient/Bureau of Indian Affairs assistance. Additionally, the alternative formula enables the state to recognize and serve economically disadvantaged adults in CTE programs conducted by adult school agencies and ROCPs. A copy of the renewal request is provided in Appendix K.

SUMMARY OF DATA USED TO DISTRIBUTE THE 2007–08 POSTSECONDARY FUNDS AMONG THE ADULT SCHOOLS, REGIONAL OCCUPATIONAL CENTERS AND PROGRAMS, AND COMMUNITY COLLEGE DISTRICTS

» Total Basic Grant Award for 2007–08	$ 129,514,828
» Total Funds Budgeted for Distribution to Local Agencies Under Title I, Part C (85 Percent of the Total Basic Grant Award)	$ 110,087.604
» Percent of Total 2005–06 CTE Enrollment Attributable to Postsecondary Programs (See Above Chart)	54.908645
» Total Amount of Funds Available for Distribution to LEA Postsecondary Programs ($110,087,604 x .54908645)	$ 60,447,612
» Total Number of Economically Disadvantaged Adults Reported in 2005–06 CTE Programs Conducted by Adult Schools, ROCPs, and Community College Districts	627,644
» Percent of Economically Disadvantaged Adults Reported in 2005–06 CTE Programs Conducted by Adult Schools and ROCPs (143,623 divided by 627,644)	22.88%
» Percent of Economically Disadvantaged Adults Reported in 2005–06 CTE Programs Conducted by Community College Districts (484,021 divided by 627,644)	77.12%
» Total 2007–08 Funds Allocated to Adult Schools and ROCPs ($60,447,612 x 22.88%)	$ 13,823,147
» Total 2007–08 Funds Allocated to Community College Districts ($60,447,612 x 77.12%)	$ 46,615,465

State Allocation of the Title II Funds

TECH PREP PROGRAMS

Ninety-two percent of the Title II funds are distributed to local Tech Prep consortia. Eight percent is retained for State Administration activities. The CCCCO allocates 69 percent of the distributed funds to local Tech Prep consortia for the improvement and expansion of Tech Prep programs. The CDE distributes the remaining 31 percent to local Tech Prep consortia through a competitive application process for a variety of Tech Prep improvement activities.

CAREER TECHNICAL EDUCATION

Carl D. Perkins Career and Technical Education Improvement Act of 2006 Funding Split Between the Department of Education and Community Colleges 2007-2008

PURPOSE	GRANT 2007-2008	CDE	CCCCO
		57.24%	42.76%
TITLE I - STATE GRANT	129,514,828	74,132,418	55,382,410
TITLE I-PART A-SECTION 112(a)(3)	5.00%	64.00%	36.00%
State Administration	6,475,741	4,144,474	2,331,267
TITLE I-PART A-SECTION 112(a)(2)	8.884%	51.00%	49.00%
State Leadership	11,506,335	5,868,231	5,638,104
TITLE I-PART A-SECTION 112(a)(2)(A)	1.000%	50.00%	50.00%
State Institutions	1,295,148	647,574	647,574
TITLE I-PART A-SECTION 112(a)(2)(B)	0.116%	0.00%	100.00%
Nontraditional Training and Employment	150,000	0	150,000
	15.00%	54.87%	45.13%
Subtotal	19,427,224	10,660,279	8,766,945
TITLE I-PART C-SECTION 131/132	85.00%	57.66%	42.34%
Secondary, Postsecondary, & Adult	110,087,604	63,472,139	46,615,465
	100.00%	57.24%	42.76%
TOTAL TITLE I	129,514,828	74,132,418	55,382,410
TITLE II-TECH PREP EDUCATION			
TITLE II-SECTION 203	100.00%	31.00%	69.00%
Tech Prep Education	11,260,243	3,490,675	7,769,568
(8% State Administration)	900,819	(450,409 S/O)	(450,410 T/A)
TOTAL TITLE II	11,260,243	3,490,675	7,769,568
TOTAL OF ALL TITLES	140,775,071	77,623,093	63,151,978
	100.00%	55.14%	44.86%

APPENDIX G
California Department of Education and Chancellor's Office, California Community Colleges

Request for Waiver of Section 132 Distribution Formula

California is requesting USDE approval to extend its waiver of the Perkins IV Section 132 distribution formula through the duration of the 2008-2012 state plan. The alternative formula complies with the "more equitable distribution of funds" waiver requirement established in Section 132(b)(1)&(2) of Perkins IV. Evidence of compliance is provided in Appendix H, which demonstrates the comparative results of allocating the Section 132 funds by the Pell Grant/Bureau of Indian Affairs assistance formula prescribed in the Act and the alternative formula, which is based on economically disadvantaged adult career technical education enrollment. Additionally, the alternative formula enables the state to recognize and serve economically disadvantaged adult CTE enrollment in over 140 programs conducted by adult schools and regional occupational centers (ROCPs), as well as those enrolled in community colleges.

The proposed alternative formula is unchanged from the formula initially approved for the Perkins II and III funds and extended for the 2007-2008 State Transition Plan. Specifically, the formula generates an unduplicated count of adults who are economically disadvantaged; in attendance at an adult school, ROCP, or community college; and enrolled in a career technical education program.

