During the 1993-94 program year, more than 1.2 million Californians were enrolled in vocational education (VE) at a secondary high school, adult education program, or regional occupational center. An additional 1.2 million Californians were enrolled in community college VE programs. VE services were provided to significant numbers of students with disabilities, limited English proficiency, and disadvantages and also to significant numbers of incarcerated youths and adults. Among the major VE activities completed in California in 1993-94 were the following: extensive VE needs assessment (including surveys of 1,700 individuals from 8 survey populations and a review of 600 existing reports); analysis of the data collected and subsequent development of a "state plan" for use of Perkins Act funds from 1994 through 1996; development of the a version of a state plan for activities under the School-to-Work Opportunities Act of 1994; continued development of model partnership academies (prototype career academies) and cooperative education programs; development of business and industry standards with input from coalitions of employers, workers, education agencies, and trade associations; and reassessment/revision of California's statewide student assessment program. (Fifteen charts are included. Appended is a special project final performance summary report form.) (MN)
CALIFORNIA ANNUAL PERFORMANCE REPORT
1993-94

This report has been prepared pursuant to 34 CFR 74.82 and covers the twelve-month program year July 1, 1993 to June 30, 1994

Submitted to the

UNITED STATES DEPARTMENT OF EDUCATION
OFFICE OF VOCATIONAL AND ADULT EDUCATION

DIVISION OF VOCATIONAL EDUCATION
WINIFRED I. WARNAT, DIRECTOR

By the

STATE OF CALIFORNIA
CAREER-VOCATIONAL EDUCATION DIVISION
DEPARTMENT OF EDUCATION
HARVEY HUNT, DEPUTY SUPERINTENDENT
CURRICULUM AND INSTRUCTIONAL LEADERSHIP BRANCH

and the

CHANCELLOR'S OFFICE, CALIFORNIA COMMUNITY COLLEGES
ERNEST LEACH, DEPUTY CHANCELLOR
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preface</td>
<td>i</td>
</tr>
<tr>
<td>Introduction</td>
<td>ii</td>
</tr>
<tr>
<td>Enrollment Data Charts</td>
<td>x</td>
</tr>
<tr>
<td><strong>Sections</strong></td>
<td></td>
</tr>
<tr>
<td>I.  Performance Standards and Core Measures</td>
<td>I-1</td>
</tr>
<tr>
<td>II. Secondary, Postsecondary, &amp; Adult Occupational Programs, Services, &amp; Activities</td>
<td>II-1</td>
</tr>
<tr>
<td>III. Single Parents, Displaced Homemakers, Single Pregnant Women</td>
<td>III-1</td>
</tr>
<tr>
<td>IV. Sex Equity</td>
<td>IV-1</td>
</tr>
<tr>
<td>V. Criminal Offenders</td>
<td>V-1</td>
</tr>
<tr>
<td>VI. Special Populations--Disabled, LEP, &amp; Disadvantaged</td>
<td>VI-1</td>
</tr>
<tr>
<td>VII. State Leadership and Professional Development</td>
<td>VII-1</td>
</tr>
<tr>
<td>Secondary</td>
<td></td>
</tr>
<tr>
<td>Agricultural Education</td>
<td>VII-1</td>
</tr>
<tr>
<td>Business and Marketing Education</td>
<td>VII-6</td>
</tr>
<tr>
<td>Health Careers Education</td>
<td>VII-17</td>
</tr>
<tr>
<td>Home Economics Education</td>
<td>VII-22</td>
</tr>
<tr>
<td>Industrial and Technology Education</td>
<td>VII-25</td>
</tr>
<tr>
<td>Postsecondary (California Community Colleges)</td>
<td>VII-33</td>
</tr>
<tr>
<td>VIII. Community Based Organizations</td>
<td>VIII-1</td>
</tr>
<tr>
<td>IX. Consumer &amp; Homemaking Education</td>
<td>IX-1</td>
</tr>
<tr>
<td>X. Tech Prep</td>
<td>X-1</td>
</tr>
<tr>
<td>XI. Integrating Applied Academics into Vocational Education</td>
<td>XI-1</td>
</tr>
<tr>
<td>XII. Career Guidance &amp; Counseling</td>
<td>XII-1</td>
</tr>
</tbody>
</table>

*Appendix A*

Special Project Final Performance Summary Report (COCCC) A-1
The Carl D. Perkins Vocational and Applied Technology Education Act (P.L. 101-392) was among the first of a slate of new federal education initiatives calling for academic and vocational collaboration, as well as increased and improved linkages between secondary and postsecondary education and between education and the workplace. Reinforcing the Perkins Act commitment to coordination are Goals 2000: The Educate America Act, the School-to-Work Opportunities Act, and the Improving America's Schools Act.

Perhaps more than at any other time in the contemporary history of education in California, statewide leadership of secondary and postsecondary education is dedicated and committed to cooperation and coordination in the conceptualization, planning, development, articulation, funding, administration, and evaluation of vocational education in this state. This demonstrable dedication to collaboration and coordination extends from state personnel and policies across to local practitioners and service providers.

One of the most notable results of this new spirit of coordination in 1993-1994 was the manner in which the 1994-1996 California State Plan was developed. The California Department of Education and the Chancellor's Office of the California Community Colleges joined as equal partners to design, fund, and undertake the extensive statewide needs assessment on which the 1994-1996 State Plan is based. The two agencies jointly convened all meetings designed to generate public and practitioner participation in the analysis of the assessment, identification of statewide priorities, and development of Plan elements. This spirit of collaboration and coordination resulted in development of a State Plan that was crafted by hundreds of individuals and strongly supported by the educational community.

We hope that this spirit of improved working relationships is reflected in the descriptions of accomplishments for the 1993-94 school year that are contained in this annual report.
INTRODUCTION

The 1993-94 school year saw the completion of an extensive vocational education needs assessment in California, and deriving from that, the development of a state plan for the use of Carl D. Perkins Act Funds from 1994 through 1996. Initial efforts also were begun to develop a state plan under the School-to-Work Opportunities Act of 1994. Included in the introduction is a review of some of these state level activities related to vocational education as a means of providing a context for the detailed sections of this report that follow.

Needs Assessment/State Plan

The Carl D. Perkins Vocational and Applied Technology Education Act of 1990 mandates that each state perform a comprehensive assessment of the needs of vocational education programs as part of its submission of a "state plan" application for Perkins funding. California completed this needs assessment during the 1993-94 school year. This was a major undertaking. Separate survey instruments were developed for eight survey populations with a combined total of nearly 300 questions. Students, faculty, administrators, and employers were all surveyed, from urban and rural areas, from large and small schools, including campuses with large numbers of special populations and low-achieving students. In addition, nearly 600 existing reports, assessments, and forecasts were analyzed. Over 1,700 respondents contributed to this survey.

Approximately 200 analytic tables were developed from this survey. These were then reviewed by the members of the Committee of Practitioners, plus the members of the Select Intersegmental Committee and the California Plan Committee. Over 1,400 person hours were spent in this review, the purpose of which was to identify several primary global vocational education goals. The findings of the three oversight committees were very consistent; these combined to develop an overarching vocational education vision to guide the 1994-96 Perkins-funded vocational education programs in California. Three statewide priorities emerged from the assessment:

1. Integration and sequencing of academic and vocational education curriculum. Activities here would include: a) integrating academic and vocational curriculum; b) sequencing courses for both academic and occupational competencies; and c)
increasing linkages between secondary and postsecondary educational institutions, between academic and vocational educators, and among education, business, industry, labor, and the community.

2. **Curriculum and program strategies reflecting workplace needs.** Activities here would include: a) increasing student work skill attainment and job placement; b) enhancing the relevance of vocational programs to the workplace and to the occupations for which students are being trained; and c) promoting the development and use of curriculum and instructional strategies that foster critical thinking, problem solving, leadership, and academic skill attainment.

3. **Instructional and support services responsive to the needs of students who are members of special populations.** Here the focus would be on: a) increasing access and retention for such populations; b) providing needed support services, with increased emphasis on guidance, counseling, placement, and transitional services; and c) monitoring successful course and program completion.

The details of this work were published in a sizable volume entitled the *1993 California Statewide Vocational Education Needs Assessment*, issued jointly by the California Department of Education (CDE) and the Chancellor's Office of the California Community Colleges (COCCC), in March 1994. The effort was administered by Susan Reese, Assistant Superintendent and State Director of Vocational Education, CDE; and Phoebe Helm, Vice Chancellor, Economic Development and Vocational Education Division, COCCC.

This needs assessment provided the framework for development of the *California State Plan For Carl D. Perkins Vocational And Applied Technology Act Funds: 1994-96*. During the past three years vocational education programs have focused on a variety of local and regional needs, attempting to target special need populations. While this will continue, the new Plan will target activities that address the three overarching priorities that emerged from the needs assessment for all vocational students. These will be the priorities across all system providers and programs. In particular, there will be an unprecedented effort to meld the efforts of secondary and postsecondary programs and institutions. The spirit of cooperation that has emerged between these two levels has been demonstrated by their joint conduct of the statewide needs assessment, the development of the statewide plan, and their work together under the School-to-Work Opportunities Act.
School-to-Work

The School-to-Work Opportunities Act activities in California began in fall 1993 with the conference in Baltimore. In February 1994, California received a demonstration grant of $750,000. To help manage the development of a plan under this Act, an interagency partnership was developed among the California Department of Education, the Chancellor's Office of the California Community Colleges, and the Employment Development Department, representing the governor. In late June, a broadly-based School-to-Career (the name used in California) Task Force was appointed by the governor to provide policy recommendations by October 31, 1994.

The plan being developed for California, while still in draft stage, is consonant with the plan for vocational education developed for the Perkins Act. Both plans:

- recognize the demographic and economic realities of the state
- call for improved programs that coordinate existing administrations and funding streams and serve all students
- cite the need for stronger public/private cooperation, and the important role of business and workplace learning in an effective employment preparation system
- call for improved academic-vocational integration
- recognize the existence of many excellent programs that already exist in the state, and the need to build these into an effective system of lifelong preparation and learning

Partnership Academies

California has been a leader in the development of what are called "Partnership Academies," the prototype for "career academies" nationally. There are now 45 such programs operating in California high schools under state sponsorship, another 40-50 under local sponsorship, and the potential for substantial growth through state legislation passed in 1993. Closely allied to Academies is the effort to develop youth apprenticeship. The California New Youth Apprenticeship Project was supported during the 1993-94 school year by grants from the Council of Chief State School Officers, the Department of Labor, and with Perkins funds. Ten pilot programs are
operating currently, four in graphic arts/printing, four in health, and one each in the construction trades and travel and tourism.

Cooperative Education

Another program model active in California is cooperative education, or workplace training linked to classroom learning. The largest example of this comes from Regional Occupational Centers and Programs (ROC/Ps) that offer this through two models: community classrooms (unpaid work experience) and cooperative vocational education (paid work experience). Officials estimate that at least half of the roughly 400,000 students in ROC/P programs in California are involved in one of these programs. The ROC/P system is a state funded one, with approximately $250 million allocated each year; it conforms to the provisions and visions of the Carl Perkins Act and interacts closely with programs funded through the Perkins Act. Cooperative education programs are also operated at the postsecondary level and serve approximately 17,258 students annually.

Business And Industry Standards

California is also actively engaged in efforts to improve both training standards and related assessment procedures. Like those of our European and Asian competitors the move towards development of industry standards is a national movement, driven in part by the federal Departments of Education and Labor. Through federal grant support, standards are now being developed through coalitions of employers, workers, education agencies, and trade associations in 22 different industries. Some of this national work, in printing and health for example, is coordinated in California. In addition to the national efforts, state led projects have recently resulted in the issuance of industry defined standards in banking and telecommunications, through cooperative funding support from the California Business Roundtable and Perkins Act funding.

Student Assessment

The California Department of Education was also engaged in revamping its statewide student assessment program. Called CLAS (California Learning Assessment System), this system has been a leader in pursuing authentic assessment, moving away from multiple choice tests towards curriculum-embedded assessments using performance
tasks, including writing prompts, group work, and investigations. As a part of this work, the State has contracted with Far West Lab to develop career related assessments through an effort called the Career-Technical Assessment Program (C-TAP), supported in part by Perkins funding. As with CLAS these tests follow the principles of authentic assessment to measure content, career-performance, and academic standards in an integrated format. Unfortunately, the CLAS system became a focus of criticism during the 1993-94 school year, and its development was halted in the fall of 1994 through the governor's veto of a bill that would have continued its development. Its future is at least temporarily uncertain, pending the possibility of new legislation during the 1995 session.

Second To None

Another document that serves as a context for vocational education in California is *Second to None*, issued by the California Department of Education in the spring of 1992. This report, based on two years of work of the California High School Task Force, called for an end to tracking, the integration of academic and vocational education, closer alliances between high schools and their surrounding communities (especially employers), and wider articulation between high schools and community colleges through tech prep arrangements. A statewide grants competition was held in the fall of 1993 through which 100 high schools received small grants to implement these changes, and many of the other 814 high schools in California are engaged in similar changes without financial support. In short, high school reform efforts are already underway in California that are consonant with provisions of the Carl Perkins Act and, particularly, the new state plan for vocational education.

Overview Of Vocational Education Delivery Systems

California is one of the largest and geographically, economically, and culturally diverse states in the nation. It currently has approximately 32 million residents, and for a decade has had roughly double the growth rate of the nation's average. It also has the largest educational system in the country, at both secondary and postsecondary levels, and this pertains to vocational education as well as other components. A brief description of the vocational education system in California is included as a context for this report.
Vocational programs operate at the high school level under the administration of the California Department of Education (CDE), which oversees K-12 education. In 1993-94 there were approximately 1.5 million students enrolled in California high schools, of which 616,802 were enrolled in at least one vocational course. These students were enrolled in courses in industrial and technology (223,097), business--office and marketing (218,303), consumer and homemaking (117,126), agriculture (51,373), home economics (14,357), and health careers (3,102).

Complementing these high school based courses are those taught through the Regional Occupation Centers and Programs (ROC/Ps), a state supported system operated through 72 locations in the state. Some of the ROCs operate with their own physical plants and some (the ROPs) use high schools and other facilities in their region. These programs are administered through the California Department of Education. Enrollments in these programs are roughly equally split between high school enrollees and adults (those out of high school). In 1993-94, 206,000 students fell into the first category and 203,000 into the second. The state spends approximately $250 million per year on this system. Enrollments in ROC/P courses (combined student and adult levels) in 1993-94 were as follows: business (office and marketing)--180,000; industrial and technology--153,000; health careers--34,000; home economics--28,000; and agriculture--14,000.

Community colleges represent the other major deliverer of vocational education in California. This network of 107 campuses is overseen by a state level Chancellor's Office. The California Community Colleges constitute the largest system of higher education in the world serving nearly 1.4 million students. One of every 15 adults in the state attends a community college. Approximately two-thirds of all students in the community colleges take at least one vocational education course.

Persons seeking vocational training from the California Community Colleges may select from 340 occupational programs statewide, including agriculture, business, health, home economics, office occupations, public safety, trade and industry, and technical skills. Colleges offer occupational training in fields such as nursing, drafting, auto mechanics, engineering technology, criminal justice, manufacturing technology, paralegal, fire fighting, and welding. Programs are available for students who are interested in upgrading their job skills, advancing their careers, learning a new occupation, or obtaining occupational certificates and licenses. Certificate and licensing programs may require anywhere from one semester to two years depending on the skills necessary to satisfy job requirements. Access to community college programs is enhanced via supplemental services to students with special needs,
including those with disabilities, of limited English proficiency, single parents, displaced homemakers, those who are economically or educationally disadvantaged, and those subject to sex bias and stereotyping.

Report Organization And Preparation

Organization

This report follows the suggested federal guidelines using the 12 sections recommended by the U.S. Department of Education. However, the format and content of each section varies due to the different organizational and operational structures of the California Department of Education (CDE) and the Chancellor's Office of the California Community colleges (COCCC). For both, preceding the 12 sections is a series of charts that report on enrollments in California vocational education courses, broken out in a variety of ways. Much of the enrollment data requested in the report appears in these charts, rather than in the narrative sections that follow.

Vocational education efforts in the California Department of Education center around the work of the Vocational Education Program Managers in five vocational program areas: agriculture, business and marketing, health careers, home economics, and industrial and technology. These program managers are responsible for providing technical assistance to teachers in these areas. Each of these program managers has written detailed reports of their efforts over the past year. These reports appear in Section VII: State Leadership and Professional Development and covers: 1) professional development; 2) curriculum development and dissemination; 3) program assessment: 4) promotion of partnerships; 5) support of vocational student organizations; 6) research and data collection; and 7) exemplary programs.

The COCCC is organized differently. Specialists have full responsibility for supporting a region of colleges and are assigned lead responsibility for a particular program or programs. In the first role, specialists provide a single point of access or "one-stop shop" for the colleges' economic development and vocational programs. In the second role, specialists have statewide leadership responsibilities in specific subject matter areas, as well as program functions. For example, specialists serve on statewide advisory committees, monitor statewide projects, act as the liaison to other intra- and interagency departments and provide leadership in assigned program areas such as advanced transportation technologies.
Another difference between the two agencies is the amount of competitive grants and contracts awarded to local educational agencies (LEAs). With the exception of Title IIB (corrections education) and IIC (secondary, postsecondary, and adult education) the COCCC distributes the majority of its Perkins funds via competitive grants and contracts to community college districts. COCCC reporting is, therefore, done by functional categories (e.g., curriculum development, professional development) of these grants rather than by subject matter areas.

Because of the different approaches to the dissemination of Perkins funding between the secondary and postsecondary levels, separate sections appear in this report for the two levels for certain of the twelve parts of the report. Whenever possible, sections have been written jointly by staff of the CDE and COCCC.

Report Preparation

Both the CDE and COCCC have been working to improve data collection systems for vocational education in California. The foundation for this at the secondary level is the California Basic Education Data System (CBEDS). CBEDS covers all public education grades K-12, and adult, and includes such measures as enrollments (with various kinds of breakouts, such as ethnicity, staffing, salaries, etc.). This data provides the basis for measuring and evaluating secondary enrollments by subject area including courses and sequences. This system is complemented in vocational education by the VE-80 reporting system for the Regional Occupation Centers/Programs (ROC/Ps).

The Chancellor's Office of the California Community Colleges instituted new procedures this year for collecting information for this report. A 1993-94 VATEA Special Project Final Performance Summary Report (see Appendix A) was designed and sent to each community college project director. This form requires an estimate of the amount of federal funds spent in 14 categories and the number of students and/or professional staff served by each project. The categories follow the requirements of the U.S. Department of Education. The information from these Summary Reports was used by the Chancellor's Office staff to develop narrative descriptions for this report. An additional source of information comes from the Chancellor's Office MIS.
ENROLLMENT DATA

The following charts display:

CHART 1  Vocational Education Program Enrollment in Secondary, Adult, and Regional Occupational Centers/Programs by Gender, 1993-1994

CHART 2  Vocational Education Program Enrollment in Secondary, Adult, and Regional Occupational Centers/Programs by Secondary and Adult, 1993-1994

CHART 3  Vocational Education Program Enrollment in Secondary, Adult and Regional Occupational Centers/Programs by Program, 1993-1994

CHART 4  Secondary *(High School) Vocational Education Program Enrollment, 1993-1994

CHART 5  Regional Occupational Centers and Regional Occupational Programs, Male and Female Enrollments by Program, 1993-1994

CHART 6  Regional Occupational Centers and Regional Occupational Programs, Secondary* (High School) and Adult Enrollment by Program, 1993-1994

CHART 7  Adult Education Vocational Program, Male and Female Enrollment by Program, 1993-1994

CHART 8  Secondary (High School) Enrollment by Ethnicity and Gender, 1993-1994

CHART 9  Regional Occupational Centers and Regional Occupational Programs, Enrollment by Ethnicity and Gender, 1993-1994

CHART 10 Adult Education Vocational Enrollment by Ethnicity and Gender, 1993-1994

CHART 11 Vocational Education Services to Special Needs Students, 1993-1994

CHART 12 Vocational Education Program Enrollment in California Youth Authority Programs by Gender, 1993-1994

CHART 13 Enrollment by Program and Gender Postsecondary (Community College)*

CHART 14 Postsecondary (Community College) Enrollments*

CHART 15 Postsecondary (Community College) Enrollment by Ethnicity and Gender, 1993-1994
<table>
<thead>
<tr>
<th>Type of Enrollment</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Secondary (High Schools)</td>
<td>352,518</td>
<td>264,284</td>
<td>616,802</td>
</tr>
<tr>
<td>Adult Education</td>
<td>65,788</td>
<td>142,296</td>
<td>208,084</td>
</tr>
<tr>
<td>Regional Occupational Centers/Programs</td>
<td>194,389</td>
<td>214,869</td>
<td>409,258</td>
</tr>
<tr>
<td>State Total</td>
<td>612,695</td>
<td>621,449</td>
<td>1,234,144</td>
</tr>
</tbody>
</table>

*Duplicated Count*
CHART 2

Vocational Education Program Enrollment in Secondary, Adult, and Regional Occupational Centers/Programs by Secondary and Adult 1993-1994

<table>
<thead>
<tr>
<th>Type of Enrollment</th>
<th>Secondary</th>
<th>Adult</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Secondary (High Schools)</td>
<td>616,802</td>
<td>0</td>
<td>616,802</td>
</tr>
<tr>
<td>Adult Education</td>
<td>0</td>
<td>208,084</td>
<td>208,084</td>
</tr>
<tr>
<td>Regional Occupational Centers/Programs</td>
<td>205,828</td>
<td>203,430</td>
<td>409,258</td>
</tr>
<tr>
<td>State Total</td>
<td>822,630</td>
<td>411,514</td>
<td>1,234,144</td>
</tr>
</tbody>
</table>

*Duplicates Count
### Chart 3

**Vocational Education Program Enrollment in *Secondary, Adult, and Regional Occupational Centers/Programs, by Program* 1993-1994**

<table>
<thead>
<tr>
<th>Type of Enrollment</th>
<th><em>Secondary (High School)</em></th>
<th>Adult Education</th>
<th>ROC/ROP</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>51,323</td>
<td>1,824</td>
<td>14,254</td>
<td>67,451</td>
</tr>
<tr>
<td>Business--Office and Marketing</td>
<td>218,033</td>
<td>149,894</td>
<td>179,995</td>
<td>547,922</td>
</tr>
<tr>
<td>Health Careers</td>
<td>3,102</td>
<td>12,432</td>
<td>33,927</td>
<td>49,461</td>
</tr>
<tr>
<td>Consumer and Homemaking</td>
<td>117,126</td>
<td>6,574</td>
<td>0</td>
<td>123,700</td>
</tr>
<tr>
<td>Home Economics</td>
<td>14,357</td>
<td>0</td>
<td>27,866</td>
<td>42,223</td>
</tr>
<tr>
<td>Industrial and Technology</td>
<td>223,097</td>
<td>37,360</td>
<td>153,216</td>
<td>413,673</td>
</tr>
<tr>
<td>Work Experience Education**</td>
<td>38,123</td>
<td>0</td>
<td>0</td>
<td>38,123</td>
</tr>
<tr>
<td><strong>State Total</strong></td>
<td><strong>616,802</strong></td>
<td><strong>208,084</strong></td>
<td><strong>409,258</strong></td>
<td><strong>1,234,144</strong></td>
</tr>
</tbody>
</table>

* Duplicated Count

** Students concurrently enrolled and reported in 5 occupational areas; not added in state total.
## CHART 4

### Secondary* (High School) Vocational Education Program

Enrollment, 1993-94

<table>
<thead>
<tr>
<th>Type of Enrollment</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>31,576</td>
<td>19,697</td>
<td>51,373</td>
</tr>
<tr>
<td>Business—Office and Marketing</td>
<td>92,398</td>
<td>125,635</td>
<td>218,033</td>
</tr>
<tr>
<td>Health Careers</td>
<td>1,096</td>
<td>2,006</td>
<td>3,102</td>
</tr>
<tr>
<td>Consumer and Homemaking</td>
<td>37,671</td>
<td>79,455</td>
<td>117,126</td>
</tr>
<tr>
<td>Home Economics</td>
<td>4,171</td>
<td>10,186</td>
<td>14,357</td>
</tr>
<tr>
<td>Industrial and Technology</td>
<td>185,606</td>
<td>37,491</td>
<td>223,097</td>
</tr>
<tr>
<td>Work Experience Education **</td>
<td>18,732</td>
<td>19,391</td>
<td>38,123</td>
</tr>
<tr>
<td><strong>State Total</strong></td>
<td>352,518</td>
<td>264,284</td>
<td>616,802</td>
</tr>
</tbody>
</table>

* Duplicated Count—Students concurrently enrolled in two vocational education programs were counted in both programs.

** Students concurrently enrolled and reported in one of the 5 occupational program areas not added to state total.

Source: CBEDS Data Collection, October 1994 PAIF "Enrollment in Vocational Classes, 1993-94".
### CHART 5

Regional Occupational Centers and Regional Occupational Programs  
Male and Female Enrollment by Program,  
1993-1994

<table>
<thead>
<tr>
<th>Type of Enrollment</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>8,908</td>
<td>5,346</td>
<td>14,254</td>
</tr>
<tr>
<td>Business--Office and Marketing</td>
<td>51,006</td>
<td>128,989</td>
<td>179,995</td>
</tr>
<tr>
<td>Health Careers</td>
<td>8,706</td>
<td>25,221</td>
<td>33,927</td>
</tr>
<tr>
<td>Consumer and Homemaking</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Home Economics</td>
<td>8,237</td>
<td>19,629</td>
<td>27,866</td>
</tr>
<tr>
<td>Industrial and Technology</td>
<td>118,707</td>
<td>34,509</td>
<td>153,216</td>
</tr>
<tr>
<td><strong>State Total</strong></td>
<td>195,564</td>
<td>213,694</td>
<td>409,258</td>
</tr>
</tbody>
</table>

### CHART 6

**Regional Occupational Centers and Regional Occupational Programs**

**Secondary* (High School) and Adult Enrollment by Program**

1993-1994

<table>
<thead>
<tr>
<th>Type of Enrollment</th>
<th>Secondary</th>
<th>Adult</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>10,196</td>
<td>4,058</td>
<td>14,254</td>
</tr>
<tr>
<td>Business--Office and Marketing</td>
<td>89,970</td>
<td>90,025</td>
<td>179,995</td>
</tr>
<tr>
<td>Health Careers</td>
<td>8,600</td>
<td>25,327</td>
<td>33,927</td>
</tr>
<tr>
<td>Consumer and Homemaking</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Home Economics</td>
<td>21,122</td>
<td>6,744</td>
<td>27,866</td>
</tr>
<tr>
<td>Industrial and Technology</td>
<td>75,940</td>
<td>77,276</td>
<td>153,216</td>
</tr>
<tr>
<td><strong>State Total</strong></td>
<td><strong>205,828</strong></td>
<td><strong>203,430</strong></td>
<td><strong>409,258</strong></td>
</tr>
</tbody>
</table>


* Calculated estimates based on concurrent/non-concurrent rates applied to annual enrollment totals by program
### Chart 7

#### Adult Education Vocational Program

Male and Female Enrollment by Program

1993-1994

<table>
<thead>
<tr>
<th>Type of Enrollment</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>1,060</td>
<td>764</td>
<td>1,824</td>
</tr>
<tr>
<td>Business--Office and Marketing</td>
<td>32,744</td>
<td>117,150</td>
<td>149,894</td>
</tr>
<tr>
<td>Health Careers</td>
<td>2,238</td>
<td>10,194</td>
<td>12,432</td>
</tr>
<tr>
<td>Consumer and Homemaking and HERO</td>
<td>3,794</td>
<td>2,780</td>
<td>6,574</td>
</tr>
<tr>
<td>Industrial and Technology</td>
<td>25,952</td>
<td>11,408</td>
<td>37,360</td>
</tr>
</tbody>
</table>

| State Total                                | 65,788| 142,296| 208,084|

### Chart 8

#### Secondary (High School) Enrollment by Ethnicity and Gender

*1993-1994

<table>
<thead>
<tr>
<th>Type of Enrollment</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Indian or Alaskan Native</td>
<td>3,702</td>
<td>2,643</td>
<td>6,345</td>
</tr>
<tr>
<td>Asian</td>
<td>25,099</td>
<td>18,519</td>
<td>43,618</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>1,880</td>
<td>1,622</td>
<td>3,502</td>
</tr>
<tr>
<td>Filipino</td>
<td>9,117</td>
<td>6,383</td>
<td>15,500</td>
</tr>
<tr>
<td>Hispanic</td>
<td>119,053</td>
<td>94,029</td>
<td>213,082</td>
</tr>
<tr>
<td>Black - Not of Hispanic Origin</td>
<td>26,218</td>
<td>22,327</td>
<td>48,545</td>
</tr>
<tr>
<td>White - Not of Hispanic Origin</td>
<td>167,449</td>
<td>118,761</td>
<td>286,210</td>
</tr>
<tr>
<td>State Total</td>
<td>352,518</td>
<td>264,284</td>
<td>616,802</td>
</tr>
</tbody>
</table>

*Duplicate Count

Source: CBEDS Data Collection, October 1993, SIF "Vocational Education Enrollment in California Public Schools by Ethnic Group, by Sex, by School, 1993-1994"
<table>
<thead>
<tr>
<th>Type of Enrollment</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Indian or Alaskan Native</td>
<td>3,097</td>
<td>2,782</td>
<td>5,879</td>
</tr>
<tr>
<td>Asian</td>
<td>16,320</td>
<td>18,702</td>
<td>35,022</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>2,771</td>
<td>1,886</td>
<td>4,657</td>
</tr>
<tr>
<td>Filipino</td>
<td>6,309</td>
<td>7,714</td>
<td>14,023</td>
</tr>
<tr>
<td>Hispanic</td>
<td>64,524</td>
<td>71,221</td>
<td>135,745</td>
</tr>
<tr>
<td>Black - Not of Hispanic Origin</td>
<td>14,585</td>
<td>21,468</td>
<td>36,053</td>
</tr>
<tr>
<td>White - Not of Hispanic Origin</td>
<td>86,783</td>
<td>91,096</td>
<td>177,879</td>
</tr>
<tr>
<td>State Total</td>
<td>194,389</td>
<td>214,869</td>
<td>409,258</td>
</tr>
</tbody>
</table>

## CHART 10

### Adult Education Vocational Enrollment by Ethnicity and Gender 1993-1994

<table>
<thead>
<tr>
<th>Type of Enrollment</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Indian or Alaskan Native</td>
<td>528</td>
<td>959</td>
<td>1,487</td>
</tr>
<tr>
<td>Asian</td>
<td>6,189</td>
<td>12,694</td>
<td>18,883</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>551</td>
<td>1,111</td>
<td>1,662</td>
</tr>
<tr>
<td>Filipino</td>
<td>2,974</td>
<td>5,193</td>
<td>8,167</td>
</tr>
<tr>
<td>Hispanic</td>
<td>18,473</td>
<td>33,888</td>
<td>52,361</td>
</tr>
<tr>
<td>Black - Not of Hispanic Origin</td>
<td>6,591</td>
<td>15,415</td>
<td>22,006</td>
</tr>
<tr>
<td>White - Not of Hispanic Origin</td>
<td>30,482</td>
<td>73,036</td>
<td>103,518</td>
</tr>
<tr>
<td>State Total</td>
<td>65,788</td>
<td>142,296</td>
<td>208,084</td>
</tr>
</tbody>
</table>

NOTE: Enrollment data for this chart is currently being determined from the end-of-year reports submitted by secondary schools, adult schools, and ROC/P's. An addendum to the Annual Performance Report will be submitted upon compilation of this data.

