

**State Superintendent of Public Instruction Jack O'Connell Testimony
Career Technical Education in California
Little Hoover Commission**

I welcome the opportunity to participate in this hearing about California's career technical education (CTE) system. Simply stated, I believe that rigorous career technical education is an essential component of our educational delivery system. When delivered well, it provides important and needed preparation for success in the demanding global economy our students face.

Why is it essential? Let me describe a few of the reasons:

- The economy changed in the 1990's from an industrial-based economy to an information and knowledge-based economy, which requires strong academic and advanced technical skills of our graduates and workers. Both are necessary for all students.
- Technological changes have increased communication and access to information in unprecedented ways. Today's students are communicating and competing with students throughout the world. The world is indeed flat, and career technical education can equip students with the skills and abilities to succeed in the global economy.
- The nature of our economy, as well as technologies of all kinds, is rapidly evolving. Students in our schools today will be employed in fields that have yet to be conceived, and regular job changes throughout the student's career will become the norm. All students will need to have career management and employability skills, including entrepreneurial skills, in order to navigate successfully throughout their career journey.
- Too many of our middle and high school students are performing below expectations, and too many students leave the educational system as drop outs. This loss of student potential cannot be allowed to continue. Career technical education is an important methodology for bringing relevancy into the middle and high school curriculum, keeping kids engaged in school, and inspiring them to reach goals they never dreamed possible.
- By the year 2010, it is estimated that only 10% of jobs will be low skilled. Most jobs will require students to have some sort of postsecondary education or advanced training. Students must be prepared to enter and succeed in these programs. Students completing career technical education pathways are more likely to graduate from high school and

understand the necessity of preparing for and completing college, technical training, or apprenticeships.

During my tenure as a member of the State Assembly and Senate, and as State Superintendent of Public Instruction, I have actively supported improving California's career technical education system. I have seen how it can provide opportunities and options for students. I have seen how it can become the basis for improving high school performance.

Schools like Galileo High School in San Francisco, Anderson W. Clark Magnet High School in Glendale, Arthur A. Benjamin Heath Professions High school in Sacramento, and Kearney High School in San Diego are a few examples where career technical education is the basis for rethinking and restructuring the high school experience to make it both rigorous and relevant.

I have often seen high quality school district and ROCP (Regional Occupational Centers and Program) pathways and courses in construction, engineering, information technology, agriculture, health professions, and other occupational areas that connect students to their future education and careers in very deep and relevant ways.

Certainly, there are great examples of excellence throughout the state and a variety of different approaches being utilized to improve career technical education. Despite these successes, I want to emphasize that the future of career technical education depends on our not returning to past practices, where students, especially minority and poor students, were tracked into vocational programs that were less than rigorous. Back then, vocational education was perceived as something for "someone else's kids, but not mine." That system and those attitudes are tired and outdated – we must abandon that thinking.

Likewise, improving career technical education cannot be about returning to a time when there were institutional and curricular barriers and policies which separated vocational and academic skills. Or, returning to a time where each vocational subject area functioned in isolation from other voc. ed. subject areas as well as from the academic world.

We must learn from the past and bury these old stereotypes and practices.

In the modern world, career related education and applied learning must be integrated into the fabric of the high school. It is no longer an either/or – either providing an academic or a career focus – it is both.

The Education Code states there are two purposes of high schools in California. One purpose is to prepare students for postsecondary education.

The other, but no less important, purpose of high schools is to prepare students for their careers.

From that point of view, we must begin to align our expectations, policies, and practices to ensure that all students are prepared with the academic and career skills necessary for success in the global economy. Career technical education can prepare students for postsecondary education as well as for employment, and can provide students with the lifelong learning skills necessary to be productive participating citizens.

As State Superintendent, my aim is to ensure that career technical education programs are of high quality and are rigorous. I will be unrelenting on this point. Although career technical education courses are necessarily designed to foster student learning of career skills and technical knowledge, the curriculum must also be designed to teach, reinforce, and foster application of high level academic skills. Academic achievement must be a responsibility of every adult in the education system, including CTE instructors.