Economic disadvantage is determined by participation in one of the following public assistance programs, or evidence of personal or family income below the poverty level:

- Board of Governors Grant (BOGG)
- Pell Grant
- California Work Opportunity and Responsibility to Kids (CalWORKS)
- WIA (Workforce Investment Act)
- Supplementary Security Income (SSI)
- General Assistance
- Bureau of Indian Affairs (BIA)
- Adults eligible for economic public assistance or student fund aid and/or an annual income below the poverty line as defined by the county of eligibility
- Other economically disadvantaged individuals

The 2008-2009 Section 132 allocations will be based on an unduplicated count of the economically disadvantaged adults enrolled in CTE programs during the 2006-2007

program year which began on July 1, 2006, and ended on June 30, 2007. Similar data collection periods will be used for the 2009-2010, 2010-2011, 2011-2012, and 2012-2013 program year allocations. Third-party verified data is preferred, but an eligible recipient may report those adults who have been identified by self-declaration as meeting at least one of the listed evidences of economic disadvantage. Reported enrollments will be validated by comparing this data with related data submitted by the eligible recipients for the same time period. Eligible recipients are required to maintain auditable records of student eligibility for five years.

Section 132 allocations are determined through the following process:

1. The California Department of Education (CDE) collects and validates the eligibility reports and data submitted by the adult school agencies and ROCPs. The Chancellor's Office of the California Community Colleges (CCCCO) collects and validates the eligibility data submitted by the community college districts;

2. The CDE determines the total number of economically disadvantaged adult CTE students by aggregating the validated economically disadvantaged enrollments reported by the adult school agencies, ROCPs, and community college districts;

3. The CDE computes a per-student allocation amount by dividing the funding available for distribution under Section 132 by the total number of economically disadvantaged adult CTE students determined in #2;

4. The CDE determines each eligible recipient's (adult school agency, ROCP, and community college district) allocation by multiplying its validated number of economically disadvantaged adult enrollees by the per-student allocation amount computed in item #3;

5. The CDE transfers to the CCCCO, by interagency agreement, the total amount of the Section 132 funds to be awarded to community college districts; and

6. Both agencies, the CDE and CCCCO, distribute the funds for which they are responsible in accordance with the Section 132 guidelines.

APPENDIX H

Comparative Results of Allocating the Section 132 Funds by the Pell Grant/Bureau of Indian Affairs Assistance Formula Prescribed in the Act to an Alternative Formula Based on the Economically Disadvantaged Adults Enrolled in Career Technical Education Programs

Calculations to demonstrate the difference in Allocations between using the Waiver criteria and the Pell+BIA grant criteria from the Perkins Act for the purpose of more equitably distributing funds

	Current Waiver Calculations			Pell & BIA Calculations			
District Name	2005-06 Undup Voc Ed Disadv W/ DSS Students*	2007-2008 Factor of Total	2007-2008 Tentative Allocation	2005-06 Undup Voc Ed Pell & BIA Students*	2007-2008 Factor of Total	2007-2008 Tentative Allocation	Difference: Waiver (Pell+BIA)
Allan Hancock Joint CCD	9,462	0.019666	$ 838,729	975	0.005986	$ 255,277	$ 583,452
Antelope Valley CCD	5,644	0.011731	$ 500,295	2282	0.01401	$ 597,480	$ (97,185)
Barstow CCD	1,769	0.003677	$ 156,807	914	0.005611	$ 239,306	$ (82,499)
Butte-Glenn CCD	7,054	0.014661	$ 625,280	2894	0.017767	$ 757,715	$ (132,435)
Cabrillo CCD	3,904	0.008114	$ 346,058	1518	0.009319	$ 397,447	$ (51,389)
Cerritos CCD	11,312	0.023512	$ 1,002,716	3156	0.019375	$ 826,313	$ 176,403
Chabot-Las Positas CCD	7,224	0.015015	$ 640,349	1658	0.010179	$ 434,102	$ 206,247
Chaffey CCD	7,157	0.014876	$ 634,410	2646	0.016244	$ 692,783	$ (58,373)
Citrus CCD	3,738	0.007769	$ 331,343	1518	0.009319	$ 397,447	$ (66,104)
Coast CCD	9,145	0.019008	$ 810,630	3448	0.021168	$ 902,765	$ (92,135)
Contra Costa CCD	9,753	0.020271	$ 864,524	2992	0.018368	$ 783,374	$ 81,150
Desert CCD	2,227	0.004629	$ 197,405	1031	0.00633	$ 269,939	$ (72,534)
El Camino CCD**	12,399	0.025771	$ 1,099,070	2616	0.01606	$ 684,929	$ 414,141
Feather River CCD	447	0.000929	$ 39,623	287	0.001762	$ 75,143	$ (35,520)
Foothill-De Anza CCD	5,126	0.010654	$ 454,378	1925	0.011818	$ 504,009	$ (49,631)
Gavilan CCD	1,438	0.002989	$ 127,467	528	0.003241	$ 138,242	$ (10,775)
Glendale CCD	4,196	0.008721	$ 371,941	3033	0.01862	$ 794,109	$ (422,168)
Grossmont-Cuyamaca CCD	8,326	0.017305	$ 738,032	2431	0.014924	$ 636,491	$ 101,541
Hartnell CCD	2,456	0.005105	$ 217,704	1104	0.006778	$ 289,052	$ (71,348)
Imperial CCD	4,698	0.009765	$ 416,439	3427	0.021039	$ 897,267	$ (480,828)
Kern CCD	9,247	0.01922	$ 819,671	5021	0.030825	$ 1,314,613	$ (494,942)
Lake Tahoe CCD	1,091	0.002268	$ 96,708	142	0.000872	$ 37,179	$ 59,529
Lassen CCD	850	0.001767	$ 75,346	365	0.002241	$ 95,565	$ (20,219)
Long Beach CCD	10,523	0.021872	$ 932,778	5450	0.033459	$ 1,426,935	$ (494,157)
Los Angeles CCD	46,351	0.096339	$ 4,108,638	15205	0.093346	$ 3,981,017	$ 127,621
Los Rios CCD	34,979	0.072703	$ 3,100,603	8396	0.051545	$ 2,198,265	$ 902,338
Marin CCD	1,207	0.002509	$ 106,991	610	0.003745	$ 159,712	$ (52,721)
Mendocino-Lake CCD	1,022	0.002124	$ 90,592	652	0.004003	$ 170,709	$ (80,117)
Merced CCD	4,183	0.008694	$ 370,789	2125	0.013046	$ 556,374	$ (185,585)
Mira Costa CCD	1,511	0.003141	$ 133,938	478	0.002935	$ 125,151	$ 8,787
Monterey Peninsula CCD	1,044	0.00217	$ 92,542	468	0.002873	$ 122,533	$ (29,991)
Mt. San Antonio CCD	10,166	0.02113	$ 901,133	2834	0.017398	$ 742,006	$ 159,127
Mt. San Jacinto CCD	4,475	0.009301	$ 396,672	1465	0.008994	$ 383,570	$ 13,102