### CHART 11

<table>
<thead>
<tr>
<th>Vocational Education Services to Special Needs Students</th>
<th>1993-1994</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Handicapped Students Served</strong></td>
<td></td>
</tr>
<tr>
<td>Mainstreamed</td>
<td>High Schools *</td>
</tr>
<tr>
<td></td>
<td>Adults Schools</td>
</tr>
<tr>
<td>Special Classes</td>
<td>ROC/Ps **</td>
</tr>
<tr>
<td><strong>Disadvantaged students Served</strong></td>
<td></td>
</tr>
<tr>
<td>Mainstreamed</td>
<td>High Schools *</td>
</tr>
<tr>
<td></td>
<td>Adults Schools</td>
</tr>
<tr>
<td>Special Classes</td>
<td>ROC/Ps **</td>
</tr>
<tr>
<td><strong>Limited-English Proficient Students Served</strong></td>
<td></td>
</tr>
<tr>
<td>Mainstreamed</td>
<td>High Schools *</td>
</tr>
<tr>
<td></td>
<td>Adults Schools</td>
</tr>
<tr>
<td>Special Classes</td>
<td>ROC/Ps **</td>
</tr>
</tbody>
</table>

Sources: 
* CDE-101E End-of-Year Report on Vocational Education Enrollment, Achievement, and Supplementary Services related to use of Perkins VATEA Funds for, "FY 1993-1994"

### CHART 12

#### Vocational Education Program Enrollment in California Youth Authority Programs by Gender 1993-1994

<table>
<thead>
<tr>
<th>Institution</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>O.H. Close School</td>
<td>391</td>
<td>0</td>
<td>391</td>
</tr>
<tr>
<td>Kerl Holton School</td>
<td>137</td>
<td>0</td>
<td>137</td>
</tr>
<tr>
<td>DeWitt Nelson School</td>
<td>245</td>
<td>0</td>
<td>245</td>
</tr>
<tr>
<td>N.A. Chaderjian School</td>
<td>304</td>
<td>0</td>
<td>304</td>
</tr>
<tr>
<td>Presenton School</td>
<td>382</td>
<td>0</td>
<td>382</td>
</tr>
<tr>
<td>El Paso De Robles School</td>
<td>422</td>
<td>0</td>
<td>422</td>
</tr>
<tr>
<td>Fred C. Nelles School</td>
<td>247</td>
<td>0</td>
<td>247</td>
</tr>
<tr>
<td>Ventura School</td>
<td>138</td>
<td>98</td>
<td>236</td>
</tr>
<tr>
<td>Youth Training School</td>
<td>935</td>
<td>0</td>
<td>935</td>
</tr>
<tr>
<td><strong>State Total</strong></td>
<td><strong>3,201</strong></td>
<td><strong>98</strong></td>
<td><strong>3,299</strong></td>
</tr>
</tbody>
</table>

Note: These data are not included in the state total for vocational education program enrollment.

* Average annual enrollment
CHART 13

Enrollment by Program and Gender Postsecondary (Community College)*

<table>
<thead>
<tr>
<th>CCC by Program and Gender</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>14,652</td>
<td>11,664</td>
<td>26,414</td>
</tr>
<tr>
<td>Arch &amp; Environmental Design</td>
<td>5,116</td>
<td>4,700</td>
<td>9,832</td>
</tr>
<tr>
<td>Business &amp; Mgmt</td>
<td>141,529</td>
<td>223,809</td>
<td>366,607</td>
</tr>
<tr>
<td>Commercial Services</td>
<td>4,802</td>
<td>12,603</td>
<td>17,507</td>
</tr>
<tr>
<td>Communications</td>
<td>11,759</td>
<td>8,794</td>
<td>20,592</td>
</tr>
<tr>
<td>Computer &amp; Info Science</td>
<td>92,462</td>
<td>95,986</td>
<td>188,870</td>
</tr>
<tr>
<td>Consumer Ed &amp; Home Economics</td>
<td>25,490</td>
<td>98,089</td>
<td>124,641</td>
</tr>
<tr>
<td>Education</td>
<td>1,328</td>
<td>4,940</td>
<td>6,269</td>
</tr>
<tr>
<td>Eng &amp; Related Techy/Ind Techy</td>
<td>112,929</td>
<td>17,120</td>
<td>130,458</td>
</tr>
<tr>
<td>Fine &amp; Applied Arts</td>
<td>19,480</td>
<td>15,885</td>
<td>35,479</td>
</tr>
<tr>
<td>Health</td>
<td>22,470</td>
<td>50,442</td>
<td>73,081</td>
</tr>
<tr>
<td>Interdisciplinary Studies</td>
<td>3,849</td>
<td>5,293</td>
<td>9,223</td>
</tr>
<tr>
<td>Law</td>
<td>3,880</td>
<td>9,961</td>
<td>13,783</td>
</tr>
<tr>
<td>Library Science</td>
<td>238</td>
<td>689</td>
<td>928</td>
</tr>
<tr>
<td>Physical Sciences</td>
<td>457</td>
<td>424</td>
<td>881</td>
</tr>
<tr>
<td>Public Affairs and Serv</td>
<td>107,285</td>
<td>74,512</td>
<td>182,252</td>
</tr>
<tr>
<td>CCC Total</td>
<td><strong>567,646</strong></td>
<td><strong>634,911</strong></td>
<td><strong>1,206,817</strong></td>
</tr>
</tbody>
</table>

* Duplicated Count - Students may be enrolled in more than one program area.
** Totals for each program area and grand total reflect all students reported. Totals for gender reflect students who did not indicate gender on data forms collected. Therefore, a slight difference is present when calculating male/female totals.
<table>
<thead>
<tr>
<th>Program Area</th>
<th>Total Voc Ed</th>
<th>Economically Disadvantage</th>
<th>LEP</th>
<th>Disabled</th>
<th>Academic Disadvantage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>26,414</td>
<td>5,173</td>
<td>324</td>
<td>1,131</td>
<td>8,223</td>
</tr>
<tr>
<td>Arch &amp; Environmental Design</td>
<td>9,832</td>
<td>2,032</td>
<td>522</td>
<td>246</td>
<td>3,556</td>
</tr>
<tr>
<td>Business &amp; Mgmt</td>
<td>366,607</td>
<td>85,838</td>
<td>24,286</td>
<td>11,807</td>
<td>134,693</td>
</tr>
<tr>
<td>Commercial Services</td>
<td>17,507</td>
<td>5,062</td>
<td>1,001</td>
<td>743</td>
<td>5,750</td>
</tr>
<tr>
<td>Communications</td>
<td>20,952</td>
<td>5,293</td>
<td>290</td>
<td>917</td>
<td>8,749</td>
</tr>
<tr>
<td>Computer &amp; Info Science</td>
<td>188,870</td>
<td>49,307</td>
<td>12,373</td>
<td>7,112</td>
<td>73,639</td>
</tr>
<tr>
<td>Consumer Ed &amp; Home Economics</td>
<td>124,641</td>
<td>30,786</td>
<td>4,154</td>
<td>4,125</td>
<td>42,528</td>
</tr>
<tr>
<td>Education</td>
<td>6,269</td>
<td>1,681</td>
<td>76</td>
<td>696</td>
<td>2,367</td>
</tr>
<tr>
<td>Eng &amp; Related Techy/Ind Techy</td>
<td>130,458</td>
<td>26,685</td>
<td>6,393</td>
<td>3,899</td>
<td>42,395</td>
</tr>
<tr>
<td>Fine &amp; Applied Arts</td>
<td>35,479</td>
<td>7,503</td>
<td>1,435</td>
<td>1,364</td>
<td>13,595</td>
</tr>
<tr>
<td>Health</td>
<td>73,081</td>
<td>19,124</td>
<td>1,789</td>
<td>2,608</td>
<td>25,531</td>
</tr>
<tr>
<td>Interdisciplinary Studies</td>
<td>9,223</td>
<td>2,444</td>
<td>9,223</td>
<td>118</td>
<td>4,504</td>
</tr>
<tr>
<td>Law</td>
<td>13,783</td>
<td>3,881</td>
<td>143</td>
<td>468</td>
<td>5,556</td>
</tr>
<tr>
<td>Library Science</td>
<td>928</td>
<td>244</td>
<td>28</td>
<td>46</td>
<td>333</td>
</tr>
<tr>
<td>Physical Sciences</td>
<td>881</td>
<td>82</td>
<td>1</td>
<td>16</td>
<td>364</td>
</tr>
<tr>
<td>Public Affairs and Serv</td>
<td>182,252</td>
<td>34,175</td>
<td>1,892</td>
<td>4,923</td>
<td>56,810</td>
</tr>
<tr>
<td>Statewide Total</td>
<td>1,206,817</td>
<td>279,311</td>
<td>63,930</td>
<td>40,219</td>
<td>428,693</td>
</tr>
</tbody>
</table>

* Note: Students may be enrolled in more than one program area.
Source: Chancellor's Office, California Community Colleges, MIS, 1993-94
<table>
<thead>
<tr>
<th>Type of Enrollment</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Indian or Alaskan Native</td>
<td>6,741</td>
<td>6,784</td>
<td>13,553</td>
</tr>
<tr>
<td>Asian</td>
<td>55,076</td>
<td>54,583</td>
<td>109,788</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>2,971</td>
<td>2,781</td>
<td>5,754</td>
</tr>
<tr>
<td>Filipino</td>
<td>16,588</td>
<td>18,302</td>
<td>34,919</td>
</tr>
<tr>
<td>Hispanic</td>
<td>99,398</td>
<td>104,004</td>
<td>203,532</td>
</tr>
<tr>
<td>Black - Not of Hispanic Origin</td>
<td>35,553</td>
<td>50,433</td>
<td>86,030</td>
</tr>
<tr>
<td>Other Non-white</td>
<td>8,267</td>
<td>7,595</td>
<td>15,881</td>
</tr>
<tr>
<td>White - Not of Hispanic Origin</td>
<td>247,132</td>
<td>274,464</td>
<td>522,210</td>
</tr>
<tr>
<td>Unknown</td>
<td>18,510</td>
<td>17,730</td>
<td>39,185</td>
</tr>
<tr>
<td><strong>State Total</strong></td>
<td>490,236</td>
<td>536,676</td>
<td>1,030,852</td>
</tr>
</tbody>
</table>

Source: California Community Colleges: MIS Database (12/05/94)
SECTION I

PERFORMANCE STANDARDS AND CORE MEASURES
(Title I, Part B, Section 115 and 116, Title 5, Part B, Section 512)

Background

The Carl D. Perkins Vocational and Applied Technology Education Act amendments of 1990 changed how federal resources were used to support vocational education, as well as where funds were to be allocated. The purpose of this Act is to make the United States more competitive in the world economy by developing more fully the academic and occupational skills of all segments of the population.

This legislation has brought many changes to vocational education, including increased attention to accountability. Districts are expected to be accountable for the outcomes resulting from the uses of these federal funds and to evaluate all vocational programs annually using measurable, objective criteria. The Act also mandates that each state develop a statewide system of core measures and standards of performance for secondary and postsecondary vocational education programs.

Conditions Established For The Proposed System Of Core Measures And Standards

Within 30 days of the enactment of the Perkins Act, each state was required to convene a State Committee of Practitioners. In California, a thirty-nine (39) member committee was appointed by the State Board of Education, in accordance with Section 115(a). This committee was composed of members from all aspects and segments of vocational education and included representation from students, special needs advocates, faculty, administration, and school boards. Formed in April 1991, the Committee of Practitioners has met on a regular basis in order to meet the requirements of the law "to review, comment on, and propose revisions to a draft state proposal, which the State Board shall develop, for a system of core measures and standards of performance for vocational programs."

In accordance with the Act, California's system of core measures and standards became effective on September 25, 1992. The goal of the Committee of Practitioners was to
develop a high-quality accountability system that would be accepted by practitioners as both reasonable and valid. The secondary and postsecondary members of the Committee were also committed to developing a system that supported ongoing state educational reforms and that was responsive to both state and local needs.

Thus, the system attempted to integrate current accountability and reporting requirements, conform to existing data collection systems, and coordinate with local assessment and planning processes. The core measures and standards were also intended to assist community colleges in complying with the State of California Assembly and Senate requirements of AB 1725 and secondary schools with the requirements of SB 662, both of which establish statewide systems for accountability.

As implemented in 1992-93, the new system attempted to build upon existing data collection systems so that the process for evaluation would not be burdensome or duplicative. This linkage included coordination with the Management Information System (MIS) of the California Community Colleges, the California Basic Educational Data System (CBEDS) data collection system for secondary education, and the VE-80 data reporting system for the Regional Occupational Centers/Programs (ROC/Ps). It was planned that the measures and standards be evaluated through these systems, along with placement data which would be accessed through unemployment insurance wage records via an interagency agreement with the California Employment Development Department.

Standards for all measures were set on two levels: (1) absolute, and (2) value added gains. Absolute standards are those that require performance at a preestablished level. (These levels represent the statewide average from baseline data collected in 1992-93.) Value added gains refer to growth or increased performance from one point to another.

Consideration Of Needs Of Special Populations

When designing the system of measures and standards, the State Committee of Practitioners considered the goals for Disabled Student Programs and Services (DSP&S), Equal Opportunity Programs and Services (EOPS), and Financial Aid and Matriculation in the California Community Colleges, as well as Special Education, Bilingual Education, Chapter I, Corrections, and Gender Equity programs in the Department of Education. Throughout the development process, a conscious effort was
made to be responsive to the instructional and support service needs of special population students enrolled in vocational programs.

All measures were designed to include each of the special populations and to be sensitive to the need to increase the number of students from special populations to gain access to, participate in, and successfully complete vocational education program sequences; to transition to the next level of education and training; and/or to be gainfully employed.

Diversity of Vocational Education Students

The core measures and standards were defined separately for secondary programs and programs serving adults in community colleges, ROC/Ps, and adult schools. Multiple measures were incorporated into this system in order to accommodate the diversity of goals and career objectives of students enrolled in vocational education courses and programs in California, including secondary, adult education, and ROC/P students, as well as both part-time and full-time students attending community colleges.

Measures and Standards

The Act requires that a system of core measures and standards be developed and implemented by the 1992-93 school year. Each system must include measures of learning and competency gains including:

1. Student progress in the achievement of basic and more advanced academic skills, and

2. One or more of the following:
   a. Competency attainment
   b. Job or work skill attainment or enhancement
   c. Retention in school or completion of secondary school or its equivalent
   d. Placement into additional training or education, military service, or employment

Although states are required to develop and implement only two measures, the State Committee of Practitioners recommended a system that incorporated all options listed above. Additionally, in order to develop a system that would accommodate the varying
Performance Standards and Core Measures

goals that cause students to enroll in vocational education courses and programs (such as employment or career advancement, transfer education, and/or attainment of a diploma or certificate), and the differences among vocational education program segments (i.e., secondary school, adult education, ROC/P, and community colleges), a bewildering array of options were devised.

After the first year of implementation of this system, it became clear that the initial system of core measures and standards was unnecessarily complex. The data collection process was found to be burdensome to local schools and colleges and, despite numerous professional development efforts, the system was not well understood in the field.

Thus, in Fall 1993, the State Committee of Practitioners recommended that the system of core measures and standards be amended. These recommendations were approved by the State Board of Education in January 1994, as follows:

Measure 1: Basic And More Advanced Academic Skills

Secondary

Student performance on the statewide California High School Performance Assessment at grade 10.

Data Collection
California High School Performance Assessment

Standard
School achievement of a score of "4" or above on a 6-point scale of student performance by:

- Absolute Performance Standard: Achieving a score of at least 75 points on a 100-point composite index comprised of rated factors, including the percent of student mobility, level of parent education, percent of students receiving AFDC, and other factors.

- Growth Standard: Showing improvement at a rate that meets or exceeds the state growth target. (Growth is the change in the percent of students meeting performance standards.)
Postsecondary

Successful completion of a vocational education course that integrates academics into the curriculum and that leads to a certificate, degree or diploma.

Data Collection
- COCCC: Management Information System (MIS)
- Adult Education: CDE Form
- ROC/P: VE-80B

Standard
Statewide average for successful course completion.

Measure 2: Retention

Secondary

Dropout complement rate (percentage of students who did not drop out in grades 10-12).

Data Collection
California High School Performance Assessment

Standard
- Absolute Performance Standard: Scoring at or above 75 points on the 100-point composite index when compared to similar schools. (Comparison group norms are frozen at level of base year, 1986-87.)
- Growth Standard: Improving the dropout complement rate by 5 percentage points over the base year of 1986-87.

Postsecondary

Percentage of students identified as course completers.

Data Collection
Performance Standards and Core Measures

- COCCC: MIS
- Adult Education: CDE Form
- ROC/P: VE-80B

Standard
Statewide average for course completion and/or attainment of course certificate.

Measure 3: Placement

Secondary and Postsecondary

Follow-up of program completers, including special populations students and tech prep students.

Data Collection
All segments:
- Unemployment insurance wage records
- Community College MIS files
- Student enrollment data from University of California (UC) and California State University (CSU) systems
- Military enlistment data

Standard
Percentage of students placed into employment or who transfer to higher education, progress to additional training, or enter the military will increase until percentage meets minimum standard (to be determined by statewide average).

Process For Developing Accountability Measures For Special Populations

The system developed for the statewide core measures and standards of performance for vocational education was designed with the active support of field practitioners, many of whom represented the needs of students who are members of special populations. Indeed, many of the members of the State Committee of Practitioners were representatives from advocacy groups and/or associations whose primary responsibility was to ensure full inclusion of special population groups into all aspects of education.
Performance Standards and Core Measures

The system developed for California includes each special population within all measures. A school or college's success in achieving progress for students who are members of special populations in vocational education is evaluated by the measures of academic achievement, retention, and placement. And, at the college level, data on course and program completion rates, including student grades, placement, and transfer rates, are monitored for each special population group, as compared to the total vocational education population in general.

The annual program evaluations conducted by districts supplement the system of core measures and standards. As required by Section 117 of the Act, local districts monitor the access, success, and progress of students who are members of special populations. The statewide system of measures and standards is designed to evaluate the success and progress of each special population. Additionally, each district is required to evaluate the effectiveness of its programs in the area of access. Access is identified by evaluating the percentage of special population students enrolled in vocational education programs, as compared to the percentage of all vocational education students and/or in comparison to the total school or college population as a whole.

How Local Education Agencies Address Core Measures And Standards In Local Plan

Eligible recipients are required to address standards for special populations students in their local plans/applications. For example, if the annual program review/evaluation indicated a lower rate of access, success, and/or progress for students who are members of special populations, the evaluation must identify and implement strategies to overcome any barriers which are resulting in these lower rates. The results of the evaluation must be incorporated into the subsequent year's local plan/application. The plan must describe the results of the program evaluation, including the core measures and standards, as well as efforts to be made to improve access and services to students who are members of special populations.

California Community Colleges

Background

Initial core measures and standards data collection for community colleges began in the summer term of 1992 and ended with the 1993 spring term. Districts reported
information in three categories: program enrollment, academic achievement, and retention.

Program enrollments in vocational education were identified by a six digit Taxonomy of Program (TOP) code with breakout columns showing gender and special populations students (Limited English Proficient (LEP), disabled, academically, and economically disadvantaged) enrollment counts.

To obtain data for the academic achievement measure, districts reported the number of students enrolled in a six digit TOP code and the number of students who completed the course with a grade of C or better. Data showing course completion by gender and special populations students were also reported. Student retention information was collected identically to academic achievement using the grade criterion of D or better.

These initial data runs showed several problems with the MIS. First, the established system included duplicate enrollments. Second, enrollment counts for LEP, disabled and academically disadvantaged students proved to be inaccurate. Thus, there was a need to correct the data collection efforts before these data could be analyzed and utilized by the local community colleges.

Progress Made In 1993-94

Academic Achievement and Retention Measures

When the Committee of Practitioners met in the fall of 1993 to discuss the results of the first year's implementation of the core measures and standards, the committee recommended that disabled, LEP, and academically disadvantaged students needed to be identified in the 1990 fall term when the MIS began and included in the current reporting period. This procedure would correct the inaccurate counts of these special populations students and provide more useful data to local community colleges. The committee also recommended that several data elements be changed to eliminate the problem of duplicate student counts.

Given the difficulties encountered with the 1992-93 data collection, the committee recommended that baseline standards be established in 1993-94 for the measures of academic achievement and retention. These data will be available for review early in 1995.
Placement Measure

A study conducted in 1992-93 assessed the feasibility of tracking post-college employment rates and earnings of community college occupational program completers and leavers over a four year period. The Post-Education Employment Tracking System (PEETS) operated by the Chancellor's Office of the California Community Colleges, in cooperation with the Employment Development Department (EDD), involved electronically matching, by Social Security Number, quarterly wage data routinely collected by EDD from employers with student demographic and educational data available in the Chancellor's Office MIS. Approximately 23,000 MIS student record files were matched with Unemployment Insurance (UI) wage data from EDD.

The results of this study revealed:

1. The post-college year-round employment rates and earning of occupational education students who received associate degrees were substantially greater than those of students who completed 12 or more units of occupational education courses but left college without an associate degree.

2. Students who completed an associate degree or certificate more than tripled their earnings from the time they were attending classes to three years after they left college. Those who left the college after completing 12 or more units of occupational education courses without a degree or certificate saw their earnings more than double during this same time period.

3. The post-college earnings and year-round employment rates of economically disadvantaged students who completed associate degree programs were nearly as high as those of the associate degree recipients who were not economically disadvantaged while attending college, and substantially greater than those of non-economically disadvantaged students who left college without an associate degree.

Because of the extremely significant results of the study and the inexpensive method for tracking the success of program completers and leavers in the labor market, the Chancellor's Office has entered into an agreement with the EDD to match UI wage record data with all occupational education student files in the Chancellor's Office MIS. This match will begin in fall 1994.
It is the intent of the Chancellor's Office to produce standardized reports for the system and to provide each college with a disk containing its own data from which additional analysis can be conducted.

Future Directions

The Chancellor's Office is currently exploring the possibility of linking the UI wage record data with secondary schools, Regional Occupational Programs, University of California, California State University student databases and military files. If this could be done, it would provide a more complete picture of the post-community college employment and wage experiences of occupational program completers and leavers.
SECTION II

SECONDARY, POSTSECONDARY, & ADULT OCCUPATIONAL PROGRAMS, SERVICES, & ACTIVITIES

Use Of The Title IIC Funds

The overall intent of the California State Plan for Vocational and Applied Technology Education Funds, 1991-94 is to:

1. Increase the number, variety and quality of technical preparation program sequences available to students and adults;

2. Increase the number of technical preparation programs which have an integrated curriculum with a common core of proficiencies;

3. Increase the trend of equitable participation of special populations;

4. Improve, expand and update career guidance programs to emphasize the need for students to have basic skills, support concepts contained in the National Guidelines for Career Development; and promote relevant career field experiences.

Number of Students Served

Over 2,278,647 students were served in vocational education programs conducted in California's secondary schools, court and community schools, Regional Occupational Centers and Programs (ROC/P), adult schools, community colleges and criminal offender institutions during the 1993-94 program year. The enrollment distribution is as follows:
Secondary, Postsecondary, & Adult Occupational Programs, Services, & Activities

<table>
<thead>
<tr>
<th>Program</th>
<th>Enrollment</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary Schools</td>
<td>616,802</td>
<td>27.07 %</td>
</tr>
<tr>
<td>Regional Occupational Centers and Programs</td>
<td>409,258</td>
<td>17.96 %</td>
</tr>
<tr>
<td>Adult Schools</td>
<td>208,084</td>
<td>9.13 %</td>
</tr>
<tr>
<td>Community Colleges</td>
<td>1,030,852</td>
<td>45.24 %</td>
</tr>
<tr>
<td>Criminal Offender Institutions</td>
<td>13,651</td>
<td>.60 %</td>
</tr>
<tr>
<td><strong>Total Enrollment</strong></td>
<td>*2,278,647</td>
<td>100 %</td>
</tr>
</tbody>
</table>

* Enrollment breakout is provided on Enrollment Charts

Division of Title II, Part C Funds Between Secondary and Postsecondary and Adult Vocational Education Programs

The Title II, Part C, funds were divided between secondary (Section 231) and postsecondary and adult (Section 232) purposes based on a comparison of the enrollment in secondary school vocational education programs and the number of economically disadvantaged adults enrolled in postsecondary and adult vocational education programs. For PY 1993-94, the comparison resulted in the following division of funds:

<table>
<thead>
<tr>
<th>Program</th>
<th>Amount</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 231</td>
<td>31,166,375</td>
<td>42.0952 %</td>
</tr>
<tr>
<td>Section 232</td>
<td>42,871,460</td>
<td>57.9048 %</td>
</tr>
<tr>
<td>Community Colleges</td>
<td>26,548,139</td>
<td>61.98 %</td>
</tr>
<tr>
<td>ROC/Ps and Adult Schools</td>
<td>16,323,321</td>
<td>38.02 %</td>
</tr>
</tbody>
</table>

Distribution of Title II, Part C, Section 231 (Secondary) Funds and the Types of Secondary Institutions Conducting Programs

There were 405 unified and union high school districts eligible to receive 1993-94 Title IIC, Section 231, allocations ranging from $202 to $5,580,966. Of these, 384 districts elected to participate in the funding. Of the 21 districts which chose to release their allocated funds, only two had allocations that exceeded the $15,000 minimum grant amount.
Some 329 applications were received and approved for the participating districts. Of these, 291 applications were received from single districts; 38 applications were received from consortiums representing 93 districts.

