

**Economic Development and Career Technical Education Reform
Implementation Strategy for Senate Bill 70 (Scott)
October 2005**

Introduction:

Based on the signing of Senate Bill 70 (Scott), this paper reflects further refinement of the concept paper developed to detail an education reform proposed January 2005 in the Governor's 2005-06 Budget. The initiative, Economic Development and Career Technical Education Reform, calls for increased coordination between community colleges and high schools for well-articulated career technical education curricula responsive to industry concerns. Since January 2005, staff discussion among the Chancellor's Office, the California Department of Education, the Legislative Analyst's Office and the Department of Finance have occurred regarding the design and implementation of the proposal. Other stakeholders and concerning parties also voiced additional perspectives, enhancing the proposal.

Some components will primarily benefit middle schools and junior high schools; some will focus on high schools, while others would primarily benefit college career technical programs. However, all projects will be designed to build systems that span in various ways across grades 7-14. Moreover, successful implementation of the proposal is predicated on a close working relationship between the offices of the Chancellor and the Superintendent of Public Instruction. It should also be noted that there are possibilities for a greater and more sustained effort, should funding in subsequent fiscal years become available.

Because the funding level is now known and consensus on priorities developed further, this latest revision has several notable changes:

- Projects with longer-range impacts have been re-directed to more immediate results. (i.e., Studies / Research funds have been redeployed to direct program areas)
- Strategic sequencing of some elements has occurred (i.e., funding for summative evaluation has been deferred until a following year.)
- Program elements have been aligned for better functionality (i.e., categorical set-aside for equipment has been replaced as a permissive element in the "Quick Start" Partnerships and "Strengthening Existing CTE Sectors" projects; Entrepreneurship / International trade objectives have been blended into the Career Exploration projects.)

Overview

The Governor's 2005-06 Budget called for expanded vocational and career technical educational opportunities for middle school and high school students, and improved linkages between the career and technical curricula of the public schools and community colleges. Toward those objectives, the Senate Bill 70 was signed to provide \$20 million of one-time funds to the California Community Colleges (CCC).

With these funds, the overall goal is to strengthen California's workforce development efforts by linking the state's investment in economic development with the state's investment in public

instruction and other significant public investments. Chancellor's Office proposes to expend 54% of the funds for community and regional consortium-based projects that bring together economic development initiatives and consortia composed of high schools, Regional Occupational Centers/Programs (ROC/Ps) and community colleges. Another 20% of the funds will develop regional articulation councils with the charge of aligning seamless, non-redundant education and training in California. Another 12.5% of the funds are targeted for strengthening existing Career and Technical Education sectors. Middle school career exploration projects are provided 7.5% of the funding to assist that crucial element in students' development. The remaining 6% of the funds are targeted at critical professional development needs and capacity building needs. The attached budget provides details on project numbers and funding levels.

Currently, the community colleges have an appreciable "infrastructure" upon which to draw for this initiative.

With the Tech-Prep Program, California has a framework of 80 consortia that engage all 109 community colleges as well as 1,046 high schools and numerous ROC/Ps. In total, the Tech-Prep consortia offer 678 "2+2" pathways in 15 broad career pathways. Those pathways encompass the bulk of California's career opportunities. Tech prep, ROC/Ps and other collaboratives, partnered with college's economic development initiatives and career technical education programs, will be key in the implementation of the quick start projects described later, as well as for general dissemination of the other types of projects.

With the CCC Economic and Workforce Development Program, California has a framework of 100 "Centers," supporting ten Economic Development Strategic Priority Initiatives. Included in the strengths of these centers are significant business/industry linkages and technical expertise in subject areas. The Initiatives also conduct environmental scanning to assess labor market needs and foster new emerging industry sectors. These initiatives will act as the centerpiece for many of the emerging cluster and sector projects described later.

Implementation Strategy

The Community College System Office proposes a policy direction that is grounded in the consensus that the California is building a Career Technical Education system. Certain shared system values and concepts will be embodied in all projects. These shared system-building elements are more fully detailed in this paper.

The Community College System Office proposes a funding approach that features three concurrent actions for the Career Technical Education system: building exemplars as beacons while strengthening the foundation as well as growing needed program capacity and infrastructure.

Building exemplars in every region of California is important to energize communities and to signal what robust, high-end career technical education can be. Exemplary "Quick Start" projects—that is, projects that are positioned to be implemented immediately—are a core component for driving change and building the Career Technical Education system. Although described more fully later in this paper, these "Quick Start" exemplars will be built around

components of the high skill, high wage, high demand emerging industries reflected in the California Community College economic development initiatives.