	Current Waiver Calculations			Pell & BIA Calculations			
District Name	2005-06 Undup Voc Ed Disadv W/ DSS Students*	2007-2008 Factor of Total	2007-2008 Tentative Allocation	2005-06 Undup Voc Ed Pell & BIA Students*	2007-2008 Factor of Total	2007-2008 Tentative Allocation	Difference: Waiver (Pell+BIA)
Napa Valley CCD	1,517	0.003153	$ 134,470	473	0.002904	$ 123,842	$ 10,628
North Orange County CCD	17,846	0.037092	$ 1,581,902	4324	0.026546	$ 1,132,122	$ 449,780
Ohlone CCD	1,116	0.00232	$ 98,924	516	0.003168	$ 135,101	$ (36,177)
Palo Verde	1,032	0.002145	$ 91,478	285	0.00175	$ 74,620	$ 16,858
Palomar CCD	5,217	0.010843	$ 462,444	859	0.005274	$ 224,906	$ 237,538
Pasadena Area CCD	6,782	0.014096	$ 601,169	2629	0.01614	$ 688,332	$ (87,163)
Peralta CCD	9,903	0.020583	$ 877,820	2813	0.01727	$ 736,508	$ 141,312
Rancho Santiago CCD	9,804	0.020377	$ 869,045	1822	0.011186	$ 477,041	$ 392,004
Redwoods CCD	2,182	0.004535	$ 193,416	1149	0.007054	$ 300,834	$ (107,418)
Rio Hondo CCD	3,743	0.00778	$ 331,786	1828	0.011222	$ 478,612	$ (146,826)
Riverside CCD	10,484	0.021791	$ 929,321	4393	0.026969	$ 1,150,188	$ (220,867)
San Bernardino CCD	6,485	0.013479	$ 574,842	3003	0.018436	$ 786,254	$ (211,412)
San Diego CCD	26,099	0.054246	$ 2,313,463	3944	0.024213	$ 1,032,629	$1,280,834
San Francisco CCD	15,978	0.03321	$ 1,416,319	3797	0.02331	$ 994,141	$ 422,178
San Joaquin Delta CCD	7,999	0.016626	$ 709,046	4131	0.025361	$ 1,081,590	$ (372,544)
San Jose-Evergreen CCD	5,117	0.010635	$ 453,580	1646	0.010105	$ 430,960	$ 22,620
San Luis Obispo County CCD	2,914	0.006057	$ 258,302	1058	0.006495	$ 277,009	$ (18,707)
San Mateo County CCD	6,943	0.014431	$ 615,440	1396	0.00857	$ 365,505	$ 249,935
Santa Barbara CCD	6,324	0.013144	$ 560,571	1105	0.006784	$ 289,314	$ 271,257
Santa Clarita CCD	2,691	0.005593	$ 238,535	710	0.004359	$ 185,894	$ 52,641
Santa Monica CCD	4,898	0.01018	$ 434,168	1900	0.011664	$ 497,463	$ (63,295)
Sequoias CCD	4,251	0.008836	$ 376,816	2542	0.015606	$ 665,554	$ (288,738)
Shasta-Tehama-Trinity Joint CCD	3,209	0.00667	$ 284,452	1592	0.009774	$ 416,822	$ (132,370)
Sierra Joint CCD	5,125	0.010652	$ 454,289	1963	0.012051	$ 513,958	$ (59,669)
Siskiyou Joint CCD	1,157	0.002405	$ 102,559	571	0.003505	$ 149,501	$ (46,942)
Solano County CCD	3,132	0.00651	$ 277,626	1375	0.008441	$ 360,006	$ (82,380)
Sonoma County Jr. Coll. District	6,447	0.0134	$ 571,474	1611	0.00989	$ 421,797	$ 149,677
South Orange County CCD	3,012	0.00626	$ 266,989	995	0.006108	$ 260,514	$ 6,475
Southwestern CCD	8,466	0.017596	$ 750,442	2455	0.015072	$ 642,775	$ 107,667
State Center CCD	14,854	0.030873	$ 1,316,686	8215	0.050433	$ 2,150,875	$ (834,189)
Ventura County CCD	6,597	0.013712	$ 584,770	2217	0.013611	$ 580,461	$ 4,309
Victor Valley CCD	3,828	0.007956	$ 339,321	2678	0.016441	$ 701,162	$ (361,841)
West Hills CCD	3,003	0.006242	$ 266,191	1318	0.008091	$ 345,083	$ (78,892)
West Kern	1,179	0.002451	$ 104,509	217	0.001332	$ 56,816	$ 47,693
West Valley-Mission CCD	3,393	0.007052	$ 300,762	1376	0.008448	$ 360,268	$ (59,506)
Yosemite CCD	10,205	0.021211	$ 904,590	4244	0.026055	$ 1,111,176	$ (206,586)
Yuba CCD	4,069	0.008457	$ 360,684	2144	0.013162	$ 561,348	$ (200,664)
STATE TOTALS	**481,125**	**1**	**$42,647,803**	**162888**	**1**		