In addition, 41 county office of education court and community schools, special schools, and correctional institutions were eligible to receive 1993-94 Title IIC, Section 231, allocations ranging from $333 to $242,000 for vocational education programs administered by these agencies. Of these, 33 agencies elected to participate in the funding. Eight applications/three-year plans were received from single agencies. Six applications/three-year plans were received from consortiums representing 25 of the eligible recipients.

Each Section 231 application was reviewed to ensure that the planned expenditure of funds was consistent with the program improvements identified in the eligible recipient's approved original or revised three-year (1991-94) plan.

Distribution of Title II, Part C, Section 232 (Postsecondary and Adult) Funds and the Types of Postsecondary and Adult Institutions Conducting the Programs

1. Community College Districts

Sixty-eight of the state's seventy-one community college districts were eligible to receive Title IIC, Section 232, funds with allocations ranging from $53,522 to $3,821,639. Each eligible community college district's VATEA three-year plan (1991-94) was reviewed including the revisions and approved. The 1993-94 VATEA Application for Use of Funds was reviewed and approved by the assigned vocational education specialist.

2. Adult Education Programs

Some 62 adult vocational education programs (53 in PY 1993-94) were eligible to receive Title IIC, Section 232, funds totaling $16,323,321 with individual allocations ranging from $52,814 to $6,275,242. All of the eligible programs chose to participate in the funding; 35 of these programs were administered by secondary school districts, and 27 were administered by Regional Occupational Programs.

Applications were received from each of the participating agencies. New three-year program improvement plans were received from those agencies that did not
participate in either PY 1991-92 or 1992-93. Each new three-year plan and plan revision was reviewed and approved by an assigned vocational education specialist. Each of the Section 232 applications was reviewed to ensure that the planned expenditure of funds was consistent with the program improvements identified in the eligible recipient's approved three-year (1991-94) VATEA plan.

Summary of Program Achievements, Services, and Activities Per Section 235

Secondary and Adult

Because program year 1993-94 represented the last year of a three-year plan for program improvement, each of the 1993-94 Section 231 and 232 applications submitted by eligible recipients was limited to the following materials: Vocational Education Application for Funds; Allocation document; Budget/Expenditure Schedule(s); Detailed Description of Planned Expenditures; Sign-Off Form for Representatives of Special Populations; Statements of General and Special Assurance; Certifications Regarding Lobbying, Debarment, Suspension, Other Responsibility Matters, and Drug-Free Workplace Requirements; and Site or Program Targeting Data.

Each application was reviewed to ensure that the funded programs (1) were of such size, scope, and quality as to be effective; (2) integrated academic and vocational education was provided through coherent sequences of courses so that participating students achieve both academic and occupational competence; and (3) provided equitable access and full participation of students who are members of special populations.

In addition, each application budget schedule and detailed budget description were reviewed to ensure appropriate use of the allocated funds. Topping the list of Title II, Part C, budgeted items were professional development activities related to program improvement and integration, curriculum revision, equipment upgrading, tech prep development and supplementary services designed to meet the needs of special population students.

Of the 343 Section 231 applications received from secondary school districts and county offices operating secondary school-level court and community school vocational education programs, 110 listed planned improvements in multiple vocational education programs at a total of 183 school sites, 19 included planned improvements in agriculture education programs, 165 included planned improvements in business
programs, 37 included planned improvements in home economics programs, 2 included planned improvements in health careers programs, and 126 included planned improvements in industrial and technology programs. (Note: Several local educational agencies "targeted" more than one program for improvement.)

Of the 62 Section 232 applications received from adult schools and Regional Occupational Centers/Programs, 47 included planned improvements in business programs, 5 included planned improvements in health careers programs, and 31 included planned improvements in industrial and technology programs. Like the Section 231 recipients, many of the local education agencies receiving Section 232 "targeted" more than one program for improvement.

Postsecondary (Community College)

The sixty-eight community college districts provide certificates and degrees as well as retraining programs in fourteen major curriculum areas as classified by the Taxonomy of Programs (TOPs) Code. The three largest program areas are: Business and Management; Engineering and Related Technologies, and Health. Approximately 70% of the allocated Section 232 funds were spent on these three programs.

Services and activities supported by Section 232 funds were designed to improve vocational programs and increase the access and success of special populations students. Activities designed to improve program quality included: Curriculum and professional development, economic development, equipment, tech prep, apprenticeship and instruction. These services accounted for approximately 63% of the expenditure of Section 232 funds. Activities and services designed to improve access and success for special populations included: Basic skills, guidance, counseling and outreach, mentoring, tutoring and supplementary services, such as child-care, classroom and equipment modification, and transportation. These services accounted for approximately 33% of the expenditure of Section 232 funds. Administration accounted for approximately 3.9% of the Section 232 funds.

The intent of Section 232 funds is to improve the quality of vocational programs and increase access and success for members of special populations. The performance measures and standards for vocational programs were described in depth in Section I of this report and, thus, are only briefly reviewed here.
Each district receiving Section 232 funds will receive performance data (core measures) on the number of students completing courses, certificates and degrees (measure one) by program area, by gender and by special populations. Additionally, placement data (measure three) on program leavers will be provided to the districts. Districts will be asked to analyze these data in the Spring of 1995 to determine priorities for program improvement and allocation of funds in 1995-96. State staff will assist districts to interpret data and set improvement benchmarks.
SECTION III

SINGLE PARENTS, DISPLACED HOMEMAKERS AND SINGLE PREGNANT WOMEN

Introduction

The purpose of Title II, Part B, Section 221 funds is to subsidize, reimburse and make more accessible preparatory services and vocational education and training to single parents, displaced homemakers, and single pregnant women by assisting them to obtain marketable skills through the provision of special supportive services such as dependent care, transportation, supplies, books or materials. Program objectives are to help single parents and displaced homemakers transition from dependency to self-sufficiency, and to expand the educational, employment, and self-sufficiency options for them. Major targeted groups are economically disadvantaged and minority women.

Secondary

Description Of Direct Services Provided

The Support Services grants continue to be successful in reaching displaced homemakers and adult single parents. These grants provide for outreach, assessment, training, job preparation, job development, job placement and other supportive services to break the cycle of welfare dependency by preparing participants to be economically self-sufficient. These grants will be improved next year by a stronger emphasis on close collaboration with the school vocational education instructors and programs. The Minority Single Parent/Homemaker grants provided the same services as the Support Services grants, ensuring services and outreach to minority populations. Native Americans were underrepresented as participants in these grants and will be a new emphasis next year.

Grants for teen parents effectively enrolled more participants in vocational education mainstream courses and established closer collaboration with vocational education instructors and comprehensive high school principals. The Teen Parent grants reached
a wide array of districts and were heavily sought after by the field. A statewide consultant on teen pregnancy and parenting provided highly successful workshops to teen parents, faculty and administrators at many school districts.

A new grant, Willa Brown, was offered on a demonstration basis. This grant is occupationally specific to airline mechanic training and required outreach to housing project residents. This project was highly effective, generating praise and excitement from both school practitioners and program participants. It was so successful that it will be expanded next year in the number of grants as well as its scope.

In summary, single parent/homemaker grants were distributed as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minority</td>
<td>52</td>
</tr>
<tr>
<td>Support Services</td>
<td>68</td>
</tr>
<tr>
<td>Teen Parent</td>
<td>267</td>
</tr>
<tr>
<td>Willa Brown</td>
<td>2</td>
</tr>
</tbody>
</table>

Statewide Projects

Project TEAM provided statewide technical assistance to all funded programs requesting help. Telephone assistance was provided in 2,545 cases on grants for adult single parents, displaced homemakers, and single pregnant women. This assistance included help on accountability, data collection, applications, final reports, claims, apprenticeship, working with community-based organizations, and implementing effective programs. Assistance was provided to 130 school districts. A teen parent consulting team, working for the New Directions Project, made use of a unique model that involved role playing and theatrical skits. Teen parent program assistance involved 65 on-site workshops at 26 different school districts; telephone help was provided 826 times.

Summary

During the 1993-1994 school year, grants offered at the secondary level served 34,205 single parents, displaced homemakers and single pregnant women. Participants were provided a variety of services: 14,444 participants were provided with counseling services, 4,900 with assessment services, 7,987 with instructional services, 2,966 with employment services, and 3,818 with support services.
Sixty-five New Horizons projects were funded to provide supportive services to single parents, displaced homemakers, and single pregnant women. (Fifty-six of these projects were continuing third-year projects, and nine were continuing second-year projects.) The New Horizons projects were funded from $20,000 to $150,000 for a total of $2.7 million. Services offered to this population at the 65 college campuses included outreach/recruitment, advising and specialized counseling to meet the needs of single parents, assistance with dependent care, transportation assistance, assistance with textbooks, assessment to determine aptitudes for employment, mentoring/job-shadowing and tutoring. A statewide coordination project funded through the Evaluation and Training Institute of Los Angeles provided services and technical assistance to the 65 projects through a group of ten experienced project directors who served as New Horizons Regional Coordinators in their geographical areas. The Coordinators made site visits to each program in their area, provided technical assistance regarding effective practices in providing support services to single parent/displaced homemaker students, answered questions regarding project accountability, and gave input to State staff regarding local project needs and achievements.

Four grants of $20,000 each were awarded for a third and final year to colleges specifically for the purpose of providing outreach programs to displaced homemakers through community-based organizations. The grant at Solano College assisted incarcerated women with advocacy services, parenting classes and with meeting their educational goals. A series of non-credit career exploration classes emphasizing non-traditional skills such as welding, horticulture, and other occupations was offered. The purpose of the career classes was to empower these women to make well-considered career choices and to earn wages sufficient to support themselves and their children. The classes included interest testing as well as information on available training sources. The grant at College of the Siskiyous assisted displaced homemakers in this extremely economically depressed area. One of the activities was an eight-week support group series that provided information and resources leading to training and education that will increase participant's economic self-sufficiency. Topics included self-esteem, communication, parenting skills, and goal-setting. Services provided included career guidance activities, child care reimbursement, employment preparation, and assistance in job placement.
Three Skills Training for New Californians grants of $35,000 each were awarded for a third and final year to programs at Long Beach City College, Los Angeles Mission, and San Diego Continuing Education Center. Services were provided to immigrants through existing English as a Second Language (ESL) programs with the main goal being to provide women with the information and self-confidence necessary to obtain basic resources and services, help with child care, counseling, and career and education awareness.

Some unique special delivery methods that were reported to be particularly effective by several project directors in 1993-94 included: (1) program strategies that increased recruitment outcomes, (2) strategies that resulted in increased retention rates of students, and (3) activities that assisted students in obtaining employment related to their vocational training.

Examples of special activities or events that were considered to be particularly effective recruitment efforts included Merced College's "Discovery Day" activities that were held prior to the beginning of the spring and fall semesters and provided early registration opportunities for single parents/displaced homemakers, with 39 students enrolling at the college. Also, at Columbia College the newly-initiated Discovery Day activities offered an opportunity in the summer for newly registered and potential new students to explore the campus, learn about options and available support services, and feel more at ease on campus before the beginning of Fall classes. Ninety-five percent of the students who participated in Discovery Day at Columbia College registered with the New Horizons program for services.

Strategies that resulted in increased retention rates included peer tutoring or mentoring, provision for needed support services (particularly child-care, transportation, and textbook assistance), and weekly support groups, especially those that used student input to determine meeting content and direction. Support group topics that were particularly valued by students at Columbia and other colleges included effective parenting, time and stress management, exploring community resources, and basic auto repair.

Yuba College reported that the single most effective aspect of the New Horizons program was the intensive, one-to-one peer counseling for single parent/displaced homemaker students. Students met with a Peer Counselor at least once a week, and records were kept using a case management system. Many of the Peer Counselors made themselves available 24 hours a day. The New Horizons staff met weekly to report on the status of the students, and if any student was experiencing difficulty, the
staff would brainstorm how to help and implement a plan of action. The criteria used to judge the success of this part of Yuba's program was the retention of New Horizons caseload students (a 15% withdrawal rate) as compared to the 37% withdrawal rate of the college's single parents/displaced homemakers not affiliated with New Horizons.

Sierra College reported that its Mentor Program matched single parents/displaced homemaker students with faculty and staff and gave students a caring contact point on campus. (The Mentor Program also created an awareness of the needs of this population among the Sierra College faculty and staff.) The weekly support groups and workshops offered throughout the semester on test-taking, time management, writing, and assertiveness were reported by students to be very helpful and increased retention. In addition, Sierra's parent locator service for single parent students was successful in increasing retention for this population because the ability for them to be contacted during the school day by their children's child care providers/schools was very valuable and enabled them to be more focused on their studies while on campus.

Los Angeles City College's New Horizons program, Focus on Career Day, utilized local business and industry representatives in activities that helped to inform students about job opportunities in the area. Workshops were held on the topics of job search, resume writing, and job interviewing. Porterville College's grant was used to fund a comprehensive program that assisted single parents/displaced homemakers in obtaining careers in mid-management through on-the-job experience obtained through the program's job shadowing/mentoring in the summer months when students are not concentrating on course work and have completed their job search skills training component. The students created their own cover letters and resumes, and they participated in role-playing and videotaping of their mock interviews.

Research/Data Collection

Research has identified services that are viewed by the program participants (single parents, displaced homemakers, and single pregnant women) as being the most needed. According to the Program Accountability Model (P.A.M.) final report for Gender Equity projects, participants who were surveyed self-identified their needs for services in the following areas: assistance in purchasing or borrowing textbooks, help in finding job internships or jobs, child-care, and help with purchasing instructional materials. The services most frequently identified by program participants as "very important" were assistance with buying or borrowing books (72%), child care (51%), and assistance with finding a job internship (52%) or job (50%). Transportation assistance
was ranked as either Important or Very Important by a total of 45% of respondents. When asked to select the one service which would be of biggest help in enabling currently enrolled respondents to attain their educational goals, the most frequently identified service was child-care.

**Exemplary Practices**

Exemplary programs were chosen on the basis of 1) efforts by rural, urban, and suburban college programs to serve a diverse student population, and 2) efforts of projects to spend increased amounts of grant money on providing the most-needed direct services to students (usually child-care, textbook and transportation assistance) in a comprehensive manner.

Allan Hancock College reported that increasing book and child care grants to over three times the amount awarded the previous year proved to be very successful, both as a recruitment tool (through advertising of financial assistance) and increased enrollment and retention accompanied by increased self-esteem and self-confidence which enabled students to actively take charge of their education as opposed to other students who are very dependent on campus programs and services for their success. Sixty students were able to purchase needed books and supplies at Solano College through the New Horizons grant, which supplied direct grants of $100 each to students. College of the Siskiyous was able to surpass its goal of providing comprehensive support services to 25 single parents/displaced homemakers through cooperation and coordination with the CARE program. Dollars available for child care support in both programs were maximized, and 35 eligible vocational education students were provided with child care assistance. Sixty-nine eligible students, most of whom were on public assistance and had two children or more, received other much-needed support services such as textbook loans, peer advisor support, counseling and advising, personal growth library materials, and participation in the parent finder service during the school day.

Exemplary efforts to serve California's diverse student population included the Avanza Skills Training Project for New Californians at San Diego Community College District. The project's primary aim was to help break the poverty cycle for post-amnesty New Californians who are single parents, displaced homemakers, or single pregnant women through a job readiness/skills training program that offered specialized instruction to the LEP target group, child care, transportation, personal counseling, vocational assessment, and job development assistance. A total of 210 New Californians received direct services over the three years of the Avanza program funding, which has now
been institutionalized at the Cesar Chavez Center. The project also produced a bilingual job skills preparation booklet that has been widely disseminated. The Community-Based Organization/Displaced Homemaker outreach program at College of the Siskiyous also made exemplary efforts in this hard-hit economically depressed area by holding successful peer support and career exploration groups for the Native American and Hispanic farm laborer populations. At San Francisco City College, outreach/recruitment efforts included the translation of Gender Equity non-traditional employment brochures into languages that would reach the area’s large Hispanic and Asian-American populations. Success groups for single parents and displaced homemakers were piloted at three neighborhood campuses, each serving a particular community. The Mission campus counselor targeted Latina women enrolled in a Vocational ESL program and was successful in helping these women to build the confidence and knowledge and use of resources required to complete the semester and re-enroll in the Fall. The Chinatown North Beach campus counselor targeted displaced homemakers with limited proficiency in English and limited knowledge of vocational options in the United States. The Southeast campus serves the surrounding African-American community, focusing on helping vocational students to develop study and other survival skills to improve class performance and stay in school.

Summary

Section 221 funds of Title II-B funded a total of eighty-nine projects to provide supportive services to single parents, displaced homemakers, and single pregnant women enrolled in vocational education programs in the California Community Colleges. The total number of eligible students reported as served is 27,964; of this total, 21,439 were female and 6,525 males.
SECTION IV

SEX EQUITY

Introduction

The purpose of Title II, Part B, Section 222 funds is to provide model programs, support services (such as dependent care, transportation, and books/supplies), comprehensive career guidance/counseling and activities to eliminate sex bias and stereotyping in vocational education programs.

Collaboration Between The California Department Of Education (CDE) And Chancellor's Office Of The California Community Colleges (COCCC)

Eight Spring Regional Equity Workshops entitled "Building Community Through Partnerships" were co-sponsored in spring 1994 by CDE and COCCC. The Department of Social Services, the Job Training Partnership Division of the Employment Development Department (JTPD/EDD) and the Housing Authority were also involved in the planning stages. Collaboration in planning and workshop participation reached beyond secondary and postsecondary vocational educators to include agencies focusing on employment, housing, and social services. A total of 590 persons participated in the workshops. Topics covered in the workshops included the impact of welfare reform on women and girls, training opportunities for women and girls in high-paying non-traditional occupations, and collaborative strategies for implementing client-centered training and placement procedures for girls/women in non-traditional careers.

Secondary

Description Of Direct Services Provided

Sex equity projects at the secondary level were more collaborative with the community colleges than ever before. The MECCA program that encourages women in technical careers was expanded and continued its linkage to postsecondary programs. The
purpose of these projects was to provide career awareness activities, classes, and support services for young women who wish to enter the following nontraditional careers: industrial technology; engineering technologies; computer drafting, manufacturing or programming; electronics; drafting; surveying; architecture; landscape architecture; regional/urban planning; construction management; or apprenticeship/craft-related occupations. Young women who are interested in technical and trade occupations often feel isolated and are not likely to encounter other young women with similar interests. The goal of MECCA was to bring these women together and to provide the knowledge and support they needed to enter the fields in which they had an interest.

Student conferences were expanded in number. Student Conference grants were available for African Americans, Asian Americans, Hispanic females, Native Americans, and Middle East females. The Middle East female conference was not immediately responded to by the field and will require more state level assistance to help districts meet the needs identified for this population. Preparatory and support services for girls and women aged 14-18 were also provided through Life Management, Self Sufficiency, and Nontraditional Awareness grants. These Sex Equity grants need to be more focused next year to meet the specific needs of diverse ethnic groups in California and changing labor market needs. Additionally, the large city districts have qualitatively, as well as quantitatively, different needs than the rural and suburban areas.

The Connections grants successfully field tested materials developed at the state level to enhance curriculum and professional development efforts leading to reduction in sex bias and stereotyping. These grants offered districts a choice in field testing different workbooks or the Team America staff training program. The workbooks included Mariposa, Options, and Visions; each were at different stages of development.

The Mariposa workbook for Hispanic females completed its final editing as a result of this field testing and is now ready for publication and distribution. The purpose of the workbook is to assist Hispanic females to select careers based on interest and ability, to address work and family values as they seek economic self-sufficiency, and to delay parenthood until adulthood.

Options, a workbook for Caucasian males, completed initial field testing, receiving a very positive reaction from the field. The purpose of the workbook is to overcome the perception that opportunities for Caucasian males will be limited in a global economy. This workbook is intended as a personal journal for the student.
Visions, a workbook for African American males, received initial field testing that was highly successful and demand for this book from field practitioners was strong. This workbook was designed to assist African American males to select careers based on aptitude and interest rather than ethnicity and gender. The workbook also addresses sexism within the African American community and life management skills. The primary users for the workbook will be young men who are being assisted by parents, mentors, and community organizations. Visions can be used in a variety of in-school settings and after-school activities.

The student workbooks and the Team American staff training projects were new models that received acclaim from the field. Team American provided district staff with a series of training workshops to help identify and overcome student stereotyping. This training also explored the relationship of higher expectations for all students to the economic competitiveness of the nation.

The Ventures grant provided nontraditional career exploration for disadvantaged males. Ventures grants were piloted to reach disadvantaged boys and provided entrepreneurship and business skills. The Ventures grant was only moderately successful and did not warrant continuation for the next year. In summary, the following grants were provided in sex equity:

<table>
<thead>
<tr>
<th>Program</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American Conferences</td>
<td>11</td>
</tr>
<tr>
<td>Asian American Conferences</td>
<td>10</td>
</tr>
<tr>
<td>Connections</td>
<td>18</td>
</tr>
<tr>
<td>Hispanic Conferences</td>
<td>13</td>
</tr>
<tr>
<td>Life Management</td>
<td>19</td>
</tr>
<tr>
<td>MECCA</td>
<td>22</td>
</tr>
<tr>
<td>Native American Conferences</td>
<td>8</td>
</tr>
<tr>
<td>Nontraditional Awareness</td>
<td>81</td>
</tr>
<tr>
<td>Self Sufficiency</td>
<td>43</td>
</tr>
<tr>
<td>Ventures</td>
<td>2</td>
</tr>
</tbody>
</table>

**Statewide Projects**

Statewide projects offered technical assistance, resource materials, and professional development in sex equity. The Connections Leadership Project developed curriculum materials, provided data collection and research, and disseminated resources and information on sex equity and single parent/homemakers. Under this project, the
SERVE library distributed 5,542 resource materials, provided 5,022 presentations on equity resources and sold 2,892 equity workbooks and videos developed by the California Department of Education Equity Office. The Project provided technical assistance 234 times to school districts with Connections grants and developed the workbooks that were field tested under the local grants.

The Mariposa workbook was completed under this project. A video to accompany the Mariposa workbook was shown to 18 districts. Mariposa is an illustrated, career guidance/life management workbook that contains information and exercises to help develop decision making skills. This workbook encourages young women to get to know more about themselves, their history and culture, and the world in which they live.

The Connections Leadership Project further developed the Options workbook, based on field testing results. This workbook was designed to introduce males to nontraditional occupations, new and emerging occupations, and skills that will enable them to work in a culturally diverse society.

The Project also helped to develop the Visions workbook. This student workbook was designed to complement the core curriculum. It is closely linked to the History-Social Studies framework and the Houghton Mifflin social studies series. Visions was written around ten rites of passage linked to career possibilities that are traditional and nontraditional to the target audience. The workbook features the fundamental aspects of career guidance. Role models in the book cover a broad range of occupations, educational levels, skills, and interests. These role models were identified and interviewed from all over the country.

To enhance the impact of these workbooks, the Connections Leadership Project developed several videos. Mariposa: Challenging the Future is a video that introduces a number of young Latinas, who discuss their individual and collective experiences with the Mariposa curriculum as well as their experiences as Hispanic women. The video focuses on the positive impact the Mariposa book has had on the lives of the young women using it and shows assertive, vibrant, and intelligent young women making the choice to be successful. The Elders video, developed by the California Department of Education Equity Office, about nontraditional African American men, was shown to 12 districts. This video profiles the lives and values of African American men through personal interviews addressing issues of work, family, single parenting, and nontraditional careers. A video to accompany Visions was begun. It involves group discussions with students who have used the workbook.
The Project also provided Team America staff training to 11 school districts, re-evaluating and developing the program as a result of field test findings. Team America provided school staff with strategies to increase student learning. The project provided training materials along with eight training workshops. Training progressed from consideration of issues related to educating students for work in the global economy through issues, strategies and resources for working with the full range of ethnic and gender groups in California, and ending with development of a local action plan. The Project provided participants with more awareness of the relationship between racial and gender stereotyping and student achievement as well as the direct relationship between what students learn in school and their later success at work.

The Connections Leadership Project also developed a new data collection and program evaluation instrument that was distributed to all districts that received single parent/homemaker and/or sex equity grants. The project also provided analysis of the data collected. A rigorous research design was developed under this project to investigate factors contributing to the permanent institutionalization of sex equity programs and exploring the role of grant size in this process. Responding to a call in the educational research for more in depth studies, this research will utilize a case study approach. Through collaboration with Harvard University Graduate School of Education, the research approach is cutting edge. Data for this study will be collected next year. Lastly, this project also provided assistance on grant application and procurement procedures, given 1,440 times, and on meeting the requests of 91 districts.

The New Directions Project was focused on at-risk populations and assistance on equity grants to overcome barriers to nontraditional careers. In addition to the teen parent team, this project provided assistance on the MECCA Nontraditional Awareness, Self-Sufficiency, and Life Management grants. It also provided liaison activities related to Tech Prep, integrating vocational education with academics, and providing linkages with the postsecondary system. Telephone assistance on implementation of these grants was provided 2,048 times, serving 151 districts.

The Harvest Project provided help to 41 school districts that were offering student conferences. The project engaged in over 4,500 contacts to provide needed assistance, including help in finding speakers, organizing the program, finding sponsors, and recruiting student participants. This assistance was so successful that some conferences drew over 500 participants. The Harvest Project also helped districts to generate interest of minority students in agricultural careers and agriculture education, involving liaison activities with California's agribusiness groups.
The T.I.D.E. Project offered professional development in the fall at 13 regional workshops attended by 479 school staff and again in the spring at 8 workshops attended by 580 school staff. The fall workshops addressed sexual harassment issues and the spring workshops addressed partnerships, especially with community colleges, community-based organizations, and local HUD offices. A statewide conference, whose theme was "Building the Community through Equity," drew 390 participants from schools, community colleges and community-based organizations. This conference featured state and federal speakers bringing the latest information on the role of vocational education and sex equity in the welfare reform movement. It also provided a wide variety of small group workshops addressing an array of equity issues to meet the varied needs and interests of attendees.

Summary

During FY 1994, the grants offered at the secondary level for sex equity served 9,273 participants: 3,906 participants received counseling in nontraditional careers, 1,472 received assessment services, 2,211 received instructional services to eliminate sex bias and encourage pursuit of nontraditional careers, 979 received employment services, and 705 received basic support services.

California Community Colleges

Description Of Direct Services Provided

Twenty-six Sex Bias mini grants were awarded to community colleges for a one-year period throughout the state, ranging from $11,000 to $15,000. The purpose of these grants was to overcome gender bias and stereotyping in vocational education programs and curriculum. As an example, College of the Canyons developed classroom Gender Equity Guidelines which provided direction in the areas of course content, teacher-student interaction, the faculty hiring process, textbook selection, recruitment process and counseling. At Los Angeles City College two inservices for Computer Tech faculty and counselors were held that were extremely effective in changing the school climate, as well as in increasing enrollment of women in technology. A Women in Technology Day and weekly support groups were held, and the retention rate of women in Computer Tech programs was increased through additional lab time provided by qualified student tutors.
Six Step-Up projects were funded in 1993-94 for amounts ranging from $44,000 to $50,000. With the assistance of a statewide Step-Up Coordinating Project, the six local projects provided non-traditional recruitment and personal needs assessments, career exploration and orientation to the trades, program retention support services, and skill training (preparatory academic skills, job-specific skills, and physical skills training necessary for the construction industry). The Step-Up program at Los Angeles Mission College had 42 participants, with the majority being either African Americans or Hispanics from Mexico, Guatemala, and El Salvador. The participants took ESL and trades classes (often in connection with the North Valley Occupational Center), attended workshops designed to increase awareness of non-traditional issues (sexual harassment on the job, understanding men’s culture, career planning, etc.), were given bilingual career testing, and benefitted from the services of a job developer who was working with the construction and other unions.