Strengthening the foundation of Career Technical Education is equally important. In California, many current occupations with good, well paying futures could be better served by improved career technical education. Due to the impact of funding constraints and other priorities, some career technical education programs in the state have languished. Moreover, foundation career areas can be transformed into emerging career opportunities with the addition of new technologies or new conditions, such as global trade or entrepreneurship skills. Although described more fully later in this paper, strengthening the foundation of Career Technical Education will be based on a competitive innovation fund. The fund will support such works as updating course content for new rigor, building learning communities, establishing work-based learning opportunities, or linking career ladders of life-long learning and career upward mobility.

Growing needed program capacity and infrastructure is the third component of the implementation strategy. Currently, California's Career Technical Education system has several weak – or missing – links. Although described more fully later in this paper, competitive RFA's targeting needed capacity or infrastructure will be developed. It is anticipated that this work will be more long term, yet it will have the most powerful legacy. For example, whereas California's workforce development system calls for seamless education and training, in actuality, alignment and articulation is spotty and provincial. Solutions need to be devised that balance transportable articulation with locally controlled education and individual faculty expertise. Another example of needed capacity and infrastructure would be the need for strong career exploration opportunities in the middle grades. Young people in middle schools and junior high are beginning the process of decision making for future careers, and all would benefit by understanding the connection between learning and skills to future careers. That information will boost the relevancy of their academic and career technical education preparation.

Finally, one other aspect of California's implementation strategy also needs introduction. The Career Technical Education system building will be under the active guidance of the state's education agencies. The Community College System Office, in consultation with the California Department of Education, will retain the prerogative to adjust actual awards for projects that meet qualifying scores to ensure appropriate geographic distribution as well as diversity and quality of project types.

SYSTEM BUILDING

The operative policy direction for this initiative is to be systems-building for Career Technical Education. All individual projects will be orchestrated toward the goal of systems building. Therefore, in California, certain shared system values and concepts will be embodied in all projects. These include:

Collaborative work and governance.

Partnerships will be the framework for rollout of all projects, and the nature of the partnership will be specified in the RFA. Success is dependent on strong collaboration throughout partnerships, which should include k-12, ROC/Ps and community college faculty and staff,

economic development personnel, business and industry, as well as community. Significant partners across project areas include economic development initiatives and consortia of high schools and community colleges, with the involvement and support of high school teachers and the Academic Senate for California Community College faculty.

Joint applications will be solicited. The applications must include both representation from Economic and Workforce Development Strategic Initiative areas and regional high school/community college consortium, such as Tech-Prep Consortia, School-to-Career Partnerships, or Middle High School projects. If an existing partnership can be demonstrated, California High School “Partnership Academies,” are also a viable basis for a “Quick Start” project, whether the “Partnership Academy” is funded or unfunded. Applications will reflect the engagement of college faculty and secondary school instructors.

Excellence in instructional content and delivery.

Many elements will support this goal. Competitive RFAs will stipulate many quality conditions, such as:

- Conformance to the applicable California Department of Education Career Technical Education standards and/or industry standards, as appropriate;
- Performance goals and program outcomes, including student enrollment levels and flexible “Career Ladders” pathways which maximize students’ options for employment or continuing education;
- Local investment through matching or “in-kind” resources;
- Program design that can be sustained and institutionalized after the funding is gone;
- Aligned career-technical education curriculum between K-12, ROC/Ps and community colleges to provide more targeted industry-driven programs through the existing Tech-Prep 2+2 model;
- New articulation agreements created between high schools, ROC/Ps and community colleges, and perhaps four year institutions (2+2+2);
- Certificate Programs in Economic Development Program Strategic Initiative Areas;
- New industry partnerships created with high schools;
- Identification of existing and needed data sources for longitudinal evaluation and project outcomes assessment

Model course sequence standards should be a basis to ensure that transitions require neither career technical education “catch up” efforts nor redundant enrollment. These model course sequences should be transportable within California to other programs that may be offered in California community colleges. The overall project work plan design must include these elements:

- Identification of the courses high school students should take as pre-requisites for entrance into a community college career and technical education program.
- Agreement on what students would learn in the high school courses so they do not have to repeat the courses in community college.
- A process for providing high school students with college credit for demonstrated learning outcomes from advanced courses taken in high school.

- Outreach by community colleges to encourage high school students to continue their education and to facilitate their enrollment in the community college vocational program.

Significant product availability and dissemination

System-building will include providing models for further statewide adoption. Products may contain:

- Documented “model” or “best practice” curriculum;
- “Tool-kits” for building 2+2 pathway programs;
- Results of in-service experiences
- New equipment to enhance college and K-12 programs

PROJECT TYPES:

I. EXAMPLAR “QUICK START” PROJECTS

“Quick Start” project funds would be rolled out competitively to fund projects aligned with target areas in the current Economic and Workforce Development (EWD) initiatives (see below). The funding awarded on a priority basis for CCC economic development and 2+2 consortia to modify existing programs. In addition to a local implementation, resulting model 2+2 curricula will be disseminated to all high schools through appropriate mechanisms. The Request For Applications (RFAs) that will be issued will have greater specificity regarding eligible applicants, timelines, deliverables and reporting requirements.