APPENDIX I

Certifications Regarding Lobbying; Debarment and Suspension, and Other Matters; and Drug-Free Workplace Requirements

Eligible agencies should refer to the regulations cited below to determine the certification to which they are required to attest. Agencies should also review the instructions for certification included in the regulations before completing this form. Signature of this form provides for compliance with certification requirements under 34 CFR Part 82, "New Restrictions on Lobbying," and 34 CFR Part 85, "Government-wide Debarment and Suspension (Nonprocurement) and Government-wide Requirements for Drug-Free Workplace (Grants)." The certifications shall be treated as a material representation of fact upon which reliance will be placed when the Department of Education determines to award the covered transaction, grant, or cooperative agreement.

1. Lobbying

As required by Section 1352, Title 31 of the U.S. Code, and implemented at 34 CFR Part 82, for persons entering into a grant or cooperative agreement over $100,000, as defined at 34 CFR Part 82, Sections 82.105 and 82.110, the applicant certifies that:

(a) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the making of any Federal grant, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal grant or cooperative agreement;

(b) If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal grant or cooperative agreement, the undersigned shall complete and submit Standard Form - LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions;

(c) The undersigned shall require that the language of this certification be included in the award documents for all sub awards at all tiers (including sub grants, contracts under grants and cooperative agreements, and subcontracts) and that all sub recipients shall certify and disclose accordingly.

2. Debarment, Suspension, and Other Responsibility Matters

As required by Executive Order 12549, Debarment and Suspension, and implemented at 34 CFR Part 85, for prospective participants in primary covered transactions, as defined at 34 CFR Part 85, Sections 85.105 and 85.110:

A. The agency certifies that it and its principals:

(a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any federal department or agency;

(b) Have not within a three-year period preceding this application been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state, or local) transaction or contract under a public transaction; violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (federal, state, or local) with commission of any of the offenses enumerated in paragraph (2)(b) of this certification; and

(d) Have not within a three-year period preceding this application had one or more public transaction (federal, state, or local) terminated for cause or default; and

B. Where the agency's representative is unable to certify to any of the statements in this certification, he or she shall attach an explanation to this application.

3. Drug-Free Workplace (Grantees Other Than Individuals)

As required by the Drug-Free Workplace Act of 1988, and implemented at 34 CFR Part 85, Subpart F, for grantees, as defined at 34 CFR Part 85, Sections 85.605 and 85.610—

A. The agency certifies that it will or will continue to provide a drug-free workplace by:

(a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;

(b) Establishing an ongoing drug-free awareness program to inform employees about:

1. The dangers of drug abuse in the workplace;
2. The grantee's policy of maintaining a drug-free workplace;
3. Any available drug counseling, rehabilitation, and employee assistance programs; and

4. The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;

(c) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (a);

(d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will:

1. Abide by the terms of the statement; and
2. Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring in the workplace no later than five calendar days after such conviction;

(e) notifying the agency, in writing, within 10 calendar days after receiving notice under subparagraph (d)(2) from an employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must provide notice, including position title, to: Director, Grants Policy and Oversight Staff, U.S. Department of Education, 400 Maryland Avenue, S.W. (Room 3652, GSA Regional Office Building No. 3), Washington, DC 20202-4248. Notice shall include the identification number(s) of each affected grant;

(f) taking one of the following actions, within 30 calendar days of receiving notice under subparagraph (d)(2), with respect to any employee who is so convicted—

1. Taking appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; or
2. Requiring such employee to participate in a drug abuse assistance or rehabilitation program approved for such purposes by the Federal, State, or local health, law enforcement, or other appropriate agency;
3. Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (a), (b), (c), (d), (e), and (f).