A statewide project coordinated the 15 new and continuing local LINKS programs (Women in Math, Science, and Engineering), which ranged from $25,000 to $75,000. These projects coordinated with secondary MECCA projects which provided mathematics and science competencies necessary for success in nontraditional vocational programs. Through the LINKS program at Southwest College over 200 women came into direct contact with nontraditional career options through workshops, presentations, a mentoring conference, and the Women’s Math Network at the college, a support group which provided bilingual tutoring (Spanish/English) to approximately 25 women. At other colleges, the Society of Women Engineers (SWE) provided valuable mentoring and job-shadowing experiences to students in the LINKS programs.

**Accomplishments Of Preparatory Services And Vocational-Technical Education Programs And Supportive Services For Women**

Sex Equity funds were used to provide: 1) preparatory services and vocational-technical programs and supportive services for women in the 26 sex bias mini-grants; and 2) non-traditional employment training and services through the Step Up (Women in the Trades) and LINKS programs at local colleges as described above.

An example of the use of sex equity funds to serve postsecondary women through the sex bias mini-grants is Yuba College’s grant which provided textbooks to 14 students, provided intensive one-to-one peer counseling, sponsored the annual Tools of the Trade Career Fair, and formalized cooperative agreements regarding non-traditional resources.
and referrals with JTPA and the Sutter County Housing Authority's Family Self-Sufficiency Program.

The Step Up program at Santa Monica College provided services through book and tool vouchers which gave students the opportunity to begin acquiring the tools needed to become successful in the application of their trade. The participants car-pooled to monthly Southern California Tradeswomen Network meetings in Los Angeles, and student membership was provided by the grant. The Tradeswomen Newsletter kept the women informed about apprenticeship application dates. A critical part of the project was the use of the SOI career/learning abilities testing which enabled the women to understand their strengths and weaknesses and to engage in activities that could help them to develop the abilities needed for their non-traditional career choices.

The LINKS projects encouraged women in math, science, and engineering non-traditional careers. Southwestern College's LINKS project served over 200 women by presenting non-traditional career options to them. Other outcomes included one woman being hired as a local fire inspector, one woman hired at a landscaping company, and several women were paired with mentors in telemedia, computer repair, and auto mechanics. The LINKS women had a higher retention rate than in general for women in nontraditional fields at Southwestern, and eight of them served as role models during outreach activities for which they were compensated.

**Exemplary Programs**

Exemplary programs were chosen on the basis of their efforts to 1) reduce sex bias and stereotyping, 2) effectively promote non-traditional careers, and 3) serve California's diverse racial/ethnic population with a maximization of resources utilized for provision of the support services most needed by students in that locale.

Southwestern College's comprehensive efforts to reduce sex bias and stereotyping featured well-received activities for administrators, counselors, faculty, and students. Ninety percent of the college's administrators participated in "Gender and the Language of Leadership," which was promoted by the college's president and was offered at a regularly scheduled central management meeting in order to encourage full administrative participation. Twenty counselors attended a staff development program on counseling students for non-traditional career choices, which was jointly presented by a counselor and speech faculty member whose recent doctoral research was in the area of language and gender. Twenty-eight faculty participated in a two-part inservice
training called "Eliminating Gender Bias in the Classroom," which presented the most recent classroom research on this topic and provided teaching strategies to overcome these barriers. Forty students attended workshops on non-traditional careers which were sponsored jointly with the Career Center and Women's Resource Center. In addition to the above outcomes, the revised "Careers Don't Come in Pink and Blue" non-traditional career brochure, which has received statewide awards, is now utilized in all new student orientation packets.

At Fresno City College a Sex Bias mini grant funded several activities, including a workshop showcasing non-traditional career options through apprenticeship which was presented to 35 girls/women at the Tenth Annual Adelante Mujer Conference. Seventeen residents of the YWCA were encouraged to enroll in vocational programs and non-traditional careers. Twenty-eight single parents and displaced homemakers received career assessment with an emphasis in the non-traditional career fields. Five students who were enrolled in non-traditional career fields received book/supply grants which enabled continued program attendance, and fees were paid for three students to attend the AAUW Math Science Conference which featured careers in math and science for women.

Cabrillo College's Sex Bias mini grant activities included funding for a directory entitled, "Women in Design and Construction," which lists services available to women in these fields and names of over 150 women who are potential mentors and employers in their business areas. A non-traditional Career Fair for women utilized these directories in connection with the college's mentoring project. The combined recruitment and mentoring strategy was successful in attracting forty-three students into the project.

Summary

Section 222 funds of Title II-B funded a total of fifty-three projects to encourage activities and model programs at California Community Colleges that will reduce sex bias and stereotyping and assist individuals in obtaining training and employment in non-traditional careers. The total number of eligible students served at the postsecondary level in sex equity programs in 1993-1994 was 27,928; 19,837 females and 8,091 males.
SECTION V

CRIMINAL OFFENDERS

The California Department of the Youth Authority (CYA) is the state agency designated by the State Board of Education to administer the Criminal Offender Program for juvenile and youthful offenders in California. The CYA is the state agency charged with providing education, training and treatment services to youthful offenders from all counties in California. In addition, the CYA mission includes assisting local justice agencies with their efforts to control crime and delinquency, and encouraging the development of state and local programs to prevent crime and delinquency.

In 1992, the California State Plan for Carl D. Perkins Act Funds was amended to charge the CYA with developing a plan to assist one or two local juvenile agencies per year to develop vocational programs for local juvenile offenders. Also, in 1992 the CYA was made eligible and received a grant under section 232 of the Perkins Act.

The 1993/94 Criminal Offender grant provided resources for the CYA Career-Vocational Education (C-VE) to expand and upgrade programs for youthful offenders before and after release and to provide assistance to a local program serving youthful offenders.

The following are highlights of the projects and programs initiated and assisted with funds from the Criminal Offender Grant:

1. Significant New Development - The CYA's C-VE Program joined a unique public/private partnership by becoming a partner in the Computers For Schools Program, sponsored by the Detwiler Foundation and aimed at moving California from last to first in the number of computers per students in the public schools. The partnership consists of businesses such as Bank of America, Pacific Bell, GTE and others who donate "used" computers that are then processed and repaired by community colleges, Regional Occupational Center/Programs (ROC/P) and the CYA before being donated to the schools. The Career-Vocational Computer Electronic Program at the Herman G. Stark Youth Training School (HGSYTS) became the first CYA institution to participate in the program.
Criminal Offender grant funds were used to purchase equipment to enhance the program's capability to process large numbers of computers.

2. **Local Agency Assistance** - The CYA developed a contract for the second year to assist the Merced County Probation Department and ROC/P to expand vocational program services to local youthful offenders.

3. **Programs for Offenders after Release** - The CYA has developed a contract to fund a second year of service with STARS, a non-profit agency in San Diego, to provide transitional services to vocational students paroling to San Diego from the HGSYTS. The STARS Project provides services to enable students to transition from the institution into college vocational certificated programs offered in the San Diego Community Colleges.

4. **Redirected or New Vocational Programs - Grant Assisted:**
   a. Fred C. Nelles School - Building Maintenance Program
   b. Preston School - Computer Graphics Program
   c. O.H. Close School - Redirected an industrial woodshop to a Computer Assisted Drafting/Estimating Program

5. **Technology Incorporated in all C-VE Programs** - Implemented the third year of a three-year program to expand the use of technology in vocational programs as a strategy for integrating academic and vocational instruction. A needs assessment indicates a fourth year will be necessary for this project.

6. **Gender Equity** - In cooperation with the California Department of Education, CYA continued to conduct a number of equity projects at the co-educational Ventura School.

7. **Staff Development Projects, included:**
   a. Trade specific workshop and trade visits
   b. Employability Skills Training
   c. Computer Training - (Two Workshops)
   d. Best Practices Workshops (3) - Rescheduled from previous year
   e. Special Education/Vocational Education - Rescheduled from previous year

8. **Program Improvements** - Eight Projects at the following schools:
   a. O.H. Close School
   b. El Paso de Robles School
c. Herman G. Stark Youth Training School  
d. Fred C. Nelles School  
e. DeWitt Nelson Training Center  
f. Ventura School

9. **Student Certification - Grant Assisted**  
   a. Preston School - One student - Apple Computer Technician  
   b. DeWitt Nelson Training Center - Eight students - Apple Computer Technician  
   c. DeWitt Nelson Training Center - Six students - Refrigeration and Air Conditioning  
   d. Herman G. Stark Youth Training School - Eight students - Welding Certification AWS

A total of 8,851 (includes 3 percent female) students are currently enrolled in CYA programs at the 11 institutions shown below:

- Northern Reception Center-Clinic  
- O.H. Close School  
- Karl Holton School  
- DeWitt Nelson Training School  
- N.A. Chaderjian School  
- Preston School  
- Southern Reception Center-Clinic  
- El Paso de Robles School  
- Fred C. Nelles School  
- Ventura School  
- Heman G. Stark Youth Training Center

Approximately 34 percent of the CYA students are Black, 15 percent are Caucasian, and 43 percent are Hispanic. Fifteen percent of the enrolled students are in Special Education, 31 percent qualify under Section 1005 of ESEA, and 7 percent are in ESL programs.

The CYA conducts 109 career-vocational education programs in the 11 institutions. Seventy-three percent of the programs are in Industry and Technology, 14 percent are in Agriculture, 7 percent are in Business and Marketing, and 6 percent are a combination of Industrial Arts and Consumer-Homemaking.

Trade Advisory committees are involved in the planning, development and assessment of the programs. JTPA programs have been developed at two institutions. Substantial efforts have been made to integrate academic and vocational education at each institution. Tech prep programs are being developed at each institution.
During the 1993/94 program year, three new career-vocational training programs were developed, computer and media technology was incorporated into 90 percent of the C-VE programs, professional development was provided to 90 percent of the C-VE programs, the number of students earning outside certification was increased by 10 percent, and academic competency base-line data for the CYA institutions was developed through the use of the Test of Adult Basic Education (TABE).

The California Department of Corrections is responsible for the care and custody of approximately 126,000 convicted felons housed in 28 institutions and 38 camps throughout the state. The Department's educational program includes academic and vocational preparation, general education development, apprenticeship training, and work incentives. Inmates have access to 51 trades in 11 occupational fields.

The Department's philosophy on vocational training is contained in these two statements:

1. Each inmate who chooses to participate in vocational training shall be afforded an opportunity to enhance his or her employability skills and to acquire high-level, trade-related training through a well-defined vocational program with qualified instructors and state-of-the-art equipment.

2. Vocational education shall provide to all inmates who may benefit an opportunity to choose, prepare for, and enter careers that will develop their potential, enhance their economic independence, and provide them a sense of satisfaction and high self-esteem regardless of race, creed, color, national origin, sex, economic status, handicapping condition, or religious belief.

The 1993-94 Perkins Vocational Education and Applied Technology Education Act funds were used to support the Department's efforts to provide quality vocational training to the inmate population through the following:

1. Purchase of modern training equipment for the vocational programs.

2. Provision of staff development training.

3. Support of external vocational education advisory council comprised of representatives of private business, industry, education, and law enforcement.
4. Maintenance of a program monitoring system to ensure that federal and state funding policies, procedures, and standards are in compliance.

5. General support of 15 vocational education programs areas that served over 4,800 students in 160 programs at 21 male and female institutions. Some 80 percent of the Department's vocational education programs are being supported with Perkins Funds.

Some of the Department's major vocational education activities and accomplishments for program year 1993-94 are as follows:

1. Approximately $493,000 was expended to purchase new vocational education training equipment for 15 vocational education programs. Some 2,200 inmates received direct training on the new equipment during the program year. This is a significant increase because the Department mandated that a classroom quota of 27 inmate students be enrolled in each program. This increase is up from the previous average of 24 inmate students.

2. Some $3,000 was used to support the on-site welding certification program administered through the Los Angeles City Building and Safety Department. There were 108 inmates tested with a 92 percent success rate during the program year. Possession of the welding certificate greatly enhances the employment opportunities of person leaving prison.

3. Twenty-seven vocational instructors attended a variety of professional development classes and/or workshops designed to enhance the effectiveness of their programs and instruction.

4. Some 90 inmates students were enrolled in the building trades indentured apprentice programs; 132 inmates were enrolled in the non-building trades apprenticeship programs.
Number Of Students Served

Significant numbers of disabled, limited English proficient, and disadvantaged students were served in vocational education programs conducted by California's criminal justice system, secondary schools, Regional Occupational Centers and Programs, Community Colleges, and adult schools during the 1993-94 program year. This information is displayed in the Enrollment Section.

State And Local Initiatives To Serve Special Populations

During the past year, California implemented a number of significant strategic policy initiatives to promote equitable access, participation and success for special populations students in vocational education programs. Through its recently approved California State Plan for Use of Carl D. Perkins Funds: 1994-96, the State enhanced its efforts to respond to the needs of special populations students by identifying as one of three overarching statewide priorities the emphasis on Instructional and Support Services Responsive to the Needs of Students who are Members of Special Populations. To achieve this goal, emphasis will be placed on increasing access and retention in improved vocational education programs; providing needed support services, emphasizing guidance and counseling and placement and transitional services; and monitoring successful course and program completion.

The ability of the State to be responsive to the needs of students who are members of special populations has been specifically addressed by requiring recipients of federal funds to ensure that they meet the intent of the law to encourage the participation of these students in vocational education programs. Specific criteria are now required of recipients in the development, implementation and evaluation of the local plan/application for Perkins funds to ensure that districts encourage the full and successful participation of special populations students. The criteria include:
Special Populations

1. Prioritization of vocational education programs.
2. Statements of Assurances.
3. Criteria for approval of the local plan and application.
4. Coordination between vocational education and student services.

Districts are required to demonstrate in their local plans that funds are directed to a limited number of sites or to a limited number of program areas, with priority given to sites or program areas that serve the highest concentration of special populations students. Districts must demonstrate that these funds are used to:

1. Provide vocational education in programs that are of such size, scope and quality to be effective.

2. Integrate academic and vocational education in such programs through coherent sequences of courses so that students achieve both academic and occupational competencies.

3. Provide full and equitable participation in such programs for special populations students.

Each district must assure through its local plan that special populations students are provided the same opportunities as students who are not members of special populations. Districts are required to describe how they will provide equal access, participation and placement activities and support services necessary for successful completion of vocational programs. The local plan must describe the affirmative outreach, recruitment and placement activities that are provided and the methods used to develop vocational education programs in consultation with students who are members of special populations.

The annual program evaluation required with the local plan supplements the State system of core measures and standards to meet the requirements of Section 117 of the Perkins Act, which requires districts to monitor the access, success, and progress of students who are members of special populations. Access is identified by evaluating the percentages of special populations students enrolled in vocational education programs as compared to the percentage of all vocational education students and in comparison to the total district population.

If a district demonstrates a lower rate of access, success and/or progress, the evaluation must address the strategies that will be adopted to overcome any barriers which are
resulting in these lower rates. For example, if lower rates of access are identified for any of the special populations groups within a program area, efforts must be directed to outreach and recruitment. These activities may include identifying the appropriate referral agencies, making presentations and visitations, open house invitations, printing flyers and brochures in various languages, and presentations in Basic Skills and English as a Second Language classes. The results of the evaluation must be incorporated into the subsequent year's local plan and application.

Monitoring of district efforts directed towards special populations students occurs during the annual state-level review of local plans. The Career-Vocational Education Division of the CDE involves Bilingual Education, Special Education, Compensatory Education and Gender Equity Specialists in the review of local plans for Section 231 and Section 232 funds. The Chancellor's Office, Economic Development and Vocational Education Division, involves the Curriculum-Instructional Resources Division, Student Services Division and Department of Corrections. All of the plans are reviewed by gender equity and vocational education specialists, while ten percent of the plans are randomly selected for review by the other special populations representatives.

During the 1993-94 school year, both the CDE and COCCC implemented at both the state and local levels a number of additional articulation strategies to ensure the provision of services to all special populations groups, as follows:

1. Revision of the vocational education items in the Coordinated Compliance Review (CCR) to include 1) evidence of approved local application with required signatures, and 2) evidence of collaboration by representatives of all special populations on the Annual Program Review/Evaluation as required by Section 117(a) of the Perkins Act. (CDE)

2. Participation by representatives of special populations groups in the statewide needs assessment phase of the development of the 1994-96 State Plan for Vocational Education. (CDE & COCCC)

3. Participation by representatives of special populations groups in the State Committee of Practitioners for Vocational Education, 1993-94. (CDE & COCCC)

4. Designation of a staff member as the statewide liaison for special populations services. (CDE & COCCC)
5. Formation of a statewide *Special Populations Task Force* consisting of field practitioners representative of all special populations groups to make recommendations on vocational education programs and services for special populations students. (CDE)

6. Enhanced collaboration between the C-VE and other divisions of the Department serving special populations students to facilitate cooperation and planning. For example, nominations for the Special Populations Task Force were solicited from Special Education, Bilingual Education, Compensatory Education, Adult Education, Gender Equity, as well as from the Departments of Corrections and Youth Authority. (CDE)

7. Encouragement for local program providers to include representatives of special populations in all professional development activities funded through the Perkins Act. (CDE & COCCC)

8. Designation of a Economic Development and Vocational Education Division specialist to be the liaison with Student Services Division regarding DSPS, Workability III and GAIN programs. (COCCC)

9. Establishment of a permanent liaison with EDD regarding the Non-Traditional Employment for Women Act. (COCCC & CDE)

As an example of further collaboration during the 1993-94 year, the C-VE worked with the Special Education Division, the Department of Rehabilitation and school districts to ensure that students with disabilities receive equal access to vocational education programs and services in a location that promotes the maximum interaction with age-appropriate peers without disabilities, and participation in the community. This collaboration included intra-departmental participation on the CDE *School to Career Task Force*; and participation by representatives of professional and advocacy groups, including Workability I and II and transition partnerships, on the newly-established *Special Populations Task Force*. Additionally, the CDE has designated a staff member to serve as liaison to the field and to coordinate its programs related to the Americans With Disabilities Act (ADA).

The State of California also received a five-year interagency transition grant funded by the U.S. Department of Education to support a school-to-career interagency transition partnership. Nine state agencies that are responsible for programs and services to students with disabilities participate in the development and implementation of this
grant. These agencies include the California Department of Education, the Chancellor's Office of California Community Colleges, the State Job Training Coordinating Council, Social Security Administration, Department of Rehabilitation, Department of Mental Health, Employment Development Department, Department of Developmental Services, and the California Association of Professors of Special Education. As a further example of interagency collaboration, the Department of Rehabilitation and the CDE have developed a draft agreement to coordinate and ensure the seamless delivery of programs and services to mutual clients. It is anticipated that the agreement will be finalized within the next year.

Description Of Supplementary Services Provided

Local educational agencies combined Perkins funds with other funding resources to provide a variety of supplementary services designed to enhance special population students access to, and success in, vocational education programs. The supplementary services provided are as follows:

- **Recruitment** - includes 8th grade orientation, brochures and written announcements, counseling and guidance.

- **Supportive Personnel** - includes provisions for tutors, aides, bilingual aides/tutors, interpreters for students with hearing impairments, readers, mobility aides, counselors, peer advisors, special populations coordinators, job placement specialists, and child care providers.

- **Instructional Aides and Devices** - includes computer assisted instruction, braille materials and raised line drawings, large print materials, bilingual materials, closed-captioned videos, taped materials, and amplified systems.

- **Curriculum Modification** - encompasses inclusion of equity issues/topics, alternate teaching strategies, task analysis, and non-traditional learning formats.

- **Equipment Modification** - includes table/workbench height adjustment, computer adaptations, and special equipment purchases.

- **Classroom Modification** - includes lighting adjustment, power source modifications, and accessible work stations.
Other Supplementary Services - includes transportation, financial assistance, assessment, specialized orientation, registration assistance, and vocational English-as-second-language classes.
SECTION VII

STATE LEADERSHIP AND PROFESSIONAL DEVELOPMENT

Introduction

Because the CDE and COCCC distribute their state leadership Perkins funds differently, their reports in this section differ accordingly. The CDE supports program managers and staffs in each program area, and distributes its state leadership funding by program area. Thus it has organized its reports by these five program areas: agriculture, business/marketing, health careers, home economics, and industrial & technology education. For each such program area there is a discussion that addresses seven topics: 1) professional development; 2) promotion of partnerships; 3) program assessment; 4) curriculum development; 5) support of vocational student organizations; 6) research and data collection; and 7) exemplary programs. The COCCC distributes its state leadership funds on a competitive basis via grants and contracts to community college districts. The COCCC reporting is done by overall functional categories (professional development, curriculum development, etc.) Thus, in this section it has provided a discussion of the broad purposes of these funds and detail on how they are used.

Secondary

Agricultural Education

Professional Development

Inservice workshops were conducted for agricultural education and academic discipline teachers, counselors, and administrators statewide in 1993-94. Agricultural Education Unit staff conducted 87 sectional, 6 regional, and 1 statewide conference/workshops in collaboration with the California Agricultural Teachers Association. These workshops covered the following topic areas:
State Leadership and Professional Development

- Integrating Curriculum and Instruction
- Effective Teaching in Restructured Schools
- Tech Prep Education Design and Implementation
- Biotechnology in Agriculture
- Aquaculture
- Program Improvement & Certification
- Student Authentic Assessment
- Knowing Your Available Resources
- Counseling Your Counselor

These workshops involved in excess of 600 teachers, counselors, and administrators from 300 districts. They have resulted in the increased involvement of programs and students in student assessment programs; restructuring of programs; tech prep articulation agreements; technology upgrades, especially in computer and laboratory science equipment; and most importantly, student enrollment.

In addition to inservice education, a cooperative preservice education effort was undertaken between the Agricultural Education Unit of the California Department of Education; the California Community College Chancellor's Office; and the California State Colleges at Fresno, Chico, San Luis Obispo, and Pomona; and the University of California at Davis. Through this effort 37 new agricultural education instructors were certified, including three minority instructors. Focused preservice efforts were directed toward integration of agriculture and science, career awareness and preparation, effective use of student organization (FFA) program in instruction, and developing education and business partnerships.

Curriculum Development And Dissemination

Developmental work on the Agricultural Education Implementation Guide and Model Curriculum Standards and Integrated Activities documents was continued in 1993-94. With the active involvement of agricultural educators from secondary and postsecondary levels and industry personnel, a comprehensive implementation guide for establishing and conducting agricultural education programs in today's restructuring high schools and ROC/Ps was developed. A central core to this development was the identification of relevant career performance and technical performance standards to guide instructional design and student assessment. These standards were developed along with integrated performance activities for the Agricultural Science Core Curriculum and the career path clusters of Animal Science and Production, Plant
Science and Production, Ornamental Horticulture, Agricultural Mechanics, Agribusiness Management, Forestry, and Natural Resources Management.

Emphasis in curriculum sequencing and integration of academic and agricultural content into the students' instructional programs has been a high priority this year. Program evaluation and funding were more closely tied to demonstrated sequential and integrated curriculum and instruction. Agricultural Education Unit staff assisted numerous districts in their integration and sequencing efforts.

Program Assessment

During 1993-94 295 programs participated in the Agricultural Education Incentive Grant program. This program is a state-funded program improvement initiative that allocates over $3 million annually to local programs that are working toward improving their programs as evaluated against fifteen state-adopted Agricultural Education program standards and nine state vocational education Quality Criteria.

Agricultural Education Unit staff coordinated or conducted program evaluations utilizing local school administration and industry advisory committees. Through use of incentive funding; a structured and defined evaluation process and emphasis on improvement; and a coordinated Program Improvement Plan developed cooperatively by program staff, site administrators, and industry advisory members, significant and lasting program improvement has been accomplished. Major areas of improvement this year include increased implementation of integrated basic agricultural core and agricultural biology courses, increase in scientific and computer equipment, increased defined sequence of courses offered in career path, and a 10% increase in student involvement in supervised practical experience component.

Promotion Of Partnerships

The development and promotion of partnerships have been accomplished through a variety of efforts and activities. The development of summer industry internships for students involved in the FFA student leadership program has been one of the most significant. This program offers students opportunities to apply for placement in workplace internships in the various agricultural career pathways. In 1993-94 ten internships were offered, a 40% increase from the previous year. The quality of the educational and occupational experience gained by students has been excellent and
employer interest and support is strong. As an example of the quality of this program, a student intern at an agricultural research center used that experience to develop an agriscience project that resulted in national finalist recognition in the FFA AgriScience student competition. Internship partnerships are being stressed, developed, and expanded at both the local and state levels.

Another fruitful effort is the development of a tech prep model program. This effort is establishing strong partnerships between academic and vocational instructors in high schools, Regional Occupational Programs, community colleges, and four-year colleges and universities. By forging these relationships and partnerships, improved curriculum design and articulation are being accomplished.

Support of Vocational Student Organizations

Student leadership and interpersonal skill development through involvement in the FFA student organization program is an integral component in agricultural education programs. In 1993-94 over 42,000 students participated in leadership development at local chapter, section, region, and state levels, an 8% increase from last year. A cornerstone of this effort statewide is an integrated leadership development program. This program provides students with a sequential series of leadership development workshops and conferences targeted to provide a progression of instruction. This series of conferences include Greenland conferences, Chapter Officer conferences, Regional Officer conferences, Advanced Leadership conferences, Excellence conferences, and the state and national leadership conferences. These conferences directly affect over 6,000 students annually with increased numbers of minority and special population students.

Agricultural Unit staff coordinate the section, region, and state leadership program of the FFA. Their efforts include training student officers, development and distribution of leadership packets to all students enrolled, state officer visitations and leadership instruction at 130 chapters annually, and conducting student skill competitive events in 29 leadership and technical skill areas.

Research and Data Collection

Program enrollment data is collected annually by the Agricultural Education Unit for the purpose of evaluating the status and trends in local programs. In analyzing the data,
general enrollment has risen to 42,667 students in 1993-94, a 4.5% increase this past year, and a 23.7% increase over the past five years. Gender balance shows 40% of the students are female and 60% male, compared to 35% female and 65% male in 1989-90.

Program enrollments in the various Agriculture Education career path areas are listed below:

- 34% in Basic Core I
- 12% in Basic Core II
- 12% Animal Science & Production
- 5% Plant Science & Production
- 5% Agribusiness
- 17% Ag Mechanics
- 12% Ornamental Horticulture
- 3% Forestry & Natural Resources

The ethnic diversity of agricultural students is improving. In 1993-94 35% of the students enrolled in an agriculture course were identified as minority.

Exemplary Programs

The nine state-adopted Quality Criteria for vocational education programs were used to determine exemplary programs in 1993-94. These criteria include Curriculum and Instruction; Leadership and Citizenship Development; Practical Application of Occupational Skills; Qualified and Competent Personnel; Facilities, Equipment, and Materials; Community, Business, and Industry Involvement; Career Guidance; Program Promotion; and Accountability and Planning. Two comprehensive high school programs and one Regional Occupational Program fully met these stringent quality standards and were qualified as a Certified Agricultural Education Program. Those programs were:

- Hanford High School, Hanford
- Atascadero High School, Atascadero
- LaPuente Valley ROP, LaPuente
Business Education

Professional Development

To encourage business education practitioners to assume a leadership role in school reform, the Business Education Unit offered a variety of professional development activities during 1993-94. These preservice/inservice opportunities, addressing key components of school-to-work programs such as integrated curriculum, tech prep education, program majors, model curriculum standards, and student/program certification, were carefully designed to benefit practitioners at every stage of implementation. This comprehensive staff development plan included the following:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Number</th>
<th>Attendance</th>
<th>Local Educational Agencies Represented</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Education Management Conferences</td>
<td>2</td>
<td>1,200</td>
<td>650</td>
</tr>
<tr>
<td>Focus: Implementation of Business Education Career Path, Model Curriculum Standards, integrated curriculum, tech prep education, and performance-based assessment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integrated Curriculum Workshops</td>
<td>5</td>
<td>620</td>
<td>115</td>
</tr>
<tr>
<td>Focus: Integrated curriculum training for teams of academic and vocational educators</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Education Tech Prep Symposia</td>
<td>2</td>
<td>225</td>
<td>57</td>
</tr>
<tr>
<td>Focus: Promising practices in tech prep education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integrated Curriculum Demonstration Site Training</td>
<td>3</td>
<td>81</td>
<td>9</td>
</tr>
<tr>
<td>Focus: Advanced integrated curriculum training - nine statewide demonstration sites involving teams of academic and vocational education personnel</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Presentations on implementation of the Business Education Career Path/Model Curriculum Standards, integrated curriculum strategies, and performance-based assessment were made to ten Partnership Academies (55 teachers) involved with industry standard development in banking and telecommunications; 15 local educational agencies (45 teachers) participating in the Career-Technical Assessment
Program; 180 teachers and administrators in high schools, adult schools, and Regional Occupational Centers/Programs; statewide conferences sponsored by the California Business Education Association, California Association of Regional Occupational Centers/Programs, and the California Association of Vocational Administrators (250 participants); and business education teacher trainer programs at four universities (85 candidates).

