

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 builds upon an understanding of trends in the size and composition of California's population. Statewide, the population is 37.7 million people, roughly 12.5% of the total U.S. population. The state's population increased by approximately 1.3% (470,000 people) in 2006, and has increased by 3.8 million people (11.2%) since the most recent (2000) U.S. Census.³⁰

Population growth during the next decade is expected to be somewhat slower, with a projected 1.3% per year increase between 2005-2015, down from the 1.6% annual population growth during the previous decade.³¹ 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.³² Additionally, the college-age population will increase by six times over the previous decade. Population changes for different age groups is anticipated to look quite different over the next decade compared to the previous decade:

- 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 a increase of over 650,000 the previous decade.

³⁰ State of California, Department of Finance, *E-1 Population Estimates for Cities, Counties and the State with Annual Percent Change* — January 1, 2006 and 2007. Sacramento, California, May 2007.

<http://www.dof.ca.gov/HTML/DEMOGRAP/ReportsPapers/Estimates/E1/E-1text.asp> (accessed June 1, 2007).

³¹ Center for Continuing Study of the California Economy. (2006). *Opportunities and Challenges for the California Economy*. Chapter 2, California Economic Growth, p. 2-5. Palo Alto, CA: Center for Continuing Study of the California Economy.

³² California Legislative Analyst's Office. (2006). *Cal Facts: California's Economy and Budget in Perspective*. http://www.lao.ca.gov/2006/cal_facts/calfacts_economy_2006.pdf (accessed June 1, 2007).

- 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% increase), with the retirement of the baby boomers becoming a factor in the California labor market after 2010.³³

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 between 2010 and 2015 the Hispanic population will represent the single largest ethnic group, in terms of overall numbers, 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% 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% decline in the White population between 2000 and 2020, resulting in the only ethnic group to experience a decline in population between 2000 and 2020.³⁴

Consideration of population changes by both age and ethnicity reveals additional important information for CTE planning. Between 2005-2015 the population of Hispanics in the 18-34-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. Population for this age cohort of African American, Asian and other groups will also likely increase, though not as rapidly as for the Hispanic population, with an estimated increase of 500,000. In contrast, the 18-34 year old White population is projected to decline by 500,000 during that same time period.³⁵

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% of the state's total population in 2006, and 58% of the population increase between 2001-

³³ 2005-2015 population projections are from the State of California, Department of Finance. (2007). *Race/Ethnic Population with Age and Sex Detail, 2000–2050*. Sacramento, CA, July 2007.
http://www.dof.ca.gov/html/DEMOGRAP/Data/RaceEthnic/Population-00-50/RaceData_2000-2050.aspH (July 16, 2007) Previous decade data is from Center for Continuing Study of the California Economy, op. cit.

³⁴ State of California, Department of Finance, *Population Projections for California and Its Counties 2000-2050*, Sacramento, California, July 2007.

<http://www.dof.ca.gov/HTML/DEMOGRAP/ReportsPapers/Projections/P1/P1.asp>. (July 16, 2007)

³⁵ Center for Continuing Study of the California Economy, *Opportunities and Challenges for the California Economy*. op cit p.2-7.

2006.³⁶ 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 increases in population between 2000 and 2020 include Placer (83%), San Joaquin (74%) and Riverside (72%).

Economic Disadvantage and Immigration

Poverty rate data indicate that 13% of the state's overall population is poor.³⁷ The poverty rate is much higher for Hispanics and African Americans (20%) than it is for Asians (12%) or Whites (8%). Children are particularly hard-hit by poverty. Poverty rates for children under 18 are much higher (19%) than for adults 18-64 (12%) or for seniors over 65 (8%). Poverty rates are especially high for children living in single mother families (42%).³⁸ Another proxy for childhood poverty is student enrollment in the public school's free and reduced price meal programs. In California, over 3.1 million students age 5-17 are enrolled in the federal free or reduced price meal program, representing over 50% of public K-12 enrollments in the state.³⁹

Increasingly, California's poor are the working poor, with 31% of families in poverty having at least one member working full-time and 39% of families in poverty having at least one member working part-time. Of particular importance to California is the role that immigrants and children of immigrants are 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%) and children of immigrants (60%). The state will need to ensure that CTE addresses the specific basic skills and workforce development needs of these families who are often uneducated in their native countries.