To make sure CTE coursework is rigorous, the California Department of Education led the development of the Career Technical Education Model Curriculum Standards, and the recently approved Career Technical Education Framework. California's standards provide a strong base for ensuring rigor in the following ways:

- Academic rigor is incorporated in the foundation standards. Business, industry, and labor identified the academic standards (English, mathematics, science, and history – social science) that are needed for success in each of the 15 industry sectors. Academic content is also embedded in the various occupational pathway standards.
- Career rigor is supported through the foundation standards that address career management and employability knowledge and skills, and the pathway standards that list occupationally specific knowledge and technical skills needed for success in preparing for work.
- The Career Technical Education Framework provides information and tools to guide district administrators and teachers on how to build rigorous CTE programs and courses.

I am happy to report that the standards are being used widely throughout the state by districts and ROCPs to re-examine CTE course content and align the content to the higher expectations set forth in the standards. The standards are also being used throughout the US and internationally as well. We should be proud that we have set the “standard” for rigor in this state and country

I have also supported the development of CTE courses that qualify for UC/CSU a-g course admission requirements. In five years we have increased the number of CTE a-g approved courses offered in the state from under 300 to 4705. This represents about 20% of all CTE courses offered in the state, and we know that it will be possible to qualify more in the future. While we recognize that the majority of CTE a-g approved courses are in the “f” and “g” categories (fine arts and college prep electives), there has been increasing numbers of courses qualifying in the academic categories.

We have also supported the movement to create smaller learning communities, specialized secondary programs, thematic high schools, and Partnership Academies. The California Department of Education provides Partnership Academy grants that have fostered the development of new models of career technical education, which integrate career and academic content and focus on higher student outcomes. This month, I released a report on the California Partnership Academy program that shows student outcomes exceeding the general high school population in almost every category, including test scores, grade point averages, attendance, a-g completion rates, and other measures. The Statewide P-16 Council that I convened in 2005 studied options for improving our high schools. The group strongly recommended increasing the number of Partnership Academies. Therefore, I am sponsoring legislation, SB 830 by Senator Christine Kehoe, to expand the number of academies from 290 to 500 by the 2012-13 school year.

Now that we have the best career technical education standards and curriculum framework in the country, it must be integrated into the school system. Every district and CTE teacher needs to understand and align their curriculum and instruction to the standards. This will require system-wide professional development over the next five years to ensure the standards are embedded throughout the system.

Districts have struggled in recent years to maintain existing CTE courses as they cannot find CTE instructors. In fact, there is a severe shortage of CTE teachers. Creative ways of attracting and training teachers need to be explored, such as an option for CTE teacher training beginning in the community colleges that will engage potential new teachers early in their college experience.

Similarly, we need to invest in CTE equipment and facilities. This past year, proposition 1D passed, providing \$500 million for CTE facilities and equipment. I support increasing the funding of CTE facilities and equipment as recently introduced by Speaker Nunez for the next bond proposition.

Likewise, it is important to hold CTE programs accountable. We now have CTE standards that define what students need to know and be able to do. A logical next step is to measure student, program, and school outcomes to ensure students are achieving the skills necessary for success in their future careers. Although assessment and accountability is a complex subject, it is possible to set up measurable outcomes. For example, how many students are completing programs, moving into postsecondary education and training, and receiving certification, degrees, and professional licenses? We need to make progress on this issue over the next two years.

We also need to support system wide evaluation and research. There are known examples of schools that produce high outcomes. We have identified some of the examples through our Distinguished Schools program that identifies schools that are distinguished as high academic performers and high CTE performers. We need to do more to identify CTE approaches that are proven to build student success. As I mentioned earlier two recent reports, one on the California Partnership Academies, and another on the effects of ROCP course taking on student achievement indicate that students participating in CTE programs reach higher academic and employment outcomes. This is a beginning, but we need to do far more to understand what works and why it works.

Lastly, we need to consider career technical education within the funding adequacy discussion that has begun in this state. CTE courses often cost more in equipment and supplies to operate. Some states recognize this reality and fund CTE at a differential rate. Potential CTE teachers are also very difficult to attract at our low beginning teacher salaries, which can restrict districts from establishing nursing/health, engineering, machining or other high demand courses and pathways. I believe it is necessary to adequately fund career technical education, as well as all aspects of the educational system so that California can remain a dominant economic force throughout this century. All students deserve an education that is rigorous, relevant and that provides the relationships they need to remain engaged in school.

Thank You