4. Drug-Free Workplace (Grantees Who Are Individuals)

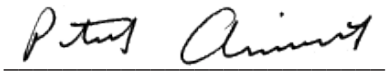
As required by the Drug-Free Workplace Act of 1988, and implemented at 34 CFR Part 85, Subpart F, for grantees, as defined at 34 CFR Part 85, Sections 85.605 and 85.610--

A. As a condition of the grant, I certify that I will not engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance in conducting any activity with the grant; and

B. If convicted of a criminal drug offense resulting from a violation occurring during the conduct of any grant activity, I will report the conviction, in writing, within 10 calendar days of the conviction, to: Director, Grants Policy and Oversight Staff, Department of

Education, 400 Maryland Avenue, S.W. (Room 3652, GSA Regional Office Building No. 3), Washington, DC 20202-4248. Notice shall include the identification number(s) of each affected grant.

As the duly authorized representative of the eligible agency, I hereby certify that the agency will comply with the above certifications.

ELIGIBLE AGENCY California Department of Education
PRINTED NAME AND TITLE OF AUTHORIZED REPRESENTATIVE Patrick Ainsworth, Ed.D, Assistant Superintendent and State Director of Career Technical Education
SIGNATURE  **DATE:** March 27, 2008

APPENDIX J

Assurances and Non-Construction Programs

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0040), Washington, DC 20503.

PLEASE DO NOT RETURN YOUR COMPLETED FORMS TO THE OFFICE OF MANAGEMENT AND BUDGET. SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.

Note: Certain of these assurances may not be applicable to your project or program. If you have questions, please contact the awarding agency. Further, certain federal awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

1. Has the legal authority to apply for federal assistance and the institutional, managerial, and financial capability (including funds sufficient to pay the non-federal share of project cost) to ensure proper planning, management, and completion of the project described in this application.

2. Will give the awarding agency, the Comptroller General of the United States and, if appropriate, the state, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.

3. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.

4. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.

5. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. §§4728-4763) relating to prescribed standards for merit systems for programs funded under one of the 19 statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).

6. Will comply with all federal statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352), which

prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Educational Amendments of 1972, as amended (20 U.S.C. §§1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. §§6106-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. §§290 dd-3 and 290 ee-3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§33601 et. seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and, (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.

7. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646), which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of federal or federally assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of federal participation in purchases.

8. Will comply, as applicable, with provisions of the Hatch Act (5 U.S.C. §§1501-1508 and 7324-7328), which limit the political activities of employees whose principal employment activities are funded in whole or in part with federal funds.

9. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§276a to 276a-7), the Copeland Act (40 U.S.C. §276c and 18 U.S.C. §874), and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§327-333), regarding labor standards for federally assisted construction sub-agreements.

10. Will comply, if applicable, with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234), which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is $10,000 or more.

11. Will comply with environmental standards, which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451

et. seq.); (f) conformity of Federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401 et. seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended (P.L.. 93-523); and, (h) protection of endangered species under the Endangered Species Act of 1973, as amended (P.L. 93-205).

12. Will comply with the Wild and Scenic Rivers Act of 1978 (16 U.S.C. §§1271 et. seq.) related to protecting components or potential components of the national wild and scenic rivers system.

13. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. §470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. §§469a-1 et. seq.).

14. Will comply with P.L. 93-348 regarding the protection of human subjects involved in research, development, and related activities supported by this award of assistance.

15. Will comply with the Laboratory Animal Welfare Act of 1966 (P.L. 89-544, as amended, 7 U.S.C. §§2131 et. seq.) pertaining to the care, handling, and treatment of warm-blooded animals held for research, teaching, or other activities supported by this award of assistance.

16. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§4801 et. seq.), which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.

17. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and OMB Circular No. A-133, "Audits of States, Local Governments, and Non-Profit Organizations."

18. Will comply with all applicable requirements of all other federal laws, executive orders, regulations, and policies governing this program.

SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL	TITLE
	Assistant Superintendent and State Director of Career Technical Education
APPLICANT ORGANIZATION	**DATE SUBMITTED**
California Department Of Education	March 27, 2008

APPENDIX K

Accountability System for Secondary and Adult Career Technical Education Programs Assisted with Perkins IV Funds Administered by the California Department of Education

The accountability requirements of local agencies participating in the federal Perkins Act funding were significantly changed by the 2006 Carl D. Perkins Career and Technical Education Improvement Act of 2006 (Perkins IV) and the ensuing administrative guidelines issued by the U.S. Department of Education. Core indicators were modified or added to align with NCLB. Local agencies must now set specific performance targets for each core indicator and be responsible for meeting these targets. Sanctions, including partial or total loss of funding, may now be imposed on local agencies that fail to meet established performance-level targets.