A particular challenge to meeting the needs of immigrants is the lack of English language proficiency. Currently, one out of every five Californians, more than 6 million individuals, are limited English proficient.⁴⁰ In the schools, there are 1.6 million students in California's K-12 education system identified as English language learners. These students collectively speak more than 50 different languages, with 1.3 million (85%) speaking Spanish as their native language.

³⁶ California Legislative Analyst's Office, op cit.

³⁷ Public Policy Institute of California. (2006). Just the Facts: Poverty in California. November, 2006. http://www.ppic.org/content/pubs/jtf/JTF_PovertyJTF.pdf. (July 16, 2007)

³⁸ Ibid.

³⁹ California Department of Education, Educational Demographics Unit (2006). Selected Statewide Data for the Year 2006-07. <http://data1.cde.ca.gov/dataquest/> (July 16, 2007)

⁴⁰ California Endowment. (2006). California County Profiles: Limited English Proficient Population, June 2006. <http://www.calendow.org/reference/publications/pdf/cultural/CA%20County%20ProfilesALL.pdf> (accessed June 2007)

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 skills needs of a new and diverse group of students, many of whom are not proficient in English or may be the first generation in their families to attend college. The impending retirements of the baby boom generation, coupled with a reduced growth rate of the 35-54 year old cohort, underscores the importance of making sure workforce-aged residents are equipped to enter and energize the economy. An additional challenge is targeting 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 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 work force, 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 process.⁴¹

The state's gross state product is over \$1.6 trillion, accounting for over 13% of U.S. gross national product. California has the eighth largest economy in the world,⁴² 40% greater than that of Texas, which has the next largest state economy. In addition, California has the largest labor market in the country with over 15 million non-farm jobs in 2006, representing 11% of non-farm 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

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

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. As Revised for the Period of July 1, 2007 – June 30, 2009. Sacramento: Cal WIA.

employees, represent over 99% of the employer businesses in the state and employ over 50% of the state's non-farm private sector workforce; firms with fewer than 100 employees represent over 97% of the employer businesses in the state and employ nearly 40% of the state's non-farm 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, as well as 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, healthcare, 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 differences can vary widely and are critical to CTE planning to ensure a match between training opportunities and regional workforce needs. To meet the educational and occupational training needs of citizens 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 three counties having annual average unemployment rates of less than 4% in 2006, while two counties experienced unemployment of over 12.5%.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, San Joaquin County, education, health services and government are projected 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

⁴⁴ U.S. Small Business Administration, Office of Advocacy Small Business Profile: California, 2006, <http://www.sba.gov/advo/research/profiles/06ca.pdf>, accessed August 7, 2007

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. As Revised for the Period of July 1, 2007 – June 30, 2009. Sacramento: Cal WIA, p. 2-10

⁴⁶ California Department of Food and Agriculture, 2006.

⁴⁷ CA Employment Development Department, Labor Market Information Division. (2006). Monthly Labor Force Data for Counties, Annual Average 2006. <http://www.calmis.ca.gov/file/lfhist/06aacau.pdf>, (accessed June 2007)

⁴⁸ CA Employment Development Department, Labor Market Information Division. (2006). Projections of Employment by Industry and Occupation, <http://www.labormarketinfo.edd.ca.gov/cgi/databrowsing/?PageID=145> (accessed June 2007)

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: Jossey-Bass p. xxx-xxxi.

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 about 1.3%, with about 400,000 new jobs added during this time. Almost 30% of this job growth is estimated to be in professional and business services area. Long-term projections (2004-2014) follow the short-term trends. Over 90% 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 ten fastest growing industries in the state account for nearly 60% 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 include: 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 over 40% during this time period, an increase of anywhere from 12,000 to 39,000 jobs.