“Quick Start” projects will align with one or more CCC Economic Development Strategic Initiatives, which include:

- Advanced Transportation Technologies;
- Applied Competitive Technologies/Manufacturing;
- Biotechnologies;
- Environmental Technologies;
- Geographic Information Systems (GIS)/Geographic Positioning Systems (GPS);
- Health; and
- Multimedia/Entertainment.

Participant colleges must have expertise in economic and workforce development, demonstrable faculty support, and a strong capacity to implement highly visible, high impact projects that can demonstrate needed change in the area of Career and Technical Education. High schools must have a pathway focus or small learning community format which provides a ready 2+2 linkage. Projects will use economic development strategies and build on regional economic trends, targeting high wage, high skill jobs of the future for students. High school students should benefit by having clear pathways to exciting career fields and a better understanding of future high wage, high skill jobs. High schools in the projects will work with middle and junior high schools to bring them information about these pathway programs. Community colleges’ strengths in economic and workforce development will aid in providing applied academics. Community college districts must act as the fiscal agent.

Building effective transitions from high school to postsecondary education will be a major focus of “Quick Start” projects.

In their implementation, “Quick Start” projects will include:

- Technical assistance and leadership from the EWD Program in the community colleges to the 2+2 curriculum pathway projects;
- Strong business and industry involvement for technical expertise and labor market requirements;
- Regional faculty collaboratives among high school and community college faculty to redesign or align curriculum and foster its portability.
- Worksite learning opportunities for students (i.e., internships, job shadowing, cooperative work experience education, community classroom, etc.);
- Professional development for high school instructors, ROC/P and community college faculty;
- Outreach activities regarding high wage/high skill career opportunities as well as the availability of the 2+2 curriculum pathway;
- Professional development for counselors and student support personnel to ensure program viability and student access;
- Instructional equipment; and
- Program model documented for dissemination and transferability.

Projects may be based on several articulation choices, including:

1. Program Alignment (coordination between existing high school, ROC/P and community college programs that results in the correct placement of students in the course sequence, including the possibility of by-passing certain college career technical education introductory or prerequisite courses or accelerated programs); or
2. “Step up” programs (building a bridge between existing high school / ROC/P pathways and community college “advanced” economic sector pathways); or
3. Reverse articulation (building curriculum back into the high school or ROC/P from colleges’ existing “advanced” economic sector pathways).

The RFAs that are issued will have greater specificity regarding eligible applicants, timelines, allowable equipment purchases, deliverables and reporting requirements.

II. GROWING NEEDED PROGRAM CAPACITY AND INFRASTRUCTURE

Additional time and resources are needed before a well-developed career technical education system can optimally function. Several significant projects will individually address these objectives:

- *Regional secondary/postsecondary curriculum alignment.* A precursor step in establishing new seamless career paths based on economic development trends is to ensure that current programs are aligned as well as possible, and to develop systemic solutions to difficulties in student transition. These ten regional grants will operate for

two years and engage multiple high schools, ROC/Ps and community colleges, along with Academic Senate and instructor representatives, to devise solutions and systems.

- *Middle School Career Exploration and Model Program Development.* Opportunities for 7th and 8th grade students to explore career and technical education pathways are needed. Colleges and the EWD Centers working with their affiliate k-12 districts will develop and implement model programs providing career exploration relating to career and technical education as well as future employment opportunities. Exposure to career opportunities in entrepreneurship and international business will be included.
- *Building career pathways and work-based curriculum.* For some locations in California, the goals of this career technical education reform will be a significant challenge. Additionally, the provision of work-based learning opportunities has many legal and logistical complications. This project is designated to provide technical assistance statewide, including a rich “toolkit” of resources and dissemination approaches.
- *Faculty and counselor in-service projects.* This category would provide funds for pairs or teams of high school faculty and college faculty to work in industry or with industry associations and professional organizations to gain knowledge regarding the education and program needs of the high growth, high demand industry sector and future employment opportunities.

III. STRENGTHENING THE FOUNDATION OF CAREER TECHNICAL EDUCATION

The “Foundation strengthening” projects would be a phased approach that is responsive to local circumstances. Projects will build on existing effective practices, and should include broad-based advisory committees.

Strengthening Existing Career & Technical Education Sectors. These projects are to focus on strengthening existing programs in the sectors identified. The intent would be to rely on existing community college programs to strengthen or reestablish secondary & ROC/P programs. Activities may include such work as updating course content for new rigor, building learning communities, establishing work-based learning opportunities, providing updated instructional equipment or linking career ladders of life-long learning and career upward mobility. These collaborative efforts would develop model articulated/aligned curriculum and coursework that reflects current industry needs, and develop regional advisory bodies that link education to labor, business and industry. These model programs would be obligated to assist other colleges and secondary school initiate new programs in these educational sectors.