Training on effective instructional strategies to meet the needs of all students, including economically disadvantaged, underrepresented and other special needs populations were provided at the annual Business Education Management Conferences, Integrated Curriculum Workshops, Partnership Academy inservice, and teacher trainer institutions (2,000 participants).

Business Education Unit staff provided three orientation seminars (30 participants) for the competitive gender equity grants - An Income of Her Own (Entrepreneurship).

Curriculum Development And Dissemination

With the assistance of business education practitioners (secondary, adult, ROC/P, and community college) and business/industry personnel, the Business Education Career Path/Model Curriculum Standards document was updated and revised. The career path has four clusters:

- Computer Science and Information Systems
- Business Management
- Accounting and Finance
- Marketing

Each career path cluster has a technical advisory committee composed of practitioners, business/industry, labor, and community-based organizations. As a result of committee input, the following areas of specialization for each career path cluster were established:
Model Curriculum Standards for elementary (awareness), middle school (exploration), Business Technology Core (foundation), career path cluster, and areas of specialization were validated by practitioners of business education and business/industry personnel.

Over 2,500 copies of the Business Education Career Path/Model Curriculum Standards document were disseminated to business education practitioners and representatives of business/industry at the Business Education Management Conferences, Integrated Curriculum Workshops, Business Education Tech Prep Symposia, Integrated Curriculum Demonstration Site Training and through presentations at vocational education conferences, a variety of workshops, and preservice institutions.

The Business Education Unit worked cooperatively with the California Business Roundtable in establishing industry-developed standards for banking and telecommunications. The process included industry research and assessment, business practitioner and industry personnel development of standards, and a statewide validation by business/industry. The Banking (1,000 copies) and Telecommunications (2,500 copies) Standards documents will be reviewed and disseminated at future Business Education Management Conferences and statewide workshops.

Developmental work for a portable certificate for the banking industry was initiated by the banking industry and the Business Education Unit. Curriculum development for the standards and performance-based assessment are major components of the project.

The Business Education Unit is continuing collaboration with the national project for standards development in the following areas: Retail trade, tourism, travel, hospitality and food marketing, and telecommunications.

Through the Business Education Tech Prep Resource Consortium, curriculum development efforts have developed two documents, Selected Integrated Performance...
Activities (IPAs), and a Program Sequence Guide, both of which align with the Business Education Career Path/Model Curriculum Standards. The IPAs, which correlate to specific business education student performance standards, were field tested with consortium schools and referenced to appropriate academic frameworks, career performance standards, and SCANS competencies and foundations. These documents (2,500 copies) were disseminated at Business Education Management Conferences, Integrated Curriculum Workshops, and various conferences and inservice activities.

Currently the Business Education Unit is working on the development of strategies documents for Workplace Learning and Outreach and Guidance as well as four separate documents - one for each career path cluster - that will provide Sample Program Sequences and IPAs in addition to those in the Selected Integrated Performance Activities.

Two documents, Economics of Business Ownership and Small Business Ownership are presently being updated to reflect current standards.

The two vocational student organizations - Future Business Leaders of America (FBLA) and Distributive Education Clubs of America (DECA), an association of marketing students - are revising their VSO Instructional Guides to incorporate the Business Education Career Path/Model Curriculum Standards and resources for performance-based assessment.

The Business Education Unit collaborated with Far West Laboratory in the development of C-TAP Guidebooks for Projects, Portfolios, and Written Scenarios in the Computer Science and Information Systems Cluster. More than 300 Guidebooks have been disseminated through Far West Laboratory.

Program Assessment

1 - Student Certification

The Business Education Employment Readiness Tests, a student assessment and program accountability system established in 1988, are currently being revised in line with the focus on performance-based or authentic assessment that is a part of state and national reform efforts. The Business Education Unit is using the Career-Technical Assessment Program (C-TAP), being developed by Far West Laboratory as a model.
The Career-Technical Assessment Program (C-TAP) consists of two general categories of assessment components, cumulative and on-demand. The cumulative assessments include the portfolios, an assessment project, and a supervised practical experience. The on-demand assessments include a project presentation and written scenarios. During 1993-94 the Business Education Unit participated in C-TAP field test of the Computer Science and Information Systems (CSIS) cluster for the following components:

<table>
<thead>
<tr>
<th>Teachers</th>
<th>Classes</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portfolio, Project, Scenario</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Portfolio only</td>
<td>9</td>
<td>18</td>
</tr>
<tr>
<td>Project only</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Currently the Business Education Career Path/Model Curriculum Standards provides the basis upon which to access student performance. The standards are organized into a career path model with the Business Technology Core as the foundation supporting the progression into cluster and specialization levels and a choice of four career paths including Computer Science and Information Systems, Business Management, Accounting and Finance, and Marketing.

The Computer Science and Information Systems cluster has now been developed. The Business Education Unit is presently working with practitioners of business education and representatives of business/industry in the development of performance-based assessments for the Business Technology Core, Marketing, and Accounting and Finance clusters. Two important components of the transition will be the portfolios and scenarios. Through portfolios, students can make their transcripts come to life by providing accurate pictures of their knowledge, skills, and abilities developed over time. With the on-demand component (scenario), students demonstrate the ability to solve problems applied to real life situations in the context of the career-technical area.

The Business Education Unit is continuing to work with groups of educators and industry representatives to develop ideas and samples to enable business educators to use the C-TAP model and have a performance-based assessment system in place.
2 - Program Certification

The purpose of the statewide Career-Vocational Education (C-VE) Program Improvement and Certification System is to recognize outstanding achievement and foster educational excellence in business education.

The system utilizes the C-VE Quality Criteria and Quality Indicators as the standards for achieving "program certification." The voluntary Program Improvement and Certification System is comprised of three phases: They are:

Phase I - Assessment/Program Improvement Plan Development
Phase II - Improvement Plan Implementation/Program Modification
Phase III - Validation Review/Certification

During 1993-94 the Business Education Unit staff provided program certification on-site technical assistance to:

- Fifty sites in Phase I
- Thirty-one sites in Phase II
- Twenty-five sites in Phase III

During 1993 fifteen sites were certified as Programs of Excellence. These sites are identified in the "Exemplary Program" section.

Every three years certified programs must be recertified. In 1993-94 twelve certified sites participated in a pilot of the recertification system.

To assist local education agencies with achieving excellence in business education, the Business Education Unit revised and updated the Handbook for Achieving Excellence in Business Education. Inservice and dissemination of the document will be provided at the Business Education Management Conferences this year.

Promotion Of Partnerships

The Business Education Unit has promoted the development of partnerships through a variety of activities. These include:
State Leadership and Professional Development

- Partnership Academies in the Business Education Career Path - one of the primary components of this program is close working partnerships with local community and employers to provide additional motivational activities such as speakers, field trips, mentors, and work-based learning experiences.

- Statewide Business Education Advisory Groups - the Unit forms task force groups to work on projects such as developing and validating industry standards, planning professional development activities, and developing performance-based assessments. Organizations and agencies which serve in an ongoing advisory capacity include the California DECA Advisory Board; California FBLA Advisory Board; Far West Laboratory for Education, Research, and Development; Statewide Office and Marketing Advisory Committee; and the Chancellor's Office, California Community Colleges.

- Curriculum Development Committees - efforts have been furthered through collaboration with California Business Roundtable, Workforce California, and California Community Colleges Statewide Business Education Advisory Committee, and through involvement with projects to develop industry skill standards. For instance, the California Banking Association was involved with the banking standard development and Chevron Technology International was involved with telecommunications. Currently the Business Education Unit is working with Bank of America in the development of a portable certificate.

- The Business Education Tech Prep Resource Consortium - includes membership of secondary schools, adult schools, ROC/Ps, community colleges, universities, and representatives of business and industry. The consortium coordinates development of tech prep business education programs throughout the state. Networking with local consortia in this effort is one of its primary objectives.

- Vocational Equity Network - the Business Education Unit works with various equity projects such as the Harvest Project which provides technical assistance and resources to secondary school districts and community-based organizations (CBOs) who sponsor collaborative education and career conferences for students of diverse backgrounds.
Support Of Vocational Student Organizations

The Business Education Unit sponsors two vocational student organizations - Future Business Leaders of America (FBLA) and the Distributive Education Clubs of America (DECA), an association of marketing students. During 1993-94 both organizations experienced a slight increase in student membership. Student membership is 6,000 in FBLA and 3,100 in DECA. Rationale for this increase includes the following:

- One of the criteria for the Career-Vocational Education Program Improvement and Certification System is "leadership and citizenship development." The utilization of a vocational student organization meets one of the Quality Indicators for this criterion. Many of the local educational agencies which have been certified in the past five years have implemented a VSO to qualify as a Program of Excellence.

- As the Business Education Unit continues to transition the Employment Readiness Tests to solely performance-based assessments, the role of FBLA/DECA competitive events has been emphasized. Many of the VSO competitive events provide excellent resources for performance-based assessment instruments such as portfolios, assessment projects, and supervised practical experiences. Involvement in these performance-based assessments has increased student interest in the related VSO.

- The role of FBLA/DECA as a strategy for delivering leadership, critical-thinking, and problem-solving skills has been emphasized. By planning, organizing, and conducting local chapter activities, business students develop and practice leadership skills. Establishing timelines, managing budgets, setting long-range goals, and promoting activities are real-life applications of the Business Education Career Path/Model Curriculum Standards. Each vocational student organization has developed a strategy guide - "Integrating Vocational Student Organizations into the Business Education Curriculum" as a resource.

Student interest and recruitment for VSOs has been emphasized in workshops and conferences throughout the state. The Instructional Strategies Guide for Special Populations identifies VSOs as a strategy for delivering leadership, critical-thinking and problem-solving skills, and self-esteem.

Both vocational student organizations offer extensive staff training. Examples include the Executive Leadership Conference, Section Fall/Winter Workshops, Section...
State Leadership and Professional Development

Leadership Conferences, State Leadership Conference, and National Leadership Conference.

Research And Data Collection

The four career path clusters in the Business Education Career Path--Computer Science and Information Systems, Business Management, Accounting and Finance, and Marketing--are research-based and aligned with predictions by government and employment agencies regarding career opportunities for the future. The United States Department of Labor predicts that employment in the business services industries will grow to 7.6 million by 2005. In California by the same year, fifty-nine percent of all employment will be in occupations represented by the four career paths in business education.

Far West Laboratory for Educational Research and Development is conducting the Career-Technical Assessment Program (C-TAP) for the Curriculum and Instructional Leadership Branch of the California Department of Education. The purpose of this program is to plan, develop, field test, and implement a performance-based student assessment and certification system for career-technical education. All C-TAP assessment components assess career-technical, academic, and generic workplace standards in an integrated format.

The Business Education Unit collects program data on an annual basis at the Business Education Management Conferences. The Annual Status Report includes information on personnel, enrollments, organizational/instructional strategies, graduation requirements, program certification, and new/expanded programs. The 1993-94 report indicated a slight increase in business education enrollments. A variety of business education courses were meeting A-F requirements. More importantly, the data indicated that many sites were implementing various components identified in California's reform thrust - Second to None.
Exemplary Programs


Certified Sites

American High School (Fremont) Business Education Department

Baldwin Park Adult and Continuing Education Business Education program

Brawley Union High School/Imperial Valley ROP Business Department

Hanford High School East Campus Business Technology

Highland High School (Bakersfield) Business Education program

Mission Valley ROP/Mission San Jose High School Merchandising/Marketing Program

North Valley Occupational Center (Mission Hills) Office Occupations Program

San Pedro/Wilmington Skills Center (San Pedro) Business Education Program

Contra Costa County ROP
El Cerrito High School Computerized Accounting

Contra Costa Co ROP/Hilltop Site Office Careers With Computer Applications

Contra Costa County ROP/Pinole Valley High School Site Computer Applications-Word Processing

Serrano High School (Phelan) Business Education Department

Sonoma Valley High School Business Education Department

Tri Valley ROP/Livermore High School/Granada High School (Livermore) Marketing Education

Turlock High School Business Technology Department
Recertified Sites

East San Gabriel Valley ROP
(West Covina)
Fashion Merchandising
Sweetwater High School/
San Diego County ROP
Business Education Department

San Marcos High School/
San Diego County ROP
Business Education Department


2. Business Education Integrated Curriculum Demonstration Programs

Arroyo Grande High School
Encinal High School
Escondido High School
Fresno High School
San Marcos High School
Silver Creek High School
Sweetwater High School
Valley High School
Westminster High School

Criteria for Integrated Curriculum Sites:

Integrated Curriculum
Business Education Career Path
Performance-based Assessment
Leverage Funding
Workplace Learning
Tech Prep Education
Powerful Teaching and Learning
Restructured High School
Technology
Health Careers Education

Professional Development

Professional development in Health Careers Education was offered in four separate categories. First, the teacher preparation credentialing program was offered to 35 teacher candidates in cooperation with the California Polytechnic University at Pomona. Included in the program are components on serving special population students, career path program models, and a variety of current teaching and learning strategies.

The second category focused on creating career paths through partnerships across the various education segments between the health care program licensing and certification boards and agencies with the health care industry. Of particular note was the third annual meeting, Beyond Workforce 2000: Health Careers Partnerships, that provided programs and content designed to create partnership models to serve students seeking to work in health care. A model partnership integration program designed around new health care work groups was initiated in North San Diego county that includes four health care providers, secondary schools, the ROC/P, community colleges and the University of California.

The third area of concentration included professional development and technical assistance for school districts wishing to implement a health careers pathway. The primary focus of the start up is the creation of integrated curriculum by interdisciplinary teaching teams. The information and accompanying Health Careers Pathway Getting Started Handbook was shared through statewide professional development programs and conferences and at school based events for more than 500 participants. Approximately 165 schools have expressed an interest and been given start up support for initiating a health careers pathway.

Last was professional development meetings convened for ROC/P and adult school supervisors and coordinators, on two occasions, to determine new program design for entry level preparation consistent with redesigned work groups currently in process by the health care industry. These new work groups are requiring new program configurations and responding course restructuring to assure that students will be prepared for employment in the health care industry of the future.
Curriculum Development

Curriculum development efforts resulted in the documents intended to support a health careers pathway interdisciplinary, workplace connected education program. To support this work and meet the current and projected health care industry workforce design, a Health Care Industry/Education Partnership Handbook was completed and distributed.

Other work in progress included: Model Curriculum Standards (MCS) for four levels; Exploration of Health Care, Introduction to Health Care, Preparing to Work in Health Care Level I, and Preparing to Work in Health Care Level II; and Model Curriculum Standards for nine service areas; Biotechnology, Dental, Diagnostic, Health Care Information, Medical Office, Nursing, Preventive, Support, and Therapeutic. These MCSs are designed from the National Health Science and Technology Business and Education Standards and Skills and are intended to provide a clear sequence of instruction with cumulative content and complexity as the program progresses.

To support integrated curriculum efforts consistent with the health careers path, interdisciplinary teams of health careers, math language arts, history-social science, and science teachers completed 20 action based projects for field test.

In cooperation with the Office of Statewide Health Planning and Development and the California State University, a Health Economics Unit on the effects of tobacco use was created and piloted.

Program Assessment

Area reviews of schools and colleges within the counties of Kern, Merced, Shasta, Sacramento, El Dorado, Placer, and Yolo were completed to provide an assessment of current program offerings compared with program need. Each review culminated in a report with recommendations as to new site career path implementation, current course update or deletion, and education and industry partnerships necessary for course articulation and industry alignment.

Promotion Of Partnerships

Industry and education partnerships have been extensive and fruitful. Partnerships have assisted with design of a health careers pathway that is aligned with the needs of the
health care industry and will result in an articulated sequence of instruction beginning in the middle grades and culminating at the point of departure at which students select to enter the health care workforce. These partnerships include collaboration with the national level American Hospital Association, American Society of Healthcare Human Resource Administrators, and American Health Care Association.

State level collaboration is being managed by the newly formed Health Care Industry Council comprised of 15 different major health care providers including: Kaiser Permanente, Hillhaven Corp., Sharp Healthcare, Unihealth America, Sutter Health, Pacificare Health, Catholic Healthcare West, Blue Shield of California, Care Enterprises, Blue Cross of California, Nova Care, Palomar-Pomerado Hospitals, FHP, Amgen Biotechnology, and University of California Medical Centers. Also on the council are representatives from all of the education segments both public and private, the Office of Statewide Health Planning and Development, the Industry Education Council, and the Business Roundtable. The purpose of the council is to create a credible, dynamic, and ongoing planning process which will project California's health care industry workforce needs through the year 2010. The data will inform the education community of the health care workforce opportunities and the accompanying preparation necessary for potential employee candidates.

Other partnerships with health care industry partners include participation in the annual Allied Dental Health Symposium to assist with the design of curriculum to serve the new dental community workforce, serve on the advisory committee sponsored by Miles-Cutler biotechnology laboratory to create a biotechnology curriculum beginning in grade 10, participation on the New Youth Apprenticeship council to design and support the four funded health care related Youth Apprenticeship models in the state, and partnerships with Sutter Health and the statewide funded Jobs For the Future project to create a Workforce Literacy model.

Education partnerships have been established through participation on the Intersegmental Coordinating Council, School Improvement Committee that is reviewing opportunities for course redesign while maintaining the University of California requirements for entry into the university. Other partnerships are focused on the integration between the health careers program and the various academic disciplines to create integrated projects and processes that support a fully integrated health careers pathway.

New partnerships have been forged with the middle schools through the creation of an advisory committee that is comparing the middle school Exploring Health Care model
curriculum standards with academic content to identify integration possibilities and accompanying interdisciplinary curriculum development and staff inservice for career path integration.

A notable outcome of the industry partnerships was the development of three levels of LAUNCH kits sponsored by Kaiser Permanente and distributed by the California Department of Education to every high school, middle school, and elementary school in the state.

Interagency partnerships have focused on creating programs that will encourage minority populations to enter and complete health careers professional preparation programs and to also consider teaching health careers programs as a possible career opportunity. A cosponsored Minorities in Health Care Professions and presentations at a variety of health care minority events underscored this effort.

Vocational Student Organizations

California Health Occupations Students of America (CAL-HOSA) leadership program memberships increased by 46.7% during 1993-94 to a high of nearly 1400 students. Added to the program this year were educational programs for students that were designed to increase their academic and leadership skills. These programs included team events, medical math, dental terminology, extemporaneous writing and speaking, and demonstration skill events.

Health care industry support increased to 16 corporate memberships that donate scholarships and other awards to student competitors. A state winners' workshop to prepare students for the national leadership conference was sponsored by the corporate members. Industry partnerships also included on-site technical assistance at local schools and support and assessment review during the state leadership conference.

Twenty potential chapter advisors attended an Advisor's Management Institute for professional development on the integration of leadership skills into the curriculum and methods for managing a HOSA chapter. Concurrently eight new state officers were prepared for their leadership responsibility as HOSA state leaders.
Research And Data Collection

Research and data collection resulted in the publication of several documents to support implementation of an interdisciplinary health careers pathway and alignment with the restructuring of the health care industry workforce. These documents included the Health Careers Pathway Getting Started Handbook that identifies the 14 critical components for career path success and the steps necessary for initiating a career path program, Health Careers Industry-Education Partnership Handbook that illustrates the role of each partner in forming a strong support team for student education and employment success, Model Curriculum Standards from which to design courses that meet the needs of both education and industry, and 25 Health Careers Information Cards for use by both counselors and students as they prepare the students education program of instruction to meet their individual career goals.

The data was collected through interviews with health care providers, document review, task force meetings, site visits, and meetings with local program supervisors and coordinators.

As a result of the research, data collection, and review, industry standards were created for four levels of instruction. The first course, Exploring Health Care, is intended for students in the middle grades; Introduction to Health Care is for students in the freshman or sophomore years; Preparing to Work in Health Care Level I is for the junior year; and Preparing to Work in Health Care Level II, for senior students. Health careers specific programs for California have been grouped into nine service areas from which programs can be designed. The nine service areas are Biotechnology, Dental, Diagnostic, Health Information, Medical Office, Nursing, Support, and Therapeutic. The service areas allow for a broader scope of preparation for first level workers in health care.

Exemplary Programs

Three programs were recognized as programs of excellence at Southeast Regional Occupation Program: Medical Assistant Front Office, Medical Assistant Back Office, and Hospital Occupations. These programs, beginning with self-assessment, revision as needed, and final program review by an outside evaluator, met the rigorous criteria required for program of excellence recognition. Of particular note was the dedicated and enthusiastic teaching staff, student achievement, and industry support.
Home Economics Education
(Home Economics Related Occupations)

Professional Development

Thirteen statewide, as well as 77 district, regional, and county professional development activities were conducted in 1993-94. More than 300 current and potential Home Economics Related Occupations (HERO) program instructors learned how to design and implement career paths, including coherent sequences of courses; developed curriculum and interdisciplinary instruction based upon Home Economics Model Curriculum Standards; addressed the needs of special population students; provided student leadership development activities as an integral part of the instructional program; expanded workplace learning experiences; established effective partnerships with business and industry; developed Tech Prep programs; and effectively recruited students and promoted programs. Seventy-five program instructors upgraded their occupational/industry knowledge and skills through internships and job shadowing experiences provided through professional development activities. In addition, fifteen instructors further developed their leadership skills through their attendance and participation in two leadership institutes. Outcomes of these professional development activities included the establishment and implementation of coherent sequences of courses which articulate Consumer Home Economics and HERO courses at 144 secondary program sites and establishment of coherent sequences of HERO and community college courses through 119 formal agreements. The majority of the coherent sequences of courses were found in the career path clusters of Child Development and Education; Fashion Design, Manufacturing, and Merchandising; and Food Service and Hospitality.

Promotion Of Partnerships

During the 1993-94 program year, eight task force groups developed, field tested, and validated model curriculum standards in eight career path clusters related to important California industries including Child Development and Education; Consumer Services; Family and Human Services; Fashion Design, Manufacturing and Merchandising; Food Science, Dietetics, and Nutrition; Food Service and Hospitality; Hospitality, Tourism, and Recreation; and Interior Design, Furnishings, and Maintenance. More than 450 representatives of education, business, industry, private and public agencies, parent and student groups were involved in the development and validation of model curriculum standards for the eight Home Economics Career Paths. Industry
State Leadership and Professional Development

associations/organizations such as the California Restaurant Association and California Hotel and Motel Association not only participated in the development of standards, but also assisted by presenting at major conferences and institutes held during the year. Partnerships were also forged with other state agencies, such as the California Trade and Commerce Agency, to develop instructional programs and professional development activities for instructors of programs in new and emerging occupations/careers. The Home Economics Education Unit Program Manager established and co-chaired a statewide committee on hospitality and tourism in cooperation with the California Director of Tourism. Five companies and professional organizations provided scholarships and awards for FHA-HERO (Future Homemakers of America-Home Economics Related Occupations) competitive activities designed for HERO program students.

Program Assessment

Fourteen Home Economics Related Occupations programs participated in the Career-Vocational Education Program Improvement and Certification System which measures performance against nine quality criteria. Two Child Development and Education programs completed the three-phase process which involves a self-study, implementation of a program improvement plan, and a site-validation visit. The remaining sites continue to implement program improvements to achieve the standards identified in the quality criteria. Fourteen Child Development and Education programs field-tested the portfolio, project, and scenario assessment components of student certification as part of the Career-Technical Assessment Project conducted jointly between the Career-Vocational Education Division, California Department of Education, and Far West Laboratory. The field test included holistic scoring and establishment of benchmarks for student achievement for the Child Development and Education Career Path Cluster at basic, proficient, and advanced levels.

Curriculum Development

A Career Path Guide and Model Curriculum Standards document was prepared for printing and dissemination. This resource is intended to serve as a basis for coherent sequences of courses, curriculum development, and measurement of student achievement for the eight Home Economics Career Path Clusters. Throughout the developmental process, input and validation was sought from instructors and related business and industry representatives to ensure that the standards reflect current
industry practices. To facilitate the integration of home economics and academic methodologies and content, these industry-validated standards were cross-referenced with academic frameworks by English-language arts, history-social science, mathematics, and science instructors. Work was begun on a resource guide outlining the steps in planning and implementing interdisciplinary instruction which will assist approximately 31 existing and other potential interdisciplinary teams to develop academically substantive and industry-related curriculum and contextual learning experiences.

Support of Vocational Student Organizations

More than 500 students enrolled in Home Economics Related Occupations programs participated in leadership development and competitive activities. Approximately 30% of these participants reflected the culturally diverse student population found in California; 12% of participants were males. Two new competitive events for the Food Service and Hospitality and the Fashion Design, Manufacturing, and Merchandising Career Paths were implemented to increase student participation as well as to strengthen FHA-HERO activities as an integral part of the instructional program.

Research And Data Collection

The course codes and descriptions used in the California Basic Education Data System to collect information on home economics related occupations courses were revised and updated to reflect the eight career path clusters. In the future, improved data will be available to respond to questions and to prepare reports.

Enrollment data indicates that 43% of the students taking a course in a Home Economics Related Occupations career path were male. No information was available on the ethnic composition of the students.

Exemplary Programs

Two Home Economics Related Occupations programs--both in the Child Development and Education Career Path cluster--were certified based upon the nine established criteria for programs of excellence: Curriculum and instruction; leadership and citizenship development; practical application of occupational skills; qualified and
competent personnel; facilities, equipment and materials; community, business, and industry involvement; career guidance; program promotion; and program accountability and planning.

A description of two exemplary programs follow: The "Careers With Children" program at Carpinteria High School/Santa Barbara County Regional Occupational Program was recognized for the sequence of courses which builds upon the Consumer and Home Economics core foundation; the provision of college credit for program completers who transition to the Early Childhood Education program at Santa Barbara City College; the operation of an on-campus, licensed child care facility; high placement rate; and 33% male enrollment. The "Child Development and Education Program" at the Southeast Regional Occupations Program was recognized for serving high school and adult students from three school districts; providing onsite job experiences at preschools, child care centers, and elementary schools as well as at an intergenerational facility that includes infants; the use of authentic assessment; and the articulated, sequence of courses connecting the secondary program with two local community college programs in Early Childhood Education.

**Industrial and Technology Education**

**Professional Development**

Statewide Industrial and Technology Education (ITE) Unit leadership in professional development for 1993-94 included activities in Gender Equity and Professional Seminars, Institutes, Workshops.

**Gender Equity Office.** As a result of gender equity participation at the ITE Unit's 1993 summer staff meeting, a series of events occurred to promote the development of gender equity strategies by teachers attending preservice and inservice activities.

Through this participation, ITE staff provided inservice to teachers from a variety of disciplines, along with administrators, counselors, and other providers to modify existing or add new instructional activities affecting 40,200 students.
State Leadership and Professional Development

Professional Seminars, Institutes, Workshops

Statewide ITE Unit leadership in seminars, institutes, and workshops included both inservice and preservice activities for vocational and academic teachers working with vocational students.

Inservice

Professional development inservice involving ITE Unit staff included both staff and field activities (technical assistance):

ITE staff inservice for 1993-94 addressed a wide variety of topics including but not limited to Total Quality Management/curriculum, Leadership Skills, and Integrated Curriculum. Staff inservice addressed both ongoing technical support services to teachers and administrators, as well as group inservice support to the field.

Large and small group field inservice activities were provided in 1993-94 on local, regional, and statewide bases. These activities were designed for vocational and academic teachers, counselors and administrators providing programs for vocational students.

Field inservice (technical assistance) activities promoted relevant teacher and administrator outcomes across a statewide participant involvement exceeding 3,000 providers. Outcomes resulted in:

- Increased awareness of teachers regarding new and emerging technologies---promoting applications of advanced technology education systems, strategies, and processes in curricula.

- Increased ability of individual teachers to work together in teams---an integral first step toward building integrated curriculum teams at a school site.

- Increased understanding of integrated curriculum concepts and related implementation tools and strategies.

- Personal (teacher) appreciation for the intra-and inter-personal challenges associated with integrated curriculum team building.
Preservice

Preservice professional development activities for 1993-94 were essentially characterized by direct involvement with teacher education institutions and related unit staff efforts:

- Ongoing collaboration with the California State University at Los Angeles, maintained a strong working relationship for the preparation of Industrial and Technology Teachers.