Largest Absolute (Employment) Changes by Industry

The professional and business services industries will add the most new jobs in the next decade, 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 slightly lower wage and lower skill areas, there are higher wage occupations that will see a large number of job openings as well. Registered nurses are projected to gain about 109,000 new jobs between 2004-2014, 60,900 due to new jobs and 48,200 replacement openings. General and

⁵⁰ CAL WIA, op.cit., p. 25.

⁵¹ CA Employment Development Department, Labor Market Information Division, projections of employment by industry and occupation. H<http://www.labormarketinfo.edd.ca.gov/cgi/databrowsing/?PageID=145H> (accessed June 2007)

⁵² Cal WIA, op.cit., p. 143.

occupational managers and elementary school teachers 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 complicated, 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, professional, and manufacturing services), as well as emerging industries (e.g., biotechnology, nanotechnology). CTE must be ready to prepare students for jobs in both types of growing 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 percent 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.

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 taking on additional responsibilities to address student needs for basic skills. High dropout rates and 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 four R's: rigor, relevance, relationship and results. CTE, with its focus on rigorous technical courses aligned or integrated with academic content to provide students a pathway to further education and careers, 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 the 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, as well as providing industry mentors and role models for both students and educators; strengthens relationships between the K-12 and community college segments, and between education and industry; and

⁵³ CA Employment Development Department, Labor Market Information Division, Projections of Employment by Industry and Occupation. <http://www.labormarketinfo.edd.ca.gov/cgi/databrowsing/?PageID=145> (accessed June 2007)

- produces positive results — promotes engagement, persistence, academic achievement, technical skills 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% growth in K-12 enrollments between 2005-2015 and 22% growth projected in community college enrollments⁵⁴), 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, college instructors, and employers, as many as 40% of American public high school graduates are unprepared for both college and work.⁵⁵

Between one-quarter and one-third of all students fail to graduate from public high schools in California⁵⁶, and African American and Hispanic students are less likely to graduate from high school compared to Asian or White students.⁵⁷ Close to 1 million Californians in the 18-24 year old cohort do not have a high school diploma.⁵⁸ 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.⁵⁹ In 2004, nearly three-quarters 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 individualized instruction, mentoring, and service learning or work-based learning opportunities, all of which are shown to help increase the likelihood that a student will stay in school.⁶⁰

Of the students completing high school, close to 70% go on to either two-year or four-year colleges. But, of those who continue on to postsecondary education, only half earn a degree

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

⁵⁵ Peter D. Hart Research Associates & Public Opinion Strategies.(2005). Rising to the challenge: Are high school graduates prepared for college and work? H[http://www.achieve.org/dstore.nsf/Lookup/pollreport/\\$file/pollreport.pdf](http://www.achieve.org/dstore.nsf/Lookup/pollreport/$file/pollreport.pdf)H. (accessed April 21, 2006)

⁵⁶ The statistic varies depending on the way that dropout rates are calculated. The basic completion ratio graduation rate, which compares 9th grade enrollment to the number of students who graduated, found that only 70.7 % 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%.

⁵⁷ de Cos, P.S. (2005). High school dropouts, enrollment, and graduation rates in California. Sacramento: California Research Bureau; California Performance Review. (2004). Chapter 3: Education, training and volunteerism. <http://cpr.ca.gov/report/cprprt.issrec/etv.chap3sum.htm>. (February 13, 2006)

⁵⁸ Center for Student Success of the Research and Planning Group for California Community Colleges. (2005). Environmental Scan: A summary of Key Issues

Facing California Community Colleges Pertinent to the Strategic Planning Process - July 2005). H<http://rpgroup.org/Projects/CCC-StrategicPlan/EvScanCCC-StrategicPln-RPCSS-07-05.pdf>H

⁵⁹ Bill and Melinda Gates Foundation. (2006). The Challenge Facing our Nation. Retrived from H<http://www.gatesfoundation.org/custom404htm?URL+%2fUnitedStates%2fEducation%2fTransformingHighSchool/RelatedInfoH>.