Core Indicators for Measuring Program Performance

SECONDARY PROGRAMS

» 1S1 – Academic Attainment—Reading/Language Arts as adopted by the state in accordance with Section 1111(b)(1) of the Elementary and Secondary Education Act of 1965 and measured by the state-determined proficient levels on academic assessments.

Calculation of performance level: Number of secondary CTE concentrators who met or exceeded the proficient or advanced level on the reading/language arts portion of the CAHSEE and left high school in the reporting year, divided by the sum of secondary CTE concentrators who received valid scores on the reading/language arts portion of the CAHSEE and left high school in the reporting year.

» 1S2 – Academic Attainment—Mathematics as adopted by the state in accordance with Section 1111(b)(1) of the Elementary and Secondary Education Act of 1965 and measured by the state-determined proficient levels on academic assessments.

Calculation of performance level: Number of secondary CTE concentrators who met or exceeded the proficient or advanced level on the mathematics portion of the CAHSEE and left high school in the reporting year, divided by the sum of secondary CTE concentrators who received valid scores on the mathematics portion of the CAHSEE and left high school in the reporting year.

» 2S1 – Technical Skill Attainment of career and technical skill proficiencies, including student achievement on technical and knowledge assessments, aligned with industry-recognized standards.

Calculation of performance level: Number of secondary CTE concentrators who, during the reporting year, passed an end-of-program technical skill and knowledge assessment aligned with industry-recognized standards, including the California CTE Model Curriculum Standards, divided by the number of secondary CTE concentrators who

completed an end-of-program technical skill and knowledge assessment during the reporting year.

- 3S1 – Secondary School Completion as evidenced by the obtainment of a secondary school diploma, a General Education Development (GED) credential, or other state-recognized equivalent.

  Calculation of performance level: Number of secondary CTE concentrators who, during the reporting year, earned a regular secondary school diploma; a General Education Development (GED) certificate, or other state-recognized equivalent (including recognized alternative standards for individuals with disabilities); or a proficiency credential, certificate, or degree, in conjunction with a secondary school diploma, divided by the number of CTE concentrators who left secondary education during the reporting year.

- 4S1 – Student Graduation Rate as described in Section 1111(b)(2)(C)(vi) of the Elementary and Secondary Education Act (ESEA) of 1965.

  Calculation of performance level: Number of CTE concentrators who, in the reporting year, were included as graduated in the state's computation of its graduation rate as described in Section 1111(b)(2)(C)(vi) of the ESEA, divided by the number of CTE concentrators who, in the reporting year, were included in the state's computation of its graduation rate as defined in the state's Consolidated Accounting Plan pursuant to Section 1111(b)(2)(C)(vi) of the ESEA.

- 5S1 – Secondary Placement in postsecondary education or advanced training, military service, or employment.

  Calculation of performance level: An unduplicated count of the number of CTE concentrators who left secondary education and were placed in postsecondary education or advanced training, in the military service, or employment in the second quarter following the program year in which they left secondary education (CTE students who graduated by June 30 would be assessed between October 1 and December 31), divided by the number of CTE concentrators who left secondary education during the reporting year.

- 6S1 – Nontraditional Participation as evidenced by participation in CTE programs leading to employment in nontraditional occupations or fields.

  Calculation of performance level: Number of CTE participants from underrepresented gender groups who, during the reporting year, participated in a sequence of courses leading to employment in nontraditional occupations or fields, divided by the total number of CTE participants who, during the reporting year, participated in a sequence of courses leading to employment in nontraditional occupations or fields.

- 6S2 – Nontraditional Completion as evidenced by completion of CTE programs leading to employment in nontraditional occupations or fields.

Calculation of performance level: Number of CTE concentrators from underrepresented gender groups who, during the reporting year, completed a sequence of courses leading to employment in nontraditional occupations or fields, divided by the total number of CTE concentrators who, during the reporting year, completed a sequence of courses leading to employment in nontraditional occupations or fields.

POSTSECONDARY PROGRAMS CONDUCTED BY ADULT SCHOOLS AND ROCPs

» 1A1 – Technical Skill Attainment of career and technical skill proficiencies, including student achievement on technical and knowledge assessments, aligned with industry-recognized standards.

Calculation of performance level: Number of adult CTE concentrators who, during the reporting year, passed an end-of-program technical skill and knowledge assessment aligned with industry-recognized standards, including the California CTE Model Curriculum Standards, divided by the number of adult CTE concentrators who took an end-of-program technical skill and knowledge assessment during the reporting year.

» 2A1 – Certification or License as evidenced by the student's receipt of a formal document that identifies and recognizes the attainment of the CTE proficiencies identified in 1A1.

Calculation of performance level: Number of adult concentrators who, during the reporting year, received a formal industry-recognized certificate or license that documents the achievement of the technical skill and knowledge standards established for the CTE program, divided by the total number of adult concentrators who, during the program year, passed an end-of-program technical skill and knowledge assessment aligned with industry-recognized standards, including the California CTE Model Curriculum Standards.

» 3A1 – Placement in further education or advanced training, military service, or placement or retention in employment.

