

Career Technical Education White Paper

The California Community College System Office offers the following discussion and recommendations to stimulate conversation about the state of Career Technical Education (CTE) in California.

1. Support a Demand-driven Career Technical Education System

Many policy papers and background materials have been produced nationally in support of an aspiration for a demand-driven system for Career Technical Education, but California has not, until very recently, significantly moved its CTE system in that direction.

Before beginning the discussion of where we need to go, it would be helpful to review the factors as to how we found ourselves in our current situation:

- **Increase in Diversity in California:**
The existing population has increased in ethnic diversity. There is no longer a majority ethnic designation for any one ethnicity.
- **Dropout Rates of Ethnic Minorities is Not Improving Enough to Meet the Need:**
While there has been improvement in secondary completion among some ethnic groups, the improvement in the fastest growing ethnic groups of Latinos and African Americans has failed to materialize.
- **Completion Rate in Community College Programs:**
There has been recent criticism about the completion rates in the community college transfer and career technical programs. While the research methodology can be questioned, the community college constituencies cannot remain complacent about this concern.
- **A Declining Middle Class Places Pressure on Financial Aid Resources:**
In many urban and rural areas where the growth of the new ethnic majority is most evident, the population is increasingly economically deprived. These families will place more value on entering the workforce than getting an education. Most community colleges find that eighty percent of their students work full time while attending college. This leads to taking fewer units and extending the education time line.
- **The Perception of the Value Attributed to Most Career Options has Diminished:**
The American public has placed such a high value on professional careers requiring a four-year degree, that most parents and students fail to value technical careers.
- **Shift in Level of Preparation Needed for Employment:**
In the late 1950's, eighty percent of the jobs leading to middle income opportunities did not require postsecondary education. Similar comparisons of job requirements in the 2000's show that as much as eighty percent of the jobs now require some level of postsecondary education to enter those same middle income jobs.
- **Secondary Graduates are not Achieving Basic Skills Requirements:**
An increasing number of the graduates from the secondary system are graduating without achieving adequate basic skills in mathematics and communications to perform well in postsecondary education. Even among the top one-third of the graduates, some 60 percent require some level of remediation in math and communications to perform at college level.

- **Loss of Career Technical Education Programs in the Secondary Schools:**
Due to the initiation of a back-to-basics curriculum within the secondary schools in the 1960's, the result was a significant reduction of career technical programs in the high schools, and in the end, no concomitant improvement in basic skills performance.
- **Business Community Demand for High Skilled Workers:**
The demand for an educated workforce has increased pressure on the education community to meet business needs for employees in high employment careers.
- **Differentiating Between Job Training and Career Education:**
There are distinct needs by the business community for a trained workforce. On the one hand, the business community has a need for workers to meet customized job needs (training). While such needs are often directed at the incumbent worker, it can also apply to new members of that businesses workforce. The business community and the students are best served in the educational setting when career technical education is combined with general education to create a student capable of managing their careers for life.

Need for a demand-driven CTE program:

A demand-driven system, in perhaps overly simple terms, is responsive to real workforce development needs and labor market realities and predictions. It is imperative that such a system address the following needs:

- Building a Curriculum that is relevant to the workforce needs of today and tomorrow.
- Creating and fostering public/private partnerships between industry and education.
- Developing an enhanced capacity for professional development for educators and counselors. so that they are current with the workforce skills and opportunities for students.
- Enhancing enrollments by increasing the numbers of students and courses available for CTE students.

The community colleges have various mechanisms to attempt to align programs to demand, but a combination of factors can stifle those efforts. Some of the factors include college funding that is unresponsive to the real costs of CTE programs. Community college CTE programs are focused on students' transitions to gainful employment, not another education segment. Those programs are high cost, due to the following:

- the need to update curriculum constantly to current industry enrollments.
- the need for faculty professional development to keep abreast of industry requirements.
- high-cost learning stations, equipment and supplies, and
- the necessity to limit class size for the acquisition of skills which requires a low student / faculty ratio.

Funding that is capped in growth. Individual community college finances are carefully monitored to “*balance the books.*” To support high-cost CTE programs, colleges are forced to practice “enrollment management” which balances the mix of high cost programs against lower cost programs.

Limited funds to initiate new programs. CTE program start up can be exorbitantly expensive, and in the zero-sum world of funding caps, as described above, program start up uses funding that otherwise could be used to maintain or update educational programs.

Unintended consequences of accountability measures. By intrinsic content, some CTE programs are difficult to master due to the combination of academic and technical skill attainment required. Colleges are mindful of student “success rates” and colleges may have disincentives to expand programs that historically have lower success rates.

A similar examination of CTE system components outside of the community college system needs to occur, and financial and administrative remedies and mandates need to be crafted to encourage and support a real demand-driven system.

2. Better Align CTE Programs Across Educational Segments

The recently published “*California Statewide Assessment of Career Technical Education Systems*” suggests a poor alignment of CTE course offerings in secondary schools versus CTE program offerings in the community colleges. Before deliberations on enhancing alignments can occur, one must determine what is available for alignment. To date, in those areas where natural alignment could occur, work has been occurring to sustain secondary / postsecondary alignment. Constant maintenance of such alignment is required, though, due to the very dynamic nature of CTE curriculum.