- CSULA and other institutions have been contacted in a consistent and ongoing effort to monitor and encourage teacher training institutions and practitioners to develop a model curriculum for the preparation of Industrial and Technology Teachers.

Related outcomes regarding teacher education, preservice activities include:

- Increased, shared understanding (university/unit) of the broad-based, dynamic concept of technology education.

- Increased, shared sensitivity for existing and emerging statewide as well as national technology education initiatives.

- Cooperative collaboration regarding credential trends and issues.

- Cooperative discourse concerning a $40 million facility renovation project at CSULA in regard to technology education and related preservice and inservice teacher education environments.

- Continued and improved curricula and delivery system opportunities for students pursuing a Bachelor of Vocational Education Degree.

- Strengthening and defining of viable teacher education delivery alternatives.
State Leadership and Professional Development

Related Preservice

Traditional preservice populations have been affected over the past ten years by teacher education program slowdowns and shutdowns. Nontraditional preservice populations have attracted the attention of many teacher educators in the state over the past years.

Outcomes in the area of related preservice for 1993-94 include:

- Increased interest in the development of industrial and technology education preservice programs for women.
- Heightened interest in the promotion of industrial and technology education teacher credentialing opportunities for individuals with baccalaureate degrees who are seeking alternatives to employment in the industrial sector.
- Development of a California Vocational Industrial Clubs of America plan of action which emphasizes both leadership development and occupational skill development.

Curriculum Development And Dissemination

Statewide ITE Unit leadership in curriculum development and dissemination for 1993-94 included activities such as Industrial and Technology Education Program Continuum and Curriculum Standards; Supplemental Handbooks; New and Emerging Technologies; and Strategies for Special Populations.

Industrial And Technology Education Program Continuum And Curriculum Standards

The planning, development, validation, and refinement of the Model Curriculum Standards, Program Framework, and Process Guide for Industrial and Technology Education in California took place over a five-year period and involved over 2,000 representatives from all educational levels including colleges and universities and business and industry. The process continued in 1993-94 with the effort reflected in a new edition.
A renewed curriculum validation and refinement process addressed industrial and technology education curriculum standards, with a shift in standards emphasis from product-based outcomes to process-based outcomes.

Industrial and technology education program quality criteria were reviewed and rewritten, providing a model and strategy for the improvement of school site programs.

Systematic changes to quality criteria were made to the industrial and technology education continuum.

The first working draft of the 1993-94 document was completed and given a limited distribution in November.

The third working draft completed, in late January/early February, was distributed at the CITEA annual conference in Riverside. Over 600 copies were distributed at this inservice to industrial education and academic discipline teachers, as well as administrators and school counselors.

Increased awareness in teachers across clusters and grade levels of the interrelatedness of framework standards, authentic (student) assessment and program quality criteria, and state and national initiatives (eg; "SCANS" and "Second to None").

Increased participation and interest of business and industry partners in the development of statewide curriculum standards.

Increased awareness of teachers regarding diverse learning styles and cultures of students.

Increased understanding of interlinking program delivery systems (tech prep, tech core, and exploring technology education).

Participation with members of a unique task force of C-VE staff--one each from the five C-VE program units: agriculture, business, health careers, home economics, and industrial and technology education, over a yearlong developmental period to develop a C-VE Frameworks.
State Leadership and Professional Development

Program Assessment

Statewide Industrial and Technology Education Unit leadership in program assessment for 1993-94 included Authentic Assessment and Program Certification.

Authentic Assessment

- Unit staff cooperated with and attended a series of meetings sponsored by the Far West Laboratory involving ITE teachers participating in the authentic assessment projects field testing activity, leading to insight into problems/successes of projects in the classroom.

- Construction technology teachers participated in one of two C-TAP thrusts: (1) student portfolio, and (2) combined student portfolio, project, and written scenario.

- Unit staff communicated with Far West personnel on a troubleshooting basis and with project (teacher) participants.

- There was increased awareness of need to develop and implement a student certification assessment system for each of the career path clusters within the ITE program area. Far West Laboratory is conducting the project for the Career-Vocational Education Division, California Department of Education.

Program Certification

- Unit staff have been actively engaged in program certification activities statewide.

- An updated version of the strategies manual for Program Improvement and Certification was developed.

- Presentations on Program Improvement and Certification were presented at a variety of regional and statewide inservice functions.

- Certification packets were supplied to interested schools.

- Technical assistance was provided to programs involved in certification activities.
State Leadership and Professional Development

- Increased awareness of Program Improvement and Certification process was obtained through inservice for teachers, administrators, and business and industry representatives.

- Certified programs successfully completed the program improvement process.

- Technical assistance was provided to Far West Laboratory in regard to program certification.

Promotion Of Partnerships

ITE Unit staff were actively engaged during 1993-94 in the promotion of partnerships among education, business, labor, community-based organizations and governmental agencies:

- Field participants were organized to establish a new statewide professional organization "Technology Core Teachers Association" (TCTA).

- Increased awareness of teachers and administrators for business/industry linkages was obtained.

- Development of advisory groups/partnerships on school sites was promoted.

- Increased participation of business/industry representatives on regional and statewide inservice programs was obtained.

- Increased understanding of standards and Career Paths among industry leaders was achieved.

- Monitoring of national standards was continued.

- There was increased involvement of business/industry representatives in the review and validation of Integrated Performance Activities.
Support Of Vocational Student Organizations

Statewide ITE Unit leadership in support of vocational student organizations for 1993-94 included activities listed below:

- Increased number of VICA advisors and co-advisors and chapters in California.
- Increased numbers of VICA students participating in regional skill olympic competitions.
- Increased participation of business and industry representatives in VICA leadership and skill activities statewide.
- Increased teacher and student awareness and participation in personal professional development program.
- Increased interest in using the VICA Professional development activities in the leadership portion of the Program Improvement and Certification process.
- Provided inservice in Total Quality Curriculum, a comprehensive total quality management program prepared under the funding of the national VICA office.

Research And Data Collection

Statewide ITE Unit leadership in support of research and data collection for 1993-94 included the following:

- Increased understanding of teachers, administrators and counselors regarding importance of state and national initiatives which impact ITE curriculum.
- Increased awareness of Industrial Technology educators that schools must shift to an outcome-based approach that meets the demands of an information-based, global economy.
- Increased awareness of instructional strategies to accommodate the diverse learning abilities and styles present in today's classrooms.
State Leadership and Professional Development

- Developed and supported teams of ITE and academic instructors to create instructional experiences and outcome-based projects that encourage active involvement of students in their learning in order to carry out activities commonly conducted in their selected career path cluster.

- Increased awareness of methodologies that support integration and acquisition of the career-technical, academic, and career performance standards needed for student certification and success in the high performance workplace.

- Increased awareness that Work Experience Education (WEE) offers another opportunity for structured workplace learning.

- Promoted community involvement projects that incorporated vocational student organization activities to provide a vehicle for students to integrate academic and ITE learning in a real world setting.

California Community Colleges

Overview

The California Community Colleges used a variety of leadership projects to assist eligible participants in the areas of professional and curriculum development, partnership building, student support services (especially among minorities), and assessment and accountability.

Leadership grants were used to support the priorities of the State Plan and the Carl Perkins Act including:

- Curricula development models designed to encourage the integration and sequencing of academic and vocational education curricula.

- Professional development activities that urge the use of curriculum and instructional strategies that reflect state-of-the-art programs and workplace needs, and promote critical thinking, problem solving, leadership and academic skill attainment with a particular emphasis on inservice and preservice training for minority faculty.
Partnership models, consortia and collaborative efforts that increase linkages between secondary and postsecondary educational institutions, academic and vocational educators, and among education, business, industry, labor, and the community.

Student support structures and services developed to increase student access and activities which support participation in student organizations.

Program assessments that encourage evaluations that measure performance against developed standards and measures, uniform data collection and evaluation designs that determine the efficacy of program improvements.

Distribution of Title II-A - State Leadership Funds

Curriculum and Professional Development

A significant portion of the funds for state leadership, 47 percent, were focused on curriculum and professional development. An estimated $1.4 million dollars was spent to improve curriculum and provide staff development opportunities for educators.

Curriculum Development

Thirty-four projects were funded to improve and develop new curriculum. An estimated $900,000 was spent on curriculum development and local advisory committee activities.

Curriculum enhancements or augmentations were made to an estimated 20 fields of study. Below is a partial list:

- Telecommunications
- Computer-Aided Manufacturing
- Biotechnology
- Business
- Engineering
- Automotive
- Electronics
- Computer Graphics
- Aviation
- Interactive & Multimedia Technologies
- Emergency Medical Technicians/Paramedic
- Administration to Justice
- Interior Program
- Hospitality/Restaurant Management
- Heating, Ventilation, and Air Conditioning

In addition, curriculum improvements were made in the areas of workplace literacy, career development and cooperative work experience. Educational Technology, such as teleconferencing and interactive video display PC training, was used to improve the delivery of instruction.

Twenty-nine projects have advisory committees that provide ongoing guidance and program review. Many have developed collaborative strategies for including business, labor, secondary education, four-year colleges, and the community in the development of curriculum including the establishment of industry standards and criteria.

Several curriculum models were developed based on input from regional consortia. For example, the Bay Area Consortium on Biotechnology/Education developed a master plan for biotechnology curriculum which included biotechnology-related curriculum for high school science, college general education, and college biology majors. A policy statement was drafted for articulation of community college courses to a four-year university.

An Emergency Medical Technician (EMT) Statewide Task Force was established to develop a model curriculum. Major stakeholders in the Emergency Medical Systems (EMS) worked in collaboration to determine curriculum content. The stakeholders included community college educators, Regional Occupation Program educators, fire service educators, private industry, and EMS agencies. Curriculum products also included regulations and standards of national and state regulatory bodies.

Exemplary Curriculum Models

The Technology Core Teachers Association and the several advisory committees in the area of Industrial and Technology Education joined together in the greater Sacramento Metropolitan Area to develop an integrated curriculum model consisting of Technology Core and Technology Majors. The model includes sequenced curriculum and student career paths. Curriculum standards and program frameworks were developed with the
guidance of a Subject Matter Professional Association (SMPA). The SMPA was formed around a Technology Core cluster. The model also embraced the principles contained in *Second to None* and the *Thinking Curriculum*. CAVIX, a data information base, was used for electronic communication with advisory and technical assistance teams.

The Los Angeles Mission College Engineering Department faculty collaborated with faculty from two feeder high schools which resulted in joint curriculum planning and course design. Emphasis was placed on the integration of math and computer technology in Computer Assisted Drafting (CAD) and the sequencing of skills activities (in the form of high school and college courses) that are needed for related careers in engineering, architecture, graphics, and art. A high school course in plane geometry and updated instructional materials was developed. Work-based learning activities and blueprint reading were added to the drafting curriculum of the high schools. JTPA funds were used to provide support services to students which enabled them to graduate and immediately enroll at Los Angeles Mission College to continue their education.

**Professional Development**

Thirty-one projects have focused resources on staff development within various disciplines. An estimated $700,000 was spent on teacher education including, but not limited to, the following:

- Certification of 65 instructors in Novell
- Update of computer technical skills for 506 business faculty
- Training on the use of faculty networks to strengthen the ties between industry and education (e.g., CAVIX, Pacific Bell Connection, Internet and other services)
- Business Leadership Institutes
- Release time to review the literature and survey curriculum at colleges and universities to update curriculum in Computer-Aided Manufacturing
- Training of Machine Tool Technology faculty by local industries in computer-aided manufacturing technology.
State Leadership and Professional Development

- Internships and training institutes for Agriculture and Natural Resource faculty
- Training in statistical process control to assist teachers to identify causes related to retention, testing, and class weakness and employ strategies for program improvement.
- Staff development activities in Interiors Program curriculum for Consumer Home Economics faculty.
- Training of Cooperative Work Experience Faculty and job placement officers on Tech Prep.

Curriculum and professional development activities are also reflected in two regional initiatives: Workplace Learning Resource Centers and the Regional Health Occupational Resource Centers.

- Workplace Learning Resource Centers

Ten regional Workplace Learning Resources Centers (WpLRC) have been established throughout the state and have coordinated activities with 23 community-based organizations (CBOs) to deliver a variety of specifically integrated literacy and economic development services designed to increase productivity, facilitate technological innovation, and promote general economic development. The centers have collaboratively worked with CBOs to provide such services as occupational-specific skills assessment, English-as-a-Second Language, analytical and problem-solving skills and team work, which will successfully translate learning into improved job performance. Inservice training sessions are held for college faculty to increase their capacity to deliver workplace learning programs and services to business and industry.

Collectively, the WpLRCs served an estimated 1,666 students. All the centers meet regularly with advisory committees to develop curricula models and conduct program reviews to determine the ongoing need for program improvements and to offer a wide variety of staff development activities.

- Regional Health Occupational Resource Centers (RHORCs)

Six RHORCs designed and implemented curriculum and professional development programs to coordinate health occupations throughout various regions of the state.
Faculty and administrators have been brought together to look at opportunities for program improvement and partnerships with industry. Workshops and training institutes were held on Tech Prep, student access for special populations, educational theory to improve teaching for different learning styles and increased teaching effectiveness for health occupations educators.

The RHORCs served an estimated 32,713 students. In addition, the centers also serve as a hub for student information and guidance pertaining to health occupational training within the community colleges, ROPs, and Adult Schools. One of the RHORCs, Central Region, initiated Health Academies at local high schools in Fresno, Alisal and Salinas. Model articulated curriculum was developed to meet the minimum prerequisites of the majority of allied health programs at Fresno City College. Students were able to obtain pre-enrollment status into a chosen allied health program at the conclusion of their senior year.

The Los Angeles/Orange RHORC developed the following continuing education courses for CNA recertification:

- Pain Management
- Precautions in Select Infection Disease
- Everything CNAs Want To Know about Legal and Ethical Aspects of Patient Rights
- A New Look at Nutrition
- Injuries in the Workplace
- My Patient is Dying
- Behavior Modification - Making Friends with Difficult Patients and/or Co-Workers
- Getting Along
- Is She Crazy - or What?

Other curriculum and professional development activities are represented in the sections on Single Parents (II-B), Gender Equity (II-B), CBO (III-A), CHE (III-B), and Tech Prep (III-E).
Exemplary Professional Development Project

Computer Managed and Aided Instruction (CMAI) Project

The measurement of this project's success appears to be demonstrated by: a) the high return on investment (the total matching fund value for a 12-month period amounted to a total of $1,153,499 for a return of $5.80 for each dollar invested in the CMAI project by California education), b) the large number of teachers receiving inservice training, c) the number of students affected, and d) the enthusiastic support and financial contributions of industry participants.

New lead directors were trained and, in turn, developed new evaluation instruments in their areas. Fifty-seven separate inservice workshops were held around the state by CMAI on computerization. A total of 951 secondary and community college instructors received over 2,417 hours of professional development and inservice training. Some 435 community colleges and 603 high school/ROP Industrial and Technology and Integrated Academic-oriented instructors and administrators were mailed the 1994 CMAI Software Users Guide.

Partnership Development

South Bay Regional Public Safety Training Consortium

Five Partnership Development Models have used a variety of collaborative relationships and strategies to build community partnerships aimed at increasing communications and the coordination of resources among education, business and industry, and the community. Each partnership was able to demonstrate that, through collaborative efforts, their capacity to leverage resources was improved.

- Exemplary Partnership Development Project

One of the exemplary projects is the South Bay Regional Public Safety and Training Consortium. Two community college district programs were merged through a Joint Power Agreement (JPA), the Evergreen Criminal Justice Training Center and the Gavilin Justice Training Center. The project is being extended to the South Bay Coastal region of California. Over 200 public safety agencies have joined, and nine community colleges are negotiating a JPA to create the South Bay Regional Safety Training Center.
This is the first multi-community college district JPA in California to bring together public safety on a regional basis to conduct comprehensive curriculum analysis to identify career paths and industry standards for four disciplines in the field of public safety: Law Enforcement, Corrections, Fire Technology, and Hazardous Material.

Student Support Structures And Services

One project was funded to provide leadership training to the Vocational Industrial Clubs of America (VICA) student leaders in the area of industrial education. There are a total of 18 colleges actively involved with California VICA enrolling 273 students. During the 1994 spring conference, 19 students from eight community college districts were awarded gold medals for their leadership in welding, electronics, collision repair, architectural drafting, air conditioning and refrigeration, automotive services technology, technical Computer Assisted Drafting (CAD), precision machining technology, and automated manufacturing.

Four major meetings were held with a total of 31 postsecondary instructors and 18 business representatives. One of these meetings was to introduce the new Total Quality Curriculum (TQC) patterned after the late Dr. Deming's work in statistical analysis and management.

Program Assessment And Accountability

An estimated 22 percent of the funds were expended on program assessment and accountability. A variety of assessment strategies were used to determine the need for curriculum and program improvement. Strategies included review of the literature, peer review, surveys and questionnaires. The following are examples:

Shaping The Future Toward the Year 2000

Data generated from subject area forums, a strategic planning retreat, and a statewide conference were used to determine curriculum and program needs in five subject areas: 1) Fashion, 2) Interiors (Environment, Design, Merchandising); 3) Life Management; 4) Life Span (Child Development, Family Studies, Gerontology) and 5) Nutrition and
State Leadership and Professional Development

Food. Program priorities, findings and future trends were published in two reports entitled:

- Program Area Contributions to: *Individual, Home and Family Improvement of Life Management, Parenting and Consumer Skills*,

These reports helped to shape future statewide planning efforts for Consumer Homemaking Education in California.

Health Occupations

Trend analysis was conducted by the Regional Health Occupations Resource Centers to identify employment trends in the health occupations. One of the centers, for example, identified that the Emergency Medical Technician (EMT) curriculum was not in alignment with state certification standards. Review of state certification examination results showed a high percentage of students failing the exam. A review of the literature and a DACUM job analysis on EMT was conducted. Based on the information generated from the literature review and job analysis, a survey instrument was designed and sent to EMT health professionals and businesses to determine if the job analysis was correct. Outcome data from the survey instrument was used to develop and distribute a new EMT curriculum for use statewide.

Business and Industry Training Needs

A statewide data base on industries training needs and job training grants has been established and maintained by ED>Net. All 71 community college districts contribute to the data base which provides an overview of the Community Colleges economic development and workforce preparation activities with business, industry, government and labor. The project produced a summary report which provides comprehensive documentation of the range of the community college degree and certificate programs that are available to employers statewide. In addition, it has summary information on programs that were established to meet employer training needs.
Environmental Hazardous Materials

A survey was conducted to determine the need to improve the Environmental Hazardous Materials Technology Program. Thirty-three agencies were surveyed to determine the need for reducing unnecessary duplication of regulatory requirements by government agencies and to recommend standardization of definition and uniform application of the law. A curriculum was developed that provides cross-training of inspectors to serve as multi-agency representatives. The information is being used by the regulatory agencies to provide solutions toward a more uniformed system of regulations.

A Statewide Health Care Policy Council was established to develop and influence policy to support a health care human resource plan directly linked to the workforce development strategies emerging from state leaders. The mission of the Health Care Council is to support and promote the development of an education/training and employment system that ensures a continuum of school-to-work experiences, and allows California workers access to the education that meets the human resource needs for health professionals by the year 2000. The ongoing work to the Health Care Council will be the compilation of data that allows for cost/benefit analysis of current health care education programs and trends for licensure and accreditation.

A report, California Community Colleges: The Nexus of Workforce Development was produced. The report provides a summary of activities chronicling the efforts to increase California’s business awareness of the role of community colleges in workforce development. The report provides a directory of companies and related organizations involved in this effort.

Other

A profile of industry representatives was developed to provide guidance to the Economic Development and Vocational Education Division with regard to new and emerging technologies. Individuals selected represent "cutting-edge" thinking regarding the future direction of business and industry in California.

Evaluation and follow-up studies on Tech Prep can also be found in the section on Tech Prep.
Summary Of Aggregate Data

In 1993-94 $3,180,187 was awarded for Statewide Leadership to provide curriculum and professional development activities, research and data collection and local advisory committees.

A total of 91,577 students were served: 41,870 females and 49,707 males. Ninety-three new programs were added, 81 were expanded, and 12 were deleted.
SECTION VIII

COMMUNITY-BASED ORGANIZATIONS (CBO)

TITLE III-A VOCATIONAL SUPPORT PROGRAMS

California Department Of Education

A non-competitive process was used to provide continued funding for vocational education support by community-based organizations grants for the 1993-94 FY. Forty-seven eligible recipients each received $10,045 to serve at-risk students in partnership with 93 community-based organizations. Although awardees received 50% less monies than the previous year, the number of students served continued to increase.

The number of California students who are at-risk with multiple disadvantages continues to increase each year, creating demands on already over-extended school and CBO services, manpower and resources. These severely economically and educationally disadvantaged youths, ages 16 through 21 are school drop-outs, teen parents, disabled youths, limited English proficient youths, and an increasing number of youths who are part of the criminal justice system.

As a result of reduced funding, awardees worked very hard to expand collaborative efforts with community groups. This endeavor made provision for an increased number of targeted students to receive support services allowing them to enroll and successfully complete vocational education programs or entry-level employment.

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Eligible Recipients (LEA's)</th>
<th>Community Based Organization (CBO's)</th>
<th>Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>20</td>
<td>30</td>
<td>1,456</td>
</tr>
<tr>
<td>Urban</td>
<td>27</td>
<td>63</td>
<td>2,240</td>
</tr>
<tr>
<td>Grand Total</td>
<td>47</td>
<td>93</td>
<td>3,696</td>
</tr>
</tbody>
</table>
Exemplary Programs

The Mission Valley ROP/C Job Track Program

Through a tremendous collaborative effort initiated by the Mission Valley Regional Occupational Center/Program (ROC/P) and more than 30 CBOs and community agencies, an electronic network project was created that provides a broad range of services that address the multiple and complex problems of the targeted youth. As their basic needs are met and self-esteem increases, the students enroll in vocational education classes. Upon successful completion of vocational training and workplace learning experiences, students are followed up to ensure successful transition to employment and/or continuing education. The key elements of the program include:

1. Outreach and recruitment through the CoordiNet agencies.
2. Referrals and follow-up to necessary support services.
4. Vocational/personal guidance and counseling.
5. Prevocational basic skills improvement/GED prep.
6. Life skills and job readiness classes.
7. Vocational education programs on several sites.
8. Job development and job placement services.
9. Affordable housing program/housing scholarship program.

This group evolved from the original SOLO Network established in 1988. The project is currently sponsored by TCCC. The network organizations also have many business connections in the community that have been valuable in assisting on advisory boards, in offering internship/job placement opportunities to students, and responding to special requests for assistance.

California Community Colleges

Introduction

The California Community Colleges funded 19 CBO projects to enhance coordination efforts between industry and educational institutions on both the regional and local level. The purpose of these funds was to provide support services correlated instruction to improve student retention in educational programs and/or enable students to successfully transition to work.
All projects that were funded with CBO funds had local advisory committees. The committees were comprised of business and industry representatives to facilitate curriculum development activities which met industry standards.

The objectives of the CBO funds were to:

- Establish consortia that would provide programs and services such as assessment, guidance and counseling, employability and personal skills development, basic skills development, and job development activities with business and industry.

- Establish at least one consortium to develop a high quality program for reducing school dropouts that can be replicated.

- Establish one consortium to serve poor minority teen parents in an urban area.

- Establish consortia to conduct job development activities for predominately single parents ages 16-21 who were severely disadvantaged.

- Establish consortia to provide assessment and career guidance; English language, math, science and career technology skills to create bridges for teen parents and GAIN participants who need strong support to make the transition to further education, and to build partnerships with business and industry and community groups.

- Increase the number of students who return to school and who successfully make the transition to work.

- Establish, improve, expand and coordinate programs and services for out-of-school youth that support their continuing education and transition to work.

**Funded Projects**

Of the 19 projects funded, 10 were Workplace Learning Resource Centers and 6 were Regional Health Resource Centers, (RHORCs). The remaining projects included Partners in Employment, Computer Adaptive Design and Drafting, and a project in Heating Ventilation and Air Conditioning.
Community-Based Organizations (CBO) – Title III-A Vocational Support Programs

The Workplace Learning Centers and RHORCs account for the major investment of CBO resources and are discussed separately below. Each discussion addresses the categories funded and activities involved in each category.

Workplace Learning Resource Centers -- Ten regional Workplace Learning Resource Centers have been established throughout the state and have coordinated activities with 34 community-based organizations to deliver a variety of specifically integrated literacy and economic development services designed to increase productivity, facilitate technological innovation, and promote general economics. They have collaboratively worked with CBO's to provide such services as occupational-specific skills assessment, English-as-a-Second Language classes, analytical and problem-solving skills and team work, which will successfully translate learning into improved job performance.

The Workplace Learning Resource Centers were allocated $299,996 of the $559,996 of the CBO funding available.

The majority of the funds were spent for counseling/assessment activities and curriculum development.

A total of 1,666 students were served of whom 826 were female and 840 were male.

Counseling/Assessment activities included providing career search and job seeking skills to youth and adults, bilingual counseling services, employment counseling/assessment, career preparation, marriage and family counseling, skills and values to enter adult life and job search strategies.

Recruitment activities targeted non-traditional students for non-traditional careers; career fairs for young women enrolled in middle and high schools to stimulate interest in mathematics, sciences and technology; non-traditional career fairs for Latina young women; programs for pregnant teens; and public forums to disseminate information regarding support services.

Curriculum development activities included English and citizenship examinations; ESL/Literacy and English classes; basic math, writing skills, parenting classes; and drug and substance abuse prevention. Curriculum was developed in the areas of business vocational training, employment planning, economic development, and health.

Research/data collection activities provided services to collect and compile business data on grants, loans and opportunities, job development, and job listing services. The
Community-Based Organizations (CBO) -- Title III-A Vocational Support Programs

information gleaned from this activity served as a data-base for a clearinghouse to the business community.

Tutoring activities were in the areas of literacy (reading, writing, math, phonics and spelling), skills and values to enter adult life, vocational ESL classes and preparation of men and women to re-enter the workforce.

Regional Health Occupations Resource Centers -- The RHORCs were funded for $210,000 (35,000 per center). The majority of the funds were used for extensive outreach and counseling activities.

A total of 32,713 students were served of whom 18,798 were female and 13,915 were male.

Curriculum development activities included workshops for faculty to enhance their skills in teaching strategies designed for adult learning, critical thinking and ethics. The subject areas included, health, basic math, English, writing skills, English as a Second Language, parenting classes, drug and substance abuse prevention, citizenship classes, and employment training. Teaching methodologies were reviewed and curricula were developed and modified to meet the needs of changing populations.

Baseline data were compiled regarding college health programs indicating the availability of specific courses, health occupation programs, and occupational wages. These data were distributed to special population students and community organizations. Tracking of inquires regarding health occupations was helpful in determining local and regional responses to emerging program needs.

Professional development workshops for counselors of high risk students were conducted. Counselors were oriented to the cadre of emerging health occupations and presented with opportunities for job shadowing. Automated interpretation of the content of presentations in language of origin was provided for parents of high risk students and young adults at community meetings. This has been helpful for parents dealing with gang related incidents by increasing the parent's options of behavioral interventions and increasing their utilization of community resources.

Direct services to students included extensive recruitment and monitoring. Youth workshops with a variety of health occupational representatives were available for high school students and were provided on a regional basis. Mentorship programs for interested students were developed within the field of health occupations. In addition,
direct services to students included an extensive undertaking to update counseling materials and videos for high school and community college counselors and students.

The RHORC's continue to impart to interested parties the Model Curriculum for Certified Nurse Assistants (CNA) as well as the Directory for Health Occupations. The centers offered "Train the Educators Institutes" and other staff development activities to assist faculty in attaining the knowledge and skills needed to develop curriculum. Instructional strategies for meeting the challenges of a diverse student population will assist faculty in teaching critical thinking, problem solving and leadership skills.

The Model Curriculum for Home Health Aides Project is providing a curriculum for home health aide education based on California requirements for use by community colleges, ROP's, and adults schools.

*Partners in Employment* -- This project developed a bridge course for students at a job site training program. This course taught students those skills necessary to be successful in subsequent college drafting courses.

*Computer Adaptive Design and Drafting* -- This project provided job shadowing experiences and career guidance for youth at risk in the field of computer adaptive design and drafting.