Calculation of performance level: An unduplicated count of the number of CTE concentrators who left the adult CTE program and were placed in postsecondary education or advanced training, in the military service, or employment in the second quarter following the program year in which they completed and left the program (CTE students who left by June 30 would be assessed between October 1 and December 31), divided by the number of CTE concentrators who completed and left the program during the reporting year.

» 4A1 – Nontraditional Program Enrollment as evidenced by participation in CTE programs leading to employment in nontraditional fields.

Calculation of performance level: Number of CTE participants from underrepresented gender groups who, during the reporting year, participated in a sequence of courses leading to employment in nontraditional occupations or fields, divided by the total

number of CTE participants who, during the reporting year, participated in a sequence of courses leading to employment in nontraditional occupations or fields.

- 4A2 – Nontraditional Program Completion as evidenced by completion of CTE programs leading to employment in nontraditional fields.

  Calculation of performance level: Number of CTE concentrators from underrepresented gender groups who, during the reporting year, completed a sequence of courses leading to employment in nontraditional occupations or fields, divided by the total number of CTE concentrators who, during the reporting year, completed a sequence of courses leading to employment in nontraditional occupations or fields.

Required Establishment of Local Agency Performance-Level Targets

Under the new Act, local agencies must either accept the state's established performance-level target, or negotiate a new performance-level target with the state, for each of the core indicators. The agreed-upon performance-level targets must be incorporated into the local plan. LEAs failing to meet at least 90 percent of any of their established performance-level targets are required to develop and implement an improvement plan. Failure to sufficiently correct determined performance-level deficiencies within a three-year period could ultimately result in the loss of part or all of the Perkins IV funding.

ROLE OF THE STATE AGENCY

Pursuant to Section 123(b) of the Act, state agencies are required to

- annually evaluate LEA progress toward the achievement of established performance-level targets;
- require the development and implementation of program improvement plans in those instances in which LEAs fail to meet at least 90 percent of any of its established performance targets; and
- consider the imposition of sanctions, which include withholding a portion or all of a LEA's allocation if it fails to make an improvement plan, fails to make satisfactory progress in closing the performance-level gap(s) targeted by the program improvement plan, or fails to meet at least 90 percent of an agreed-upon level of performance for the same core indicator for three consecutive years.

Accountability System Framework for Secondary and Adult Career Technical Education Programs Assisted with Perkins IV Funds

The Accountability System developed by the California Department of Education (CDE) to ensure secondary and adult CTE program compliance with this state administration requirement is described in the following narrative.

STATE PERFORMANCE LEVELS AND TARGETS

» The state's 2008–09 performance-level targets for the core indicators will be based upon the statewide performance levels achieved in the 2007–08 program year. Subsequent year performance-level targets will be negotiated annually with the U.S. Department of Education.

» The initial academic performance rate for English and mathematics will be based upon the proficient level of 380 or above for the California High School Exit Exam. The performance rates for these core indicators will be calculated by dividing the total number of CTE students scoring at or above proficient level by the total number of CTE students tested.

LOCAL AGENCY PERFORMANCE-LEVEL TARGETS

» Local agencies may choose to accept the annual statewide performance-level target, or negotiate adjusted annual performance-level targets with the CDE based upon the following criteria:

1. The performance-level targets will be based upon the LEA's actual performance for the last completed year for which data is available, (i.e., 2008–09 performance-level targets will be based upon achievement levels achieved in the 2006–07 program year);
2. The performance-level target must be expressed as a percentage and demonstrate the LEA's intent to make continuous and reasonable annual progress toward achieving no less than 90 percent of the state's performance-level target within a three-year period.
3. CDE will consider unusual mitigating demographic, programmatic, or unforeseen circumstances in negotiating annual performance-level targets.
4. Performance-level targets must be determined between January and March annually and reflected in the LEA's annual Perkins application.

ACCOUNTABILITY DETERMINATION

» Agencies meeting or exceeding 90 percent for each of its approved annual performance-level targets will be considered to be in compliance with Perkins accountability requirements.

» Agencies falling below 90 percent on any of its approved annual performance-level targets will be considered a *Needs Improvement Agency*.

» Agencies scoring below 90 percent in three or more of its approved annual performance-level targets or scoring below 60 percent of any single annual performance-level target will be considered a *Priority Improvement Agency.*

- Agencies scoring in the lowest percentage of overall performance as determined by a composite ranking of all performance-level measures will be considered a *Monitored Agency* and will be subject to Perkins Program Monitoring.

- CDE will calculate rates for each measure by agency and will determine the numbers and rankings of districts scoring below the overall annual state performance-level targets in 10 percent increments for all agencies.

IMPROVEMENT PLANS AND MONITORING

- Agencies scoring at or above 90 percent of the annual state performance-level target will submit an annual Perkins application indicating the CTE program elements the Perkins funding will be used to support and anticipated outcomes expected. These agencies will be exempted from formal program improvement plans or monitoring but will continue to be subject to state and local fiscal audit requirements.