Alignment from community colleges CTE programs to four year baccalaureate degree granting institutions is another element of concern. One of this year’s projects is being implemented, funded from SB70 funds, which propose to examine that issue and generate recommendations. The California Community Colleges System Office anticipates presenting information and recommendations on this subject as that project generates findings.

3. Address the Challenges of Life-Long Learning

Discussions of California’s CTE system often envision a secondary / postsecondary pipeline for young Californians to enter the workforce. However, that conception does not address the reality of today’s workforce needs. According to demographers and various studies of the California workforce, a large portion of the available workers are already out of the secondary school system. Thus we are faced with the need to simultaneously address improving the status of CTE offerings in the secondary schools that have traditionally formed the pipeline for community college CTE students, as well as addressing the needs of youth and young adults who are no longer in the secondary school system that need basic skills education and training for today’s high wage/high skill jobs.

Life-long learning needs have many dimensions:

Individuals who have left the educational system with skills only sufficient for marginal participation in the workforce. The cumulative effect of California’s high secondary school drop out rate is a significant population group requiring additional education and training to address California’s workforce labor needs.

Incumbent workers needing skills upgrades or incumbent workers at risk of losing employment due to economic dislocations. California’s economy is dependent on dynamic workforce needs which are constantly being impacted by technological advances and global competitive circumstances.

Re-entry workers needing education and training. For many legitimate reasons, such as family obligations or sickness / injury, some populations may well have skills, but have been outside of the workforce. Special needs can be present, such as updating licenses needed to enter the occupation, with which community college can assist.

The California Community Colleges System Office’s recent *Strategic Plan* outlined many of these issues. Methods for the implementation of those recommendations are now under study. However, it can be anticipated that the system will need resources and administrative remedies to address life-long learning needs better.

In summary, our recommendations for the Governor’s CTE Initiative include the following:

1. ***Career Technical Education Must Address Career Pathways*** – The new career technical education programs should give attention to assisting students in moving along a career pathway that allows them to maximize their ability to move up the career ladder. Much of the bad reputation that was given to career technical education

programs of the 1970's and 1980's was because education professionals tracked students. This practice was most prevalent among Hispanic and Black students.

2. **Concurrent Enrollment Programs** – Some controversy was raised by misuse of concurrent enrollment between the K-12 and community colleges. While a legislative fix was needed to control the use of concurrent enrollment, that fix also shut doors of opportunity for the middle college programs, cooperative career technical programs between high schools and community colleges, and instructional access at the high school site. Some accommodation needs to be given to facilitate career technical program access through concurrent enrollment.
3. **Credentials vs. Minimum Qualifications** – The K-12 and ROC/P's use teaching credentials, while the community colleges use minimum qualifications as the factor in deciding who may provide instruction. Career technical classes need to have experienced journeyman level faculty in the trades, particularly when addressing apprenticeship programs.
4. **Create a Mechanism for Replacing Programs that are Outdated** - Some change is needed to meet occupational needs and to allow for articulation and cooperative programs between community colleges and the K-12. Crafting up-to-date career technical education curriculum that expertly equips enrollees with the skills and knowledge needed for current occupations and/or occupations occurring in emerging industries.
5. **Regional Collaboration** – Some of the best growth comes in regional areas where collaboratives have been developed among local Workforce Investment Board's (WIB's) ROC/P's, K-12's and the community colleges. These collaborations can be particularly effective when economic development agencies are included in the process. Efforts need to be made to encourage these regional collaboratives, especially when they are dedicated to meeting workforce development coordination for the region.
6. **Addressing Rural and Economically Depressed Area Needs** – California is finding it increasingly difficult to meet the educational needs of rural and economically depressed areas in order to break the pattern of poverty.
7. **Collaborative Partnerships for Career Technical Education in the State Systems for Education** – The federal government recognizes the California Department of Education as the single state agency to receive federal funding under the Perkins Act. A Joint Advisory Council is in place to coordinate funding between the K-12 and the community colleges and to oversee the improved coordination of CTE offerings at both the secondary and community college level. This group should sustain the balance and encourage collaboration that will maximize resources to meet student needs for career technical education in California.
8. **Increase the actual number and choices of enrollment opportunities** – in varied career technical education areas, as well as increasing accomplishment outcomes, as measured by “work ready” certificates, degrees and diplomas, or transition to more advanced training in even higher-skill occupation.
9. **Create and sustain indispensable partnerships between education and business and industry** – These partnerships keep career technical education programs current and relevant to the needs of the state's workforce, create multiple learning venues for students, and support a climate of mutual benefit.
10. **Ensure sufficient competent faculty, counselors, and instructional support services to meet the challenge of preparing California's workforce** – This would include updating the skills of current professionals in education, as well as increasing the number of educational professionals through recruitment and training.

The K-12 needs to promote access among its students to all careers, and the community colleges need to recognize the contributions of the K-12 in providing appropriate skills and creating awareness of career pathways and basic skills development so that by working together, we will ensure a brighter and economically more secure future for our students.