*Heating Ventilation and Air Conditioning* -- This project developed a college program to meet the community needs for trained technicians for heating and air conditioning repair. Twenty-five students were recruited and completed the program.

**Summary**

Partnerships between community colleges and CBO's enabled colleges to respond to local needs by creating high tech programs and innovative groupings of programs and services. In addition, outreach, guidance, assessment, education and work skills were provided for disadvantaged adults including single parents and dislocated workers.

These programs served a total of 34,554 students: 19,689 females and 14,865 males. Sixty-seven CBOs were included in these activities. Of the 19 grant recipients 14 were in urban areas and 5 were rural areas. The majority (64 CBOs) were located in urban areas and balance (3 CBOs) were in rural areas.
SECTION IX

CONSUMER & HOMEMAKING EDUCATION

Secondary

Number Of Students Served

California Consumer and Homemaking Education (CHE) programs served 117,126 students in grades 9-12 during the 1993-94 program year. Approximately 75% of the students served reside in economically depressed areas. The accomplishments described below apply to both depressed areas and non-depressed areas.

Coherent Sequences Of Courses

Over 165 Consumer and Homemaking Education programs have implemented coherent course sequences consisting of a two-year comprehensive core and one or more specialized content area courses that provide a foundation for career paths in at least one of the eight Home Economics Career Path Clusters: Child Development and Education; Consumer Services; Family and Human Services; Food Science, Technology, and Dietetics; Food Service and Hospitality; Hospitality, Recreation, and Tourism; and Interior Design and Maintenance. Forty-six percent (46%) of these programs are sequenced with a Home Economics Related Occupations program, while 28% are components in a sequence that leads to postsecondary education in community colleges or four-year colleges/universities.

Professional Development Activities

Nineteen statewide and over 50 district, regional, and county professional development activities were conducted to support improvement of CHE programs. Over 1,500 CHE instructors developed skills to implement coherent sequences of courses; provide interdisciplinary instruction; integrate FHA-HERO leadership and citizenship development into the instructional program; assume professional leadership roles;
implement strategies to address the needs of males, the culturally diverse, and special populations, including residents of economically depressed areas (ERA); and provide substantive content area curriculum in the middle grades, consumer education, and nutrition science.

Curriculum Development And Dissemination

A Career Path Guide and Model Curriculum Standards document was prepared for printing and dissemination. This document serves as a basis for coherent sequences of courses, curriculum development, and measurement of student achievement in the seven CHE content areas and leadership. Throughout the developmental process, input was sought from secondary and postsecondary home economics instructors, as well as agencies that serve individuals and families, to ensure that the curriculum standards reflect current conditions in the home and community. To facilitate the integration of CHE and academic content, these standards were cross-referenced with academic frameworks by English-language arts, history-social science, mathematics, and science instructors. Work was begun on a resource guide outlining the steps in planning and implementing interdisciplinary instruction to assist interdisciplinary teams with developing academically substantive curriculum and contextual learning experiences.

Some 162 CHE instructors were assisted with improving instruction by implementing a curriculum guide, Individual and Family Health. The guide can be used to design a specialized home economics course that is part of a sequence of courses to support three Home Economics Career Path areas or integrated into other content areas, including food and nutrition, consumer education, family life and parenting education, and child development and guidance.

Over 130 instructors learned how to use a nutrition science packet to implement specialized CHE area courses in Nutrition Science as part of a coherent sequence of courses that support home economics or other related career paths.

Through the revised Vision: Home Economics 2000, over 275 CHE instructors were assisted in developing coherent course sequences, implementing the CHE Comprehensive Core, and designing advanced, specialized CHE content area courses.
Program Assessment

Fifty sites with CHE programs participated in the statewide Career-Vocational Education Program Improvement and Certification process--forty in Phase I, nine in Phase II, and one in Phase III--which measures programs against nine quality criteria. One CHE program completed the three-phase process which involves a self-study, implementation of a program improvement plan, and a site validation visit. The remaining sites continue to implement the nine quality criteria in preparation for full certification. Over 50 CHE instructors requested technical assistance or participated in professional development activities designed to assist with incorporating the authentic assessment tasks of student certification, including portfolio assessment and FHA-HERO Competitive Recognition Events, into instruction.

Promotion Of Partnerships

The Home Economics Education Unit received a grant from the Wells Fargo Foundation to develop consumer education instructional materials in collaboration with the History-Social Science Unit of the California Department Education; the audience for these materials will be new immigrants. Funding awarded to the California Home Economics Education Foundation, in cooperation with The Dental Health Foundation, was used to provide training and develop a resource for home economics instructors/FHA-HERO advisors to infuse tobacco use prevention into classroom instruction and FHA-HERO chapter activities. These activities were funded by a grant from the California Department of Health Services, Tobacco Control Section.

Support Of Vocational Student Organization

More than 3,000 students enrolled in a CHE program participated in Future Homemakers of America-Home Economics Related Occupations (FHA-HERO) leadership development activities and competitive activities. Approximately 30% of the state and region officers and members reflected the culturally diverse student population in California; 12% were males. Thirty regional meetings, a Region Officers Training Conference, a Legislator's appreciation luncheon, and one State Leadership Meeting were held to support development of student leadership, citizenship, and career skills. In addition, visits to the Capitol were scheduled in conjunction with the State Leadership meeting to enhance student understanding of the legislative process. A guidebook for home economics teachers/FHA-HERO advisors to use in infusing
tobacco use prevention into FHA-HERO chapter activities, *FHA-HERO: Toward a Tobacco Free Future*, was developed through a grant from the California Department of Health Services.

**Coordination With Sex Equity Coordinator**

During the 1993-94 program year, the Home Economics Education Unit Program Manager cooperated with the Sex Equity Coordinator to develop strategies to address gender equity and serving teen and single parent families and displaced homemakers. Sex equity state staff also reviewed applications for CHE funding, and Home Economics Education Unit staff participated in reading competitive sex equity grants.

**Exemplary Programs In Consumer And Homemaking Education**

The Consumer and Homemaking Education program at Gridley High School in Gridley was recognized as a program of excellence based upon completion of the statewide Career-Vocational Education Program Improvement and Certification System. This single-teacher Consumer Home Economics Department has a sequentially structured program, including three levels of the Comprehensive Core, thereby providing students with the opportunity to become program completers. This site offers a Child Care and Education Career Path Cluster program which builds upon instruction in the Comprehensive Core. The program courses are sequenced with programs at the Butte County ROP and Butte Community College. A creative design course is offered as an alternative for the fine arts graduation requirement. FHA-HERO leadership activities are an integral part of instruction and include an in-depth community involvement project with the local migrant Head Start program.

The criteria for recognition as an exemplary program include the following: curriculum and instruction; leadership and citizenship development; practical application of occupational skills; qualified and competent personnel; facilities, equipment, and materials; community, business, and industry involvement; career guidance; program promotion; and program accountability and planning.
California Community Colleges

California Community Colleges Consumer/Home Economics State Advisory Committee

In 1993-94 the Consumer Home Economics State Advisory Committee continued to fulfill its role of setting the vision of the future. The committee provides recommendations to the Chancellor's Office for future directions and special project funding in the five content areas of Home Economics: Fashion, Interiors, Lifespan, Life Management, and Nutrition/Foods. The committee is concerned with the consumer/home economics aspect of the profession as well as the occupational/vocational education programs of the various content areas.

The committee has one community college educator and one business/industry representative for each of the five content areas and will expand to incorporate the Hospitality Content area. In addition, the committee has one representative from a California State University Home Economics Department, the California Community Colleges Association of Occupational Educators, and the California Department of Education Home Economics Unit. The COCCC Specialist, Peggy Olivier, and the Committee Coordinator, Sandy Bucknell, serve as ex-officio members of the committee. The Director of the Center for Home Economics, Shirley McGillicuddy, frequently attends the meetings. The Chair of the committee is a member representing business/industry. Pat Dorman is currently serving as the chair of the committee.

The business/industry members are commended for the strength they have provided to the profession. Their leadership was outstanding at the five Subject Matter Forums that were held on five successive Fridays in September and October 1993 at locations throughout the state. These dedicated community representatives also were highly involved in the March 1994 Conference and provided a breakout session on effectively using advisory committees at the local level. Pat Dorman continues to represent the SAC at several Child Development committees.

Consumer Home Economic Education Professional Development

The Consumer Home Economic Education Professional Development Project provided an array of activities designed to improve home economics and related programs and instruction in California Community Colleges. Five one-day subject specific Forums, *Fitting the Pieces Together*, concentrated in each of the program areas of: Fashion, Interiors, Life Management, Lifespan, and Nutrition and Food were held around the
state in September and October 1993 for 225 participants. Content focused on implementing the *CCC Home Economics Program Plan, 1992*; developing partnerships with business/industry; teaching and reaching special student populations; overcoming gender imbalance and stereotyping and issues, trends, and employment outlook specific to the program area.

Through a Strategic Planning Retreat for 20 CHE leaders, Forum outcomes were translated into priorities to be addressed through the CCC CHE/ECE conference and an *Issues & Answers* publication. The March 1994 *Shaping the Future* three-day conference involved over 140 individuals in subject area Mini-Forums, tours and focus sessions; general and focus sessions which addressed issues and trends common among program areas. Included were Tech Prep, business/industry alliances and employee needs, reaching special populations, grant writing and funding sources.

Conference outcomes along with those from the forums became the basis for an *Issues and Answers* publication produced and distributed through the Center project. Four issues of *COMPENDIUM* were produced and contributed to and extended professional development activities to a wider audience, featured special innovations in local programs and projects, project news, critical trends and future events.

Support was provided to InfoNet, the CHE telecommunications system, through staffing with a part-time secretary. The system was carefully assessed to determine effectiveness.

Preliminary work to revise the CCC Comprehensive Guidelines for Child Development Instruction and Services Programs through retaining a consultant and convening a Task Force was supported through the project.

The Home Economics Professional Development Committee members were active participants in project implementation, advisement, and evaluation. Linkages were formed with the Consumer Home Economics State Advisory Committee, VATEA Special and CHE Mini Grant projects, related institutions and organizations.
Direct Services To Students

Statewide Summary Of Consumer Homemaking Education (CHE) Mini Grant Projects, VATEA Title III-B, 1993-94

Prior to 1991-92, Carl D. Perkins Vocational Education Act (VEA), CHE funds were awarded to local district/colleges through an allocation process. A variety of surveys and studies to determine obstacles to success, appropriateness of funds use, impact and innovative practices had been conducted during the years these funds were available. The most recent study, sponsored by the Chancellor's Office, and conducted by Sierra College, Consumer Homemaking Education in California's Community Colleges; A Description of Uses and Model Program Efforts identified some long-term concerns. These included: insufficient state funds available, staff lacked time to research or be trained in use of funds, too many restrictions on how funds may be used, weak on-campus support. The average CHE allocation of colleges responding to the survey which were utilizing funds was $6,987. The mean allocation, $2,771. Many colleges returned their CHE allocation because restrictions placed on use of the limited dollars available were too cumbersome. The Chancellor's Office asked the Consumer Home Economics State Advisory Committee to review the study and make recommendations for distribution of CHE funds. Committee members included educational and business/industry representatives.

- The committee recommended the following to the COCCC:
  - Training to develop strategies characteristic of model programs.
  - A competitive bid process for placing Carl D. Perkins Vocational and Applied Technology Education Act funds to lead to exemplary projects with an increased funding base.

To implement these recommendations, the Chancellor's Office prepared specifications for CHE Mini Grants. Specifications were included in the Request for Application (RFA) publication, advertising the availability of funds and distributed statewide. The minimum amount which could be requested was $5,000; maximum was $20,000. Funds available in 1993-94 were $675,000.

Colleges were provided with assistance to improve the quality of their application. Assistance included consultation, a Mini Grant writing workshop and a series of Second Chance workshops held in cooperation with Gender Equity. Particular
emphasis was placed on strategies for coordinating CHE Mini Grants with Gender Equity activities which was an essential requirement for CHE Mini Grant specifications. Colleges were invited to revise and resubmit their project applications. As a result, 37 projects were approved for funding.

Throughout the process, the Center for Consumer Home Economics Education, supported by VEA/VATEA funded grant awarded to Mt. San Antonio College by the Chancellor's Office provided assistance to local colleges. Consultation activities included project conceptualization and applications, project implementation, processing of quarterly reports and project modification/revision, processing of final reports and claim for funds, and summarization of progress for the project monitor. The Center was established by the COCCC to provide linkage between the state and local colleges relating to CHE Mini Grants and Home Economics and related subject matter. All Center activities were provided at the request of the Chancellor's Office and in accord with prior approved procedures/processes.

Statewide dissemination of project activities, results, and products was not expected from individual projects which had limited budgets. The Center for Consumer Home Economics Education facilitated this process. Information disseminated responded to specific requests and to identified needs. Project directors were provided a list and contact information for all projects which included a parenting component at the request of one college. Workshops featuring Mini Grant Writing and project implementation were conducted. Project activities and innovations were in COMPENDIUM. Summary information on CHE Mini Grants was developed and distributed statewide as a means for encouraging replication.

Conclusions And Recommendations

The competitive bid process for awarding VATEA, CHE, IIBB funds to local colleges was an emotional and traumatic experience for many instructors who developed the applications. Most of them had not been involved in grant writing previously. However, the outcome appears to have partially met the recommendations from the Consumer Home Economics State Advisory Committee, that of providing an improved funding base for adequate project support. All applicants had the option of requesting funds between $5,000 and $20,000 and could plan realistic budgets to support objectives and activities. During the early funding cycles, there was limited opportunity to provide training on implementing innovative strategies. The Center compiled and published a brochure describing model/innovative projects, the five model projects
listed in the Sierra Study were included. The publication was available on request and was listed as a resource in specifications for 1993-94 CHE Mini Grants.

Workshops were conducted to help applicants improve their project applications during renegotiation and Second Chance, and the goal of improving the quality and fundable percent of applications demonstrated improvement.

**Academic Achievement:** Consumer Home Economics Education subject matter was utilized as a vehicle for improving basic skills: critical thinking, life management skills, communication (oral and written) through these projects. Some projects addressed pre-academic skills as this was more appropriate with the target population.

**Retention:** Retention is valid only for projects which have on-going or a series of classes/workshops. Many of the activities were not designed for retention, i.e., one time events, information dissemination through brochures, etc. The average of those who reported retention was 85.33%

**Products:** Brochures, booklets, curriculum guides, resource guides, evaluation feedback forms, newsletters, slides, recruitment materials, pre and post test, how-to guides are examples of products developed through the projects. Products demonstrated a lot of creative energy. All were unique and all very replicable for widespread use.

**Innovations:** Projects demonstrated a high degree of creativity and imagination. CHE funding enabled innovation. Projects reached large numbers of people in a very personal way-nurturing individuals and whole families. Projects tied very closely to RFA specifications. Education was very cost effective. Reaching a large number of disadvantaged people and making positive changes in their lives was characteristic of most projects. Enormous energy from caring professionals was a common element.

Common themes among projects was the linkage with lifespan, consumer, life management content, and focus on such priority needs as parenting, wellness/nutrition, consumer, family life, intergenerational, crises prevention.

Unique elements included: train the trainer, sensitivity to non-English speaking people, hands-on-learning, modeling.
Observations

- The Mini Grant process, e.g. pre-screening of projects, qualified readers recruited and trained, grant writing workshops, project coordinators workshop resulted in improved quality of CHE Mini Grants and expanded communication/dissemination between projects which appears to have encouraged replication.

- The term "Mini Grant" is misleading, the work involved in developing proposals and implementing projects for CHE $5,000 to $20,000 grants is just as extensive as for projects with larger budgets.

- Attention should be directed toward simplifying and standardizing project specifications and application procedures and format.

- Provide sufficient lead time between advertising the availability of RFAs (Requests for Application) and project application due dates.

- Fund projects on schedule to provide full operational periods during planned months of the academic year.

- CHE Mini Grant Project Directors workshops should be continued to provide very specific implementation and reporting instructions and promote project improvement through interaction and networking.

- Mini Grant forms and reports should be easy to complete, provide essential data and reflect actual project successes and obstacles as a basis for improving Title IIIB funds utilization.

- RFA packages should include the review rating form and the final report outline.

- CHE funds used for credit classes should be aimed toward SAM Code D, possibly occupational courses.

- Project advisory committees need representatives from target population(s).

- For quality instruction, project staff should have expertise in at least one of the Home Economics content areas.
Consumer & Homemaking Education

- Projects need to continue to address gender stereotypes and diversity in family units.

- Final Report Executive Summaries should include a brief description of products developed.

- Multi-year funding is critical because the target populations live in a tentative world. Credibility within the community can not be maintained when projects/services start and stop.

- Dissemination is vital to encouraging replication of successful practices and innovative strategies. The full report, including Executive Summaries should be distributed to project directors and made available at -cost to other colleges.

- The use of a Data Interpretation Panel is a technique which should be utilized with subsequent project years to ensure objectivity and relevance of summarizing reports.

Research/Data Collection

Los Angeles Mission College is the recipient of a VATEA, Title IIA and IIIB grant to develop and field test curriculum for individuals interested in the care giving field. The curriculum is designed to encourage economically disadvantaged, ethnic minorities, limited English proficient students to seek training which will equip them with the education, skills, and background necessary for gainful employment as caregivers. Additionally, the curriculum is intended to address family issues and the concerns of the in-home care provider since many care providers manage the occupation of homemaker while providing care for others in the home.

Employment projects from the Bureau of Labor Statistics show that home health care workers, personal and home care aides, and human service workers are among the top ten occupations with the fastest job growth in California from now until 2005. Over 7,000 jobs are projected in the Los Angeles area alone.

The vision of this project is to create an interdisciplinary caregiver curriculum which would provide certification and continuing education. Already, this curriculum fulfills this vision by meeting the new fifteen hour preventative health practices, first aid, and CPR requirements as outlined in California State Assembly Bill 962. Beginning
January 1995, these requirements mandate training for each licensed family day care home provider and at least one director or teacher at each child day care facility.

All components of the curriculum are planned to help bolster student's self esteem, expand their knowledge of careers in the human services profession, reduce the barriers to success normally associated with underrepresented students, encourage gender equity and link them to a city-wide industry network.

*Needs Assessment:* The needs assessment preceded the development of curriculum so that a direct link was established for graduates of the program to jobs, entrepreneurial opportunities or a transfer sequence to the university. It is the responsibility for institutions of higher education to objectively evaluate labor market projections when developing new curriculum. Curriculum committees at the community college level and taxpayers are looking very closely and demanding justification for new curriculum because of the fiscal constraints confronting the state's budget.

To substantiate the necessity for the Lifespan/Life Management Intergenerational Curriculum, three areas were examined: 1) labor market projections; 2) business owners/managers perceptions for the need for educated caregivers; and 3) the existence of curriculum within the community college system.
TECH PREP

INTRODUCTION

The Introduction Section discussed ways in which California is developing an increasing pattern of cooperation and collaboration between the secondary and community college levels. This was exhibited in the vocational education needs assessment conducted during the 1993-94 school year, and the development of a state plan that derived from this needs assessment. It was also evident in the work done to develop a state plan for the School-to-Work Opportunities Act.

As with these state level activities, efforts to develop links between the two levels grew during the year through the use of Title III-E funds to support the development and operation of tech prep programs. In California, these funds are directed to three categories of activities:

1. The community colleges continued to support 85 local community college consortia directed toward establishing tech prep linkages in particular career/training fields. These consortia include secondary schools, community colleges, and institutions of higher education offering apprenticeship programs. These sites were chosen through a statewide competitive process. During the 1993-94 school year the community colleges serving as the fiscal agents for these consortia reported on the aggregate number of students served by these consortia. At the secondary level 16,345 students were involved and at the postsecondary level 6,358 students were involved. These consortia are continuing to expand.

2. The secondary level continued to provide grants to six regional consortia in the fields of agriculture, business education, engineering technology education, health careers, home economics, and industrial and technology education. These sites were also chosen through a competitive process. Consortia include secondary schools, ROC/Ps, adult schools, community colleges, and institutions of higher education offering apprenticeship programs. These efforts are directed toward
developing articulation agreements between secondary and postsecondary levels and providing assistance in curriculum and professional development.

3. The community colleges have established contracts with outside agencies to conduct three types of state level activities: 1) provide tech prep consortia projects with student services information and materials for outreach and guidance; 2) provide student follow-up studies on tech-prep students to measure longer term performance outcomes; and 3) evaluate statewide tech prep program development and implementation.

The sections that follow provide detail on the various topics identified in the federal guidelines under tech prep. Specific activities and accomplishments of the secondary level regional consortia referred to under "2" above come at the end of this section.

California Community Colleges

Impact of Services

The three Statewide Tech-Prep special projects -- Outreach and Guidance, Student Follow-up and Program Evaluation -- each are having a continuing impact on program improvement. The Outreach and Guidance project has produced numerous information dissemination products. These products include videos and a variety of documents. Along with the technical assistance this project provides to the State, these widely disseminated products have had the impact of further introducing Tech-Prep to Californians. Other products enhance the quality of preparatory services while still others assist students, parents, and counselors to chart the best type of technical preparation for desired career paths. These products also influence the restructuring of curriculum into an integrated format by providing templates for curriculum deliberations. This project also responds to the needs of special populations by inclusive images and language in all products, which in turn builds a program climate that is sensitive to special populations.

The Statewide Student Follow-up Special project has initiated discussions on data collection, analysis, and interpretation. To assist local program administrators to become familiar with the range of issues associated with student follow up, this special project provides workshops around the State to ensure that all involved Tech-Prep consortia can participate. The project is assisted by an advisory committee which
provides policy recommendations to the project. The composition of the advisory committee represents the diverse interests involved with student follow-up issues.

The Statewide Program Evaluation special project, in addition to providing informal on-site technical assistance, provides an important, objective repository of "best practices" and program "pitfalls," which accelerates the pace of maturation for Tech-Prep programs. Additionally, through its qualitative and quantitative analysis, this project surfaces policy concerns to program administrators and state level administrators, building a climate of continuous improvement. Findings from this evaluation project are published and disseminated. Additionally, those findings are also routinely represented at professional meetings and other public venues.

In response to the required 1993-94 consortia performance report, one of the most significant documented impacts of services provided by the state was the increased business/industry involvement with curriculum and programs in a variety of dimensions. In addition to all local consortia containing employer partners and local advisory committees involving employers, many programs report more profound measures of employer involvement. For illustrative purposes, several examples are listed below:

- Culver City Chamber of Commerce, along with the Los Angeles International Airport (LAX) Chamber of Commerce facilitated job shadowing in business and industry for students in the local Tech-Prep program.

- An employment-education summer internship program for teachers and counselors involved with the State Center Tech-Prep program created opportunities for those individuals to become more familiar with industry practices and requirements. During two or three days of structured field trips, visits were made to worksites for learning and networking. In another local consortia -- the one centered on Los Angeles Valley College -- similar work site visits for faculty were arranged on a rotating basis.

Another real impact of services provided by the state was the continuing development of new curriculum. In addition to the many instances of pilot testing Tech-Prep courses developed from staff development, other locations reported the institutionalization of Tech-Prep curriculum, replacing traditional curriculum. Anecdotal reports suggest that real benefits to students derived from Tech-Prep curriculum, are most notably higher grade point averages and student satisfaction.
A particularly satisfying aspect of this trend is the growing recognition of the value of Tech-Prep curriculum for all learners. One example is found in the consortium anchored by El Camino College of Torrance, California. In that program, modules of the applied academic curricula are now being utilized at work sites via the college's workplace learning resource center.

Another impact of services provided by the state is the growing readiness of local Tech-Prep consortia to integrate national education reform movements into their programs, most notably SCANS competencies in curriculum and School-to-Work Opportunity Act precepts into programs.

One other impact of services provided by the state is the move toward greater regionalization in Tech-Prep for efficiency and effectiveness. Following the lead of the state, regional coordination clustering has occurred in diverse areas of the state, both urban and rural. For example, the Los Angeles Community College District campus coordinators of Tech-Prep programs provided combined staff development programs. In a rural setting, both the central coastal mountains area and the San Joaquin Valley areas have coalesced into regional groupings. In the San Francisco Bay Area, the advent of the Silicon Valley tech prep consortium -- a consortium of consortia -- has consolidated instruction training and inservice seminars.

Planning of Tech-Prep Programs

Significant activity, supported from COCCC Tech-Prep funding authority, was conducted concerning the planning of Tech-Prep programs between secondary and postsecondary institutions in occupational instructional areas, including apprenticeship.

Information collected, via the year end performance report for 1993-94, shows that extensive use of federal funds on planning of Tech-Prep programs between secondary and postsecondary levels were used for curriculum and professional development; 7,199 secondary and 2,201 postsecondary professional staff, were served with these funds.

Benefits Of Tech-Prep Programs And Services

One of the real benefits of Tech-Prep programs and services in meeting the needs of special populations is that the program has been built with special attention to those
needs. For example, in promoting the program via the products of the Tech-Prep Guidance and Counseling special project, deliberate design has created materials that are fully inclusive of California's diverse populations without a detrimental "targeting" or "tracking." Furthermore, Tech-Prep program design must follow the requirements of the "Request for Applications" which includes addressing special population needs. The California statewide evaluation project high-lighted particularly promising practices for meeting the needs of special populations, in Tech-Prep programs. In aggregate, these practices fell into the following three areas:

- Mini-grant programs supported recruitment, instruction, career guidance, and other Tech-Prep activities for special populations;

- Joint ventures with other programs serving special populations (e.g., working with local Greater Avenues for Independence - GAIN - programs to fund equipment for both Tech-Prep and GAIN students) expanded both resources and services available for students;

- Serving special populations as part of day-to-day Tech-Prep program operations - rather than through special activities - furthers the achievement of Perkins Act goals.

The flavor of such efforts can be conveyed by a description of one activity. The Tech-Prep program involved with Pasadena City College developed a software program to assist LEP students with dental terminology.

The Impact Of Tech-Prep Professional Activities And Services

The impact of Tech-Prep professional activities and services on guidance counselors, teachers and others is reflected in the growing statewide "readiness" for education reform and Tech-Prep. Curriculum development continues apace, ranging from planning activities to full implementation. The classroom skills needed for integrated academics and secondary-postsecondary articulation are another arena that shows this impact.

"Readiness" is also displayed in institutional changes which are underway to improve the administration of Tech-Prep programs. One example is Los Angeles City College, which has implemented admission and follow-up procedures to process Tech-Prep
students into that institution. Other consortia have developed counselor handbooks and appropriate procedures for Tech-Prep.

Preparatory Services Provided

An important component of the initial efforts in California's development of Tech-Prep education has been the development and delivery of preparatory services as described in 406.3 of the VATEA Final Regulations. The year-end performance report for 1993-94 (from those California Community Colleges serving as fiscal agents for Tech-Prep consortia) revealed that the major expenditures for preparatory services were used to purchase textbooks and for recruitment and counseling activities.

Additionally, the work of the specially funded Tech-Prep "Outreach and Guidance" project has produced a variety of video tapes, brochures, pamphlets, and other resources which have been widely disseminated and used in California in support of preparatory services.

Exemplary Program(s)

Although several Tech-Prep programs in California can be deemed exemplary, the Tech-Prep consortium from State Center Community College District (Fresno Area) deserves first mention. This program was awarded one of the American Association of Community Colleges (AACC) Dale Parnell "Excellence in Education" Tech-Prep/Associate awards in addition to garnering the U.S. Department of Education's "Excellence in Education" award. Examples of the innovative programs and projects developed by the SCTPC include the integration of academic and occupational education; education/employer partnerships; applied academic instruction; programmatic articulation between secondary schools and community colleges; advanced skills curriculum and degree program development; career orientation and outreach materials; marketing and promotion products; and a comprehensive system for evaluation and program improvement. National recognition has also been bestowed on the East San Gabriel Valley Regional Occupational Program, which is a national Tech-Prep demonstration site. Additionally, two locales in California have been awarded direct implementation grants from the School-to-Work Opportunity Act: Tulare County and San Diego both have Tech-Prep program involvement.
The Secondary Level Regional Consortia

Agricultural Education

In 1993-94 the Central Valley Resource Consortium for Agricultural Education was established as a result of a competitive application process. The consortium was funded for two years with its purpose being to develop a comprehensive agriculture tech prep program which encompasses grades 11-14 and is an extension of foundation academic and agricultural skills developed in grades 9 and 10.