⁶⁰ ACTE Issue Brief: Career Technical Education's Role in Dropout Prevention and Recovery. http://www.acteonline.org/resource_center/upload/Dropouts.pdf

within six years⁶¹; only 15% of high school graduates earn a four-year college diploma within ten years after high school.⁶² Taking into account a 30% drop out rate, this means that only 25% of entering high school freshmen complete any kind of postsecondary degree and only 11% 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% of community college students place in remedial level mathematics and 42% of place in remedial level English.⁶³ The most recent (Fall 2006) results of the 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% of entering freshman were proficient in mathematics, and 54.7% were proficient in English.⁶⁴

The Need for Workplace Skills

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

It is projected that 60% of future jobs will require training that only 20% of today's workers possess.⁶⁵ Other projections suggest that by the year 2020, 36% of jobs will require "some college," and an additional 39% of jobs will require a college degree. If current trends persist, the population supply will not meet the demand since only 28% of the population is expected to have "some college" and 33% 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.⁶⁶ 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 \$19,19.915. By contrast, graduates with a technical certificate or AA earned \$37,990 and those with a bachelor's degree earned an average of \$54,689 in 2005.⁶⁷

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 continues to be "wide gaps between the skills that businesses value and the skills most graduates actually have."⁶⁸ A recent survey of employers

⁶¹ Tucker, M. (2004). High School and Beyond: The system is the problem- and the solution. National Center on Education and the Economy published in Double the Numbers, R. Kazis, J. Vargas & N. Hoffman (Eds.), November 2004. http://colosus.ncee.org/pdf/acsd/global/promo/gates_paper.pdf. (accessed November 1, 2006)

⁶² Hill, E. (2005). Improving high school: A strategic approach. Sacramento: CA Legislative Analyst's Office.

⁶³ Center for Student Success, op. cit.

⁶⁴ California State University, Analytic Studies. Proficiency Reports of Students Entering the CSU System. <http://www.asd.calstate.edu/performance/proficiency.shtml>

⁶⁵ Business-Higher Education Forum. (2003). Building a nation of learners: The need for changes in teaching and learning to meet global challenges. http://www.bhef.com/includes/pdf/2003_build_nation.pdf.

⁶⁶ Jenkins, D. (2006). Career pathways: Aligning public resources to support individual and regional economic advancement in the knowledge economy. Brooklyn, NY: Workforce Strategy Center.

⁶⁷ U.S. Census Bureau, Current Population Survey, 2006 Annual Social and Economic Supplement, Internet release date: March 15, 2007.

⁶⁸ 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. (p. 8)

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/work ethic, teamwork/collaboration and communication skills 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.⁶⁹ 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 countries where highly trained individuals are willing to work for relatively low wages.⁷⁰

Implications for CTE

The educational context for CTE suggests that better strategies are needed to support students’ academic achievement and persistence at both the K-12 level 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 CTE can respond to these needs. CTE can 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 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 a full range of workplace skills that adults need to succeed over their lifetimes.

Policy Context

Policymakers in California have renewed their commitment to CTE, as demonstrated by recent activity in the area of policy, legislation and new initiatives aimed at strengthening the state’s K-12 school system, economy, and workforce development systems. Through legislation and budget initiatives, policy makers are addressing such issues as the expansion of the number of CTE teachers and counselors, stronger links between secondary and postsecondary education, and the expansion of partnership academies and integrated curriculum strategies, among many other issues. Below is provided a brief synopsis of a few key initiatives.

Examples of New Initiatives

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, both through budget initiatives and statewide policy discussions. In the May revision of the Governor’s 2008 budget, the governor proposes “substantial ongoing and new support for the expansion of CTE and teachers and counselors to ensure that the many students who directly

⁶⁹ Ibid.