- Agencies determined to be *Needs Improvement Agencies* will be required to submit a Program Improvement Form, which describes the planned strategies and activities to be employed during the upcoming year to bring performance levels to the 90 percent compliance mark. The form will be developed, updated, and distributed annually by CDE staff. The Program Improvement Form will be submitted with the annual Perkins Application and reviewed and approved by CDE staff.

- Agencies considered to be *Priority Improvement Agencies* will be required to submit a detailed Action Plan for either the agency or school site that is not achieving the required levels.

    1. The Action Plan must include a diagnosis of the causes of the low performance using available data and other pertinent information and describe the strategies planned to move the agency or school site to 90 percent performance within two years.
    2. The Action Plan will include expected outcomes, the Perkins funding and agency funding dedicated to each strategy, and the date of completion expected for each strategy.
    3. *Priority Improvement Agencies* may request specific technical assistance from CDE to help them build capacity to meet the established annual performance-level targets.
    4. *Priority Improvement Agencies* will be visited by a CDE staff member at least once during the year to validate that the agency is making progress in implementing the Action Plan, and to arrange for appropriate/available technical assistance.
    5. *Priority Improvement Agencies* will exit Priority Improvement status when the performance improves enough to advance to *Needs Improvement Agency* status or is meeting 90 percent of the state annual performance level.
    6. *Priority Improvement Agencies* remaining in the Priority Improvement Agency status for four years will become a *Monitored Agency*.

» Agencies determined to be *Monitored Agencies* will be subject to a Perkins Program Monitoring (PPM) as specified annually by the JACCTE.

1. The Coordinated Program Monitoring (CPM) system annually conducted by the CDE will be utilized for any *Monitored Agency* that falls within the annual CPM site selection criteria.
2. For agencies not included in the current year CPM cohort, the monitoring will be conducted by a team of trained reviewers consisting of a CDE lead member serving as the review team lead, a representative from a county office of education and/or ROCP, and other CTE experts and/or business/labor identified by CDE and trained to conduct the PPM review.
3. A review tool will be utilized by the review team to determine the quality of the *Monitored Agency's* CTE programs. The tool will be designed to examine the extent of compliance with Perkins IV local uses of funds requirements, the extent to which the agency is meeting the state's CTE program quality indicators, the alignment of curricula with the California Model CTE Curriculum Standards, and other aspects of the CTE program administration.
4. The *Monitored Agency* will use the review tool to conduct a self-study. The completed self-study accompanied by a proposed Action Plan will be submitted to CDE prior to the arrival of the review team. All pertinent data and documents related to the review tool and proposed Action Plan will be gathered for use by the review team in determining any finding.
5. The review team will issue a written report and a set of recommended actions that the *Monitored Agency* may take to improve its CTE programs and bring them into compliance within two years.
6. *Monitored Agencies* must submit a final detailed Action Plan to the assigned CDE or designated county office staff member for negotiation and approval. The *Monitored Agency* will be required to submit progress reports that will be described in the Action Plan. The agency may request specific technical assistance to help them to build capacity to meet the established annual performance-level targets.
7. *Monitored Agencies* making substantial improvements will be allowed to continue receiving Perkins funding if they make sustained progress in their performance status.
8. *Monitored Agencies* remaining at low performance levels or experiencing decreasing performance will be revisited and re-evaluated by the review team after two years.
9. The review team may determine that there are conditions that the *Monitored Agency* cannot overcome, which should not prohibit the agency from receiving continued Perkins funding. In this case, the *Monitored Agency* will be certified as exempt by the Joint Advisory Committee on Career Technical Education (JACCTE). Such conditions may include remote locations, local labor market conditions, or other unusual chronic conditions identified by the team.
10. *Monitored Agencies* not making progress after four years in the *Monitored Agency* status will be put on a one-year probationary status by CDE. The written

notice of the probationary status will list the terms and conditions the *Monitored Agency* must meet to continue to receive Perkins funding. A *Monitored Agency* considered by CDE staff to not be meeting probationary status terms and conditions will be referred to the JACCTE. The JACCTE will conduct a public hearing and make a determination of funding sanctions to be applied. The JACCTE may continue probationary status, or discontinue Perkins funding for a minimum of one year, and until the *Monitored Agency* demonstrates it has made changes likely to improve CTE performance.

SANCTIONS

- The JACCTE will determine sanctions by majority vote of the members.
- All sanctions will have a time limit determined at the time the sanction is applied. In no case will a sanction last more than two years.
- Sanctions will be applied only after a *Monitored Agency* has been reviewed twice and completed a one-year probation period, but has not shown significant progress in improving CTE Performance levels, or in meeting the minimum requirements specified by the Perkins Act.
- Sanctions may include:

    1. Continuing the *Monitored Agency* on a probationary status with specific conditions delineated in the action plan that the *Monitored Agency* must implement to continue receiving Perkins funding;
    2. Withholding all or a portion of the *Monitored Agency's* Perkins allocation;
    3. Prohibiting the *Monitored Agency* from using Perkins funding for specific programs or school sites that are chronically underperforming;
    4. Assigning control of the *Monitored Agency's* CTE program budget and operations oversight to a county office of education, a state-appointed monitor, or Perkins Consortium;
    5. Any combination of the sanctions described above; or
    6. Other sanctions determined by the JACCTE.