The consortium began by focusing on development of curriculum and supportive materials and services for career pathways in Animal Science and Production, Plant Science and Production, Agribusiness Management, Ornamental Horticulture, Agricultural Mechanics, Forestry, and Natural Resource Management. The curriculum in these pathways is being designed to provide a seamless and sequential series of instruction which includes the integration of science, math, and communications skills and competency. The consortium members include one community college, thirty high schools, and two regional occupational programs. Participants include rural, suburban, and urban schools and programs, academic and agricultural teachers from both consortium partner schools and others selected for their expertise. Counselors, school administrators, and industry representatives have been involved in development of this tech prep model. Currently over 139 people are working and contributing to this effort in the various areas of curriculum development, student services, staff services, and program services.

During the first year of operation the consortium has been effective in planning and initial development activities. The project is directed and managed by project staff who work very closely with an articulation council which is made up of project staff, industry representatives from each career path, secondary and community college teachers, county office of education specialists, and staff from the California Department of Education. All planning and developmental work has been done through a strong collaborative effort between secondary educators, postsecondary educators, and industry representatives.

Significant accomplishments by the consortium this year include:

- Adoption of model curriculum standards for all career paths.
Tech Prep

- Established Administrators Advisory Committee to recommend implementation strategies.
- Published consortium newsletter titled the "Vector" which provided consortium tech prep information to 1200 readers statewide.
- Identified target occupations at entry, technical, and professional levels for all career paths.
- Developed Advisory Committee manual for use in developing and operating tech prep programs.
- Established tech prep program admission requirements.
- Began development of student assessment system utilizing portfolios, projects, and supervised practical experience components.
- Conducted integration and interdisciplinary teaming workshops for consortium site personnel.

The Central Valley Consortium is an exemplary program in agricultural tech prep. Although it is in its infancy, it is developing operational examples of the components outlined in Perkins. This consortium is formally linked to over 30 secondary programs and has contact with over 300 secondary and 50 community college agricultural programs in California.

Business Education

The Business Education Tech Prep Resource Consortium, which is composed of personnel from the university, community college, eight school districts, Regional Occupational Centers/Programs, representatives from business/industry, and parents, made significant progress in 1993-94 in the areas of curriculum development, staff training, counseling/guidance, and workplace learning.

*Curriculum Development* -- The Consortium conducted a field test of the Integrated Performance Activities (IPAs) developed for the Business Technology Core, Computer Science and Information System and Marketing career path clusters. The field test
included 15 sites. Specific review was directed to use of the IPAs with special populations.

During 1993-94, Integrated Performance Activities were developed for the Accounting and Finance and Business Management career path clusters. The IPAs were the outcome of writing sessions with 55 individuals comprised of academic and vocational instructors from secondary and postsecondary levels, administrators, counselors, parents, and business/industry representatives. Academic instructors used the academic frameworks as a primary source of reference.

Consortium schools also developed tech-prep program sequences for the Accounting/Finance and Business Management career path clusters. Model Curriculum Standards and integrated performance activities have been linked to suggested courses within the program sequences.

Components of the documents, Integrated Performance Activities, Course Sequencing Guides, and Tech Prep Model Curriculum Standard Infusion, all based on the Business Education Career Path/Model Curriculum Standards, have been disseminated at the Business Education Management Conferences, Integrated Curriculum Workshops, Business Education Tech Prep Symposia, and various presentations (2,300 copies). Integrated curriculum activities have been implemented at three consortium sites.

Staff Training -- Various staff training activities were provided for the local education agencies involved with the consortium. A two-day integrated curriculum workshop by the School Restructuring Support Institute was provided to 65 members of the consortium. Three members of the consortium participated in training sessions sponsored by the Center for Occupational Research and Development (CORD). Two integrated math workshops were provided for 50 mathematics and business education practitioners.

The Business Education Tech Prep Consortium staff provided staff training through a variety of activities. These included presentations at the two Business Education Management Conferences (1,200 practitioners), National Business Education Association Conference (800), National Tech Prep Conference (1,500), the American Vocational Association (2,000), California Business Education Association State Conference (600), and the CAROC/P-CAVA Conference (500). These presentations included both urban and rural settings.
"Promising Practices and Resources in Tech Prep Business Education" was the theme of the two Tech Prep Symposium sponsored by the Consortium this year. Fifty-five of the local tech prep consortia were represented at the conferences. Consortia networking was extended through CAVIX (California Academic and Vocational Information Exchange).

All of the staff training activities emphasized instructional strategies for serving special populations. One, the Business Education Integrated Curriculum Demonstration Program, which features tech prep business education, is also model site for special populations.

Counseling/Guidance -- The Business Education consortium collaborated on the development of a variety of counseling/guidance resources this year. They included:

- **Tech-Prep Guidance Manual**—developed in cooperation with Allan Hancock College material detailing how students who have completed high school tech prep programs may continue tech prep at Grades 13-14 and what their transfer and/or career options are upon successful completion of the program.

- **School-to-Career Welcome to the 21st Century, Tech-Prep Illustrated Booklet, Tech Prep Model Portfolios, Pathways to the Future, and Tech Prep - "A Career Planning Handbook"** were developed in collaboration with the Tech-Prep California Outreach and Guidance Project (State Center).

Counseling Articulation Workshops were sponsored for all local education agencies belonging to the consortium. The following materials were featured at the workshops: Individual Tech-Prep Career Plans, Tech-Prep Sequences/Allan Hancock Course Schedules, and Tech-Prep Methodology Options/Allan Hancock College which included the following programs—English, Mathematics, Computer Science, Life and Physical Science, and Business.

Counseling and guidance resources were distributed at the Tech-Prep Symposia and various workshops. Currently the Consortium is working on a Counseling/Guidance Strategies Manual.

Workplace Learning -- During 1994-95, the Consortium will be developing a Workplace Learning Strategies Manual which will include work-based learning, school-based learning, and connecting activities.
Assessment -- Various consortium members participated in the Far West Laboratory field test of performance-based assessment (portfolio, project, and scenario) for the Computer Science and Information Systems career path cluster.

Exemplary Programs

- Arroyo Grande High School
- Sweetwater High School

Criteria

- Coordinated and articulated Tech-Prep Program Sequence
- Business Education Tech Prep Career Path
- Career Path Associate Arts Degree/Certificate
- Common Core of Proficiency in Math, Science, and Communication
- Workplace Learning
- Seamless transition between secondary and postsecondary education

Health Careers Education

The Health Careers Tech Prep Resource Consortium is housed at East Bakersfield High School in Kern County. The community is primarily agriculture with an urban sprawl, small rural areas, and a highly diverse student population. East High is conveniently located for the focal point of the consortium; across the street from Kern Medical Center, several blocks from Bakersfield Community College, and less than a mile from the Kern Regional Occupational Center.

The second year of funding for the Health Careers Tech Prep Resource Consortium has resulted in the creation of two interdisciplinary action-based integration projects for tenth grade students that have been pilot tested and distributed to several schools for an expanded field test.

The industry Practitioners and Employers Council has been expanded to over 200 members resulting in workplace learning and mentoring opportunities for all students enrolled in the health careers tech prep program. Additionally, several of the industry partners have helped sponsor a Health Faire and are offering scholarship support for students continuing their education at a postsecondary agency.
Education partnerships have been strengthened between the high school and community college by expanding health careers specific technical level preparation for graduates of the high school component of the tech prep program and by providing college credit for students completing a high school based Medical Terminology course.

Additional partnership strengths support students' preparation through increased enrollment opportunities at the Kern Regional Occupational Center by the addition of a medical assistant program to the schedule of courses. The majority of students enrolling in this and other health specific programs are concurrently enrolled in the tech prep program.

Education partnerships have also extended into the middle school through information presentations and recruitment efforts. Assisting students in career making decisions prior to entering high school.

Other support for the tech prep program has been through the involvement of parents in the program. As more than 67% of the students enrolled are of minority backgrounds (59% Hispanic), their parents are frequently reluctant to participate at the school site and often are unaware of their child's ability to perform high levels of academic work. The recruitment of parent support has occurred as the result of an intensive campaign including home visits, phone calls, picnics, awards ceremonies, and written communication. Parent support has been crucial to student achievement.

The projects and services have been created and supported by an enthusiastic, committed and dedicated teaching team comprised of academic (math, science, history-social science, and language arts) and health careers teachers, counselors and administrators from the high school, ROC, and community college.

**Home Economics Related Occupations**

The 1993-94 program year was the second year of funding for the Home Economics Related Occupations Tech Prep Resource Consortium. Accomplishments are described below:

Sixteen tech prep implementation sites were established in the four identified career paths -- four in Fashion Design, Manufacturing and Merchandising; two in Food Science, Dietetics, and Nutrition; four in Food Service and Hospitality; and six in Hospitality, Tourism, and Recreation. Model curriculum standards were field tested
and validated in the four career paths being focused upon by the consortium. The development of sample course outlines and curriculum for each of the four career paths was initiated. Interdisciplinary teams at all sixteen sites participated in at least one interdisciplinary team training workshop; as a result, each site conducted a minimum of three interdisciplinary activities, including action-based projects to integrate academic and occupational content based upon established curriculum standards. Each implementation site identified a sequence of courses for the tech prep program; the majority were able to identify the postsecondary course sequence as well. The first statewide California Hospitality Educators Institute was held with more than 300 secondary and postsecondary educators, governmental and private agencies, business and industry representatives, counselors and administrators in attendance; the Institute assisted current instructors of Hospitality Programs in expanding their programs and provided information potential instructors and administrators with information on how to establish Hospitality Programs. At least four new programs were established as a result of the institute; more are slated for implementation during the 1994-95 program year.

Work was initiated on the development of two resources for use by sites that are currently establishing or are planning to establish tech prep programs. One of the documents will address working with business and industry partners; the second one will serve as a guide for developing and implementing interdisciplinary teams in order to effectively integrate academic and occupational content.

Industrial & Technology Education

ITE Unit staff are specifically tied to two major (statewide) Tech Prep projects and thirty-five local (consortium) projects spread across California. The two major projects include the Industrial Technology Tech Prep and Engineering Technology Tech Prep programs. Engineering Technology Tech Prep is a unique program that prepares students who are systems oriented and interdisciplinary in their technical preparation. Industrial Technology Tech Prep is a unique program designed to prepare students for new and multi-system approaches to swiftly changing technical content. Both programs are designed to meet the changing needs of the workplace.

Tech Prep activities supported by the ITE Unit staff in 1993-94 resulted in the following outcomes:
• Field testing of Industrial and Technology Education curriculum and curriculum development in the Engineering Technology Tech Prep Program.

• Development of assessment measures to determine usefulness of the curriculum.

• Reinforcing the importance of industry partners as active participants in the validation of student performance standards.

• Implementing a database of integrated performance activities (IPA) for each content area.

• Staff development activities that provide program demonstrations of exemplary industrial and technology Tech Prep programs.

• Technical support via CAVIX and Infonet, the Statewide Resource Library, Tri-in-the-Teacher and Train-the-Trainer workshops, and regional orientation workshops.

• Participation of approximately 500 teachers, administrators, counselors in workshops concerning Engineering Tech Prep and integrated curriculum representing over sixty school districts.

• Participation of approximately 600 local providers in regional (Clovis/Fresno) Industrial Technology Tech Prep and integrated curriculum workshops.

• Training of 17 teachers and counselors in a Tech Prep summer internship.

• Training in the applied academic curricula for over 170 academic and industrial technology educators representing twenty-five secondary and post-secondary institutions.

• Training provided to teachers from both rural (eg: Selma) and urban (eg: Fresno) districts, addressing gender and cultural concerns.

• Liaison activities with projects concerned with the entrance of females into Industrial and Technology Tech Prep programs.

• Activities with the Outreach & Guidance Consortium to address ITE concerns during the development of guidance and counseling materials.
• Development and expansion of integrated curriculum and instructional strategies for grades 9-14.

• Development of Career Pathways programs for grades 9-14 including:
  • Competency-based curriculum
  • Integrated curriculum/instructional strategies
  • Sequences of courses
  • Authentic assessment techniques and industry validation of curriculum
  • School-to-Career transition activities
SECTION XI

INTEGRATING APPLIED ACADEMICS INTO VOCATIONAL EDUCATION

Introduction

During the 1993-94 school year, a comprehensive needs assessment was completed prior to the development of the 1994-96 California State Plan for the Carl D. Perkins Vocational and Applied Technology Education Act funds. One of the factors examined in the needs assessment was the integration of academic and vocational education. The following findings on this factor were elicited from the needs assessment:

1. Twenty-eight percent of all vocational education program administrators and faculty reported that no integration efforts have been initiated at the local level.

2. Fully 50 percent of administrators report either no efforts or only planning has been done in the area of integration of academic and vocational education curriculum and programs.

3. Academic faculty are viewed as very real and key barriers to integration.

4. Faculty at all levels (secondary/postsecondary) and within all vocational education programs suggest that teacher inservice is essential for further integration efforts.

5. State requirements tend to discourage integration, as do academic college enrollment requirements.

6. The data reflect the need to expand the planning process as evidenced by the need for more fiscal and human resources. This need is further supported by a lack of understanding of the concept of integration overall, and the need to expand inservice training and to provide courses taught by both vocational and academic teachers.
7. Employers reported that they felt community college graduates have a balanced education relative to vocational education and academics (66.7%) while the same group reported they felt considerably different about high school students (37.4%). This could indicate a greater need to focus attention on integration at the high school level.

8. Over 50% of faculty and administrators surveyed agreed that inservice training in integration strategies is currently underway and 91.7% say that current inservice encourages the concept and its importance to the overall vocational education effort.

9. From the broader perspective, some integration of vocational education and academics is taking place in California schools, and with additional resources, planning, collaboration, and faculty/administrator staff development, more is envisioned to take place at an increased pace.

10. Stronger state-level leadership has been acknowledged by the respondents as vital to the success of integration.

11. Eighty percent of respondents indicated that State-developed applied academic curricula were most helpful within the K-12 system. Another 80+% indicated that State development and support of integrated curricula, technical assistance, and inservice training were among the most important activities state-level agencies could undertake.

Upon completion of the needs assessment, an extensive process of review, analysis and comment on the assessment data was done by field practitioners, educators, counselors, employers, parents, students, and members of business, industry and labor, and the community. Recommendations were made concerning priorities to be included in the 1994-96 State Plan, with the number one priority listed in the new plan being "Integration and Sequencing of Academic and Vocational Curriculum."

Secondary Efforts

Partnership Academies

During the 1993 - 94 school year the staff from 14 California Partnership Academies participated in a Curriculum Integration project. Those selected met twice during the
Integrating Applied Academics Into Vocational Education

Summer of 1993 and three times during the school year. The Academies were selected based on three high-demand industries as identified by the California Business Roundtable. The three industries and the Academies representing each are as follows:

- **Telecommunications**: Concord High School, Fremont High School (Oakland), John Muir High School (Pasadena), Valley High School (Santa Ana), and Woodside High School (Redwood City).
- **Banking and Finance**: Fairfield High School, Florin High School (Elk Grove), Fresno High School, John Muir High School (Pasadena), and Serrano High School (Snowline).
- **Health**: Blair High School (Pasadena), Encina High School (Sacramento), Jordan High School (Long Beach), Stagg High School (Stockton).

There were three main goals for this integrated curriculum project:

- Develop, field test, and refine a model for establishing vocational and academic interdisciplinary teacher teams
- Develop illustrative examples of integrated curriculum with an industry focus
- Establish networks of cross-disciplinary teacher teams to support and expand the work of the project.

The project was developmental in nature with a strong focus on process; throughout the year as those involved worked on integration of learning activities, there was also much discussion and reflection about how to team, how to integrate, how to include industry, and how to change the basic ways in which teachers and students presently work together. Assessment of student work was also carefully examined as a difficult and critical part of curriculum change.

Each Academy team was comprised of six members: four Academy teachers (three academic and one vocational), an administrator (usually the principal or other administrator chiefly responsible for the Academy at the high school), and when possible, an industry representative. The administrator's involvement was necessary because of his or her importance in implementing curricular integration at the school, and the resulting need to understand how and why changes were being made.
industry representative played a critical role in linking the integration of applied academics and vocational education to the needs of industry.

Janet Kierstead, a nationally known education consultant in integrated curriculum development, led the workshops. She provided a variety of related articles and papers to the participants to help them become familiar with integration concepts and methods. She also developed materials and related resource materials; these materials have been assembled in an integration notebook which will be made available to other sites in the state interested in integration. Dr. Kierstead conducted each of the sessions during the year which involved reviews of the process made by the team, with feedback and sharing among teams and among teachers of like disciplines. These workshops also included a variety of lessons and activities related to developing the details of action-based projects, as well as understanding "high performance" classrooms, the nature of industries, curriculum management, and assessment.

Vocational Education staff from various units attended the meetings and contributed to discussions and workshop activities. Standards and related materials for the vocational areas were included. Members of the California Curriculum Consultant Project, which provides services to teachers, assisted them in aligning curricula with the State frameworks.

At the end of the school year over one hundred people, including educators, business and industry representatives, and government officials, attended a one-day presentation of the work accomplished by the Academies in this project. Students and staff gave presentations describing their work and reflecting on progress made. Materials from this project are available, and teachers have been providing inservice to others in their districts for the integration of applied academics and vocational education.

Agricultural Education

The Agricultural Education Unit provided leadership, coordination, and technical assistance to a wide range of integration efforts at both state and local levels during the 1993-94 program year. Efforts involved professional development workshops, preservice education, local education agency technical assistance, integrated core curriculum implementation, and conduct of a teacher recognition award system.

Inservice programs for school-site personnel which focused on effective strategies for integration of academic and agricultural curricula were provided through twenty-nine
Integrating Applied Academics Into Vocational Education

area workshops and a statewide Summer Science Institute. These workshops involved over 450 teachers and proved to be especially successful in assisting in integrating mathematics, biological and physical science, and communications with agricultural courses; especially the Agricultural Core Curriculum. As a result of this and other integration efforts, 46% of the 325 programs in the state are teaching this integrated curriculum involving 19,320 students.

Additional professional development and technical assistance was directed at conducting interdisciplinary teaming workshops for agriculture and academic teachers involved in restricted high schools and schools involved in the Central Valley Agricultural Tech Prep Resource Consortium. These efforts involved 30 schools which are developing and implementing successful models of effective integration. Models which appear to produce students who are more engaged in learning and more clearly understand the relevancy of instruction to their futures in careers and society.

The redesign of preservice education programs in agriculture to include integrated instruction was concluded as a collaborative effort with five college/universities in 1993-94. This new curriculum is being used to train forty or fifty new agricultural instructors annually, better preparing them to meet the changing needs in our high schools and community colleges.

In an effort to encourage excellence in integrated instruction the FFA student organization initiated teacher and student award recognition programs in Agriscience. These programs have placed a focus and priority on improving agriculture and science integration and instruction; they have also resulted in increased student and teacher competency and interest statewide.

In the identification of Agricultural Education programs which are exemplary in integration of applied academics, schools were selected that have formed interdisciplinary teaching teams, established clear sequences of courses in defined career paths, and have demonstrated improved student performance. Four sites clearly meet that criteria and are exemplary. They are:

- Hanford High School - Hanford
- Las Plumas High School - Oroville
- Pioneer High School - San Jose
- Ceres High School - Ceres
Business Education

During 1993-94, the Business Education Unit sponsored five statewide integrated curriculum workshops. The two-day sessions were designed to provide school teams with a foundation for developing curriculum strategies that integrate Business Education Model Curriculum Standards across disciplines and enable students to make real connections to the business world. One hundred and fifteen sites with teams of at least four members representing business education, mathematics, English-language arts, Social Science and/or Science participated. Total attendance for the workshops was 620. Training included strategies/methods for powerful learning, review of integrated curriculum process, and team member integrated curriculum planning and practice.

In addition to the intense two-day staff training activities, each site team received an Integrated Curriculum Implementation Guide which includes processes schools have used to create integrated curriculum, a business education integrated curriculum model with samples of the required components, and the Business Education Career Path/Model Curriculum Standards.

To encourage additional local educational agencies to pursue integrated curriculum strategies, the Unit has established nine Business Education Integrated Curriculum Demonstration Programs. These developmental sites have been provided extensive training on integrated curriculum. They were selected because of their exemplary progress on implementation of integrated curriculum.

During the 1994-95 school year, the Business Education Unit will be sponsoring visitations to the demonstration sites.

The majority of the nine selected integrated curriculum demonstration sites serve high concentrations of special populations. One site has a diverse population which includes 62 different languages and dialects. Four sites have partnership academies specifically designed to serve at-risk youth. The demonstration sites will highlight successful instructional strategies for serving special populations.

During the past two years, the Business Education Unit has developed integrated performance activities (IPAs) for all model curriculum standards in the Business Education Career Path Clusters—Computer Science and Information Systems, Business Management, Accounting and Finance, and Marketing. The IPAs were developed to encourage the implementation of integrated curriculum based on the content standards.
identified in the academic frameworks and business education model curriculum standards. They incorporate concepts from applied academic resources such as the Center for Occupational Research and Development (CORD). The IPAs encourage action-based activities and student teaming approaches to critical thinking, problem-solving, and decision-making. The IPAs also facilitate implementation of the Business Education Integrated Curriculum Model. They suggest themes, address content standards, and provide ideas for action-based projects.

The Business Education Unit also provided integrated curriculum resources to the 10 California Partnership Academies involved with the development of industry standards in banking and telecommunications.

During 1994-95, a cadre of integrated curriculum specialists will serve as mentors to those site who attended the integrated curriculum workshops in 1993-94. In addition to technical assistance, instructional resources will also be provided.

A review of the Business Education Integrated Curriculum Demonstration Programs has indicated the following:

- improved student performance
- higher levels of student attendance
- increased enrollments in advanced levels of education
- reduced dropout rates
- improved teacher moral and motivation
- increased coordination and articulation of program sequences

**BUSINESS EDUCATION INTEGRATED CURRICULUM DEMONSTRATION PROGRAMS**

Arroyo Grande High School  
Encinal High School  
Escondido High School  
Fresno High School  
San Marcos High School  
Silver Creek High School  
Sweetwater High School  
Valley High School  
Westminster High School
CRITERIA FOR INTEGRATED CURRICULUM SITES

Integrated Curriculum
Business Education Career Path
Performance-based Assessment
Workplace Learning
Tech Prep Education
Powerful Teaching and Learning
Restructured High School
Technology

Health Careers Education

Ten schools were selected through a competitive process to create health careers pathway models. During 1993-94 each school interdisciplinary teaching teams comprised of academic (math, science, history-social science, and language arts), health careers teacher(s), a counselor, administrator and health care industry representative designed and piloted two integrated action based projects for the tenth grade students.

The projects were designed around the unifying theme: Patterns of Change in Health Care, and connecting themes—Bioethical Issues, Technological Advances, Epidemiology, and Socioeconomic Conditions. The projects are designed to be teacher team taught and student team completed. Content is intended to add relevancy to academic abstract concepts through the context of health care as evidenced by the unifying theme and connecting themes. The projects received several critiques from consultants representing the various disciplines as well as students participating in the pilot work and an outside assessment expert. The projects are currently in review by the partner schools in the project and revision are occurring based on the various critiques that have been completed.

In addition to the project development the teaching teams have also been working towards achieving the 14 critical components that have been identified for career path success. The critical components are: administrative support, shared planning time, guidance and counseling services, professional development, performance standards, creative and innovative teaching strategies, education partnerships, academic support services, industry partnerships, workplace learning, flexible, schedules, performance-based interdisciplinary assessment, interdisciplinary curriculum, and student centered learning.

An average of 75 students are enrolled in the health career pathway at each of the 10 schools. Each student, in addition to participating in interdisciplinary curriculum, also has a workplace learning experience, e.g., volunteer, community service, exploratory
Integrating Applied Academics Into Vocational Education

rotations, a mentor, and tutoring as needed. The ten sites are representative of the state's education community both, in population and ethnicity.

- California High School
  Urban setting
  Ethnicity:
  Annual enrollment: 1,950
  65% Hispanic

- East Bakersfield High School
  Urban setting
  Ethnicity:
  Annual enrollment: 1,700
  65% minority, 59% Hispanic

- Galt High School
  Rural setting
  Ethnicity:
  Annual enrollment: 1,300
  73% Caucasian, 23% Hispanic

- Liberty High School
  Suburban setting
  Ethnicity:
  Annual enrollment: 2,300
  69% Caucasian, 26% Hispanic

- Palmdale High School
  Suburban setting
  Ethnicity:
  Annual enrollment: 2,650
  55% Caucasian, 10% Afro American, 28% Hispanic

- Quincy High School
  Rural setting
  Ethnicity:
  Annual enrollment: 600
  93% Caucasian, 7% American Indian

- Shasta High School
  Suburban setting
  Ethnicity:
  Annual enrollment: 1,750
  80% Caucasian

- Valley High School
  Suburban setting
  Ethnicity:
  Annual enrollment: 2,000
  30% Afro American, 28% Caucasian, 15% Hispanic, 17% Asian, 8% Filipino
Integrating Applied Academics Into Vocational Education

- Van Nuys High School
  Urban setting
  Ethnicity: Annual enrollment: 3,000
  18% Asian, 49% Hispanic, 5% Afro American, 23% Caucasian

- Westminster High School
  Urban setting
  Ethnicity: Annual enrollment: 2,500
  38% Asian, 28% Caucasian, 26% Hispanic

The school teams meet together twice each year at three-day summer and winter integration institutes to review their work and gain further insight into the complexities of creating an industry focused career path, and to participate in health care site visitations to enhance their understanding of the scope of the industry. They also meet at regularly scheduled intervals on four occasions regionally to review the work in progress.

An additional 165 sites have requested technical assistance in the initiation of a health careers pathway. The model schools will assist in providing assistance and support to these schools once they have instituted the career pathway.

Home Economics Education

During the 1993-94 program year, the Home Economics Education Unit provided several professional development activities which focused on the integration of academic and home economics content through interdisciplinary teaming in order to prepare students with the academic, personal, and occupational skills for successfully transitioning to advanced education, training programs, and/or work. One hundred fifty-five teachers from 35 school sites participated in the workshops/institutes. Each site was required to send teams of no less than three teachers representing at least two academic disciplines in addition to Home Economics. The majority of the teams had five representatives, some of which also included administrators and counselors. Besides Home Economics instructors, team members included teachers from the disciplines of science, math, English-language arts, history-social science, art, foreign language, agriculture, and business education. The teams were trained in developing action-based projects as a means of integrating academic and occupational content to
address model curriculum standards as well as developing contextual learning experiences.

Although a formal research study on the results of the interdisciplinary teaming at local sites has not been conducted to date, teachers reported an increase in student achievement and retention; a renewed enthusiasm and interest in teaching; and a greater respect for the contributions of all disciplines in the education of students.

Work was begun on a guide to assist school sites with establishing interdisciplinary teams and integrating academic and occupational content. Examples of exemplary practices and other successful strategies will be included in the resource.

Industrial & Technology Education

Statewide ITE Unit leadership in support of Integrating Applied Academics into Vocational-Technical Education Programs for 1993-94 included activities leading to the outcomes listed below:

- Increased understanding of interdisciplinary implementation strategies by facilitating workshops in which interdisciplinary teams of instructors were featured as examples for how to develop integrated curriculum for implementation.

- Education/industry teams developed strategies for the implementation of interdisciplinary curriculum into youth apprenticeship programs.

- Increased awareness of teachers and administrators regarding interdisciplinary curricula from across the United States.

- Increased awareness of teachers, administrators, counselors, and business industry representatives through major workshops on integration teams and integration implementation.

- Increased sensitivity of teachers developing a working affiliation with representatives from other disciplines.

- Increased understanding of emerging issues on integrated academic and vocational articulation and a comprehensive approach to education.
Integrating Applied Academics Into Vocational Education

- Technical assistance in support of program school restructuring meetings.

1993-94 exemplary programs were recognized through the program certification process in ITE. The programs included:

<table>
<thead>
<tr>
<th>Program Site</th>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oakdale High School, Oakdale</td>
<td>Automotive Technology</td>
</tr>
<tr>
<td>Riverbank High School, Oakdale</td>
<td>Automotive Technology</td>
</tr>
<tr>
<td>Quincy High School, Quincy</td>
<td>Automotive Technology</td>
</tr>
<tr>
<td>Quincy High School, Quincy</td>
<td>Drafting Technology</td>
</tr>
<tr>
<td>Quincy High School