⁷⁰ National Center on Education and The Economy. op. cit.

enter the workforce are educated and prepared to succeed.”⁷¹ In March of 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.⁷²

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 services⁷³. 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; and
- projects that will strengthen Career Technical Education sectors at secondary schools.

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, non-redundant education and training in California. Another 12.5% of the funds (\$2.5 million) are targeted for strengthening existing CTE sectors. Middle school career exploration projects are allocated 7.5% of the funding (\$1.5 million). The remaining 6% of the funds (\$1.2 million) are targeted at critical professional development needs and capacity-building needs.⁷⁴

Assembly Bill 2448 (Hancock): Regional Occupational Centers and Programs

AB 2448, signed by the Governor of California on September 28, 2006, redefines the role of ROCPs in the CTE delivery system. The bill phases out the number of adults that can be served through ROCPs, implements several recommendations by the Legislative Analyst’s Office to refocus ROCP services to high school students and ensure that courses are part of occupational course sequences, and makes various modifications to ROCPs.⁷⁵

⁷¹ Office of the Governor, Revised Budget Summary, K thru 12 Education, Program Enhancements and Other Budget Adjustments.

⁷² Office of the Governor, Governor’s Remarks at CTE Summit, March 13, 2007. <http://gov.ca.gov/index.php?/print-version/speech/5622/>

⁷³ Economic Development and Career Technical Education Reform Implementation Strategy for Senate Bill 70 (Scott) October 2005, H<http://www.cccco.edu/divisions/esed/sb70/implementation.docH> (August 1, 2007).

⁷⁴ Chancellor’s Office California Community Colleges, Economic Development and Workforce Preparation Division, 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.

⁷⁵ Legislative Council, State of California. (2006). AB 2448. http://www.leginfo.ca.gov/pub/bill/asm/ab_2401-2450/ab_2448_bill_20060915_enrolled.pdf. (accessed September 17, 2006)

Assembly Bill 1802: The Middle and High School Supplemental Counseling Program

Among its provisions, this education finance bill establishes the Supplemental School Counseling Program (\$200M) and requires the governing board of a school district that maintains any of grades 7 through 12 to adopt a counseling program that includes a provision for a counselor to meet with each student to explain the academic and department records of the student, 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. Students who have failed the high school exit examination, are at risk of failing the examination, or are not earning credits at a rate that will enable them to graduate from high school with their class will be assigned first priority for counseling services.⁷⁶

Senate Bill 293: Workforce Training Act

Senate Bill (SB) 293, signed by the Governor on September 29, 2006, replaces 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 there 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 programs⁷⁷.

Implications for CTE

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.⁷⁸ 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 retirement of baby boomers imminent, and replacement workers having lower levels of education and skill, 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.⁷⁹ California's governor and legislature are

⁷⁶ Legislative Council, State of California. (2006). AB 1802. http://www.leginfo.ca.gov/pub/05-06/bill/asm/ab_1801-1850/ab_1802_bill_20060706_enrolled.pdf (accessed September 17, 2006)

⁷⁷ California Community Colleges Chancellor's Office <http://www.calwia.org/sb293/index.cfm> (accessed July 31, 2007).

⁷⁸ Educational Testing Service. (2007). America's Perfect Storm. Three Forces Changing Our Nation's Future. Princeton, NJ: ETS.

⁷⁹ U.S. Chamber of Commerce. (2006). Global Engagement: How Americans can win and prosper in the worldwide economy. http://www.uschamber.com/NR/rdonlyres/e37qbx3vp6opk4h7br5a5dthq37ou4xd6p55hzxerdmmy7byta5ggw6a4c3jz2gadlaabbiyskvn4vlfdu3fxg2csa/Global+Engagement_rdc.pdf.

looking to CTE to help the state address these issues, to keep students engaged in secondary and postsecondary education as well as to better prepare students at all stages for ongoing education, employment and long-term career success.

Given these heightened expectations, resources must allocated and targeted to the K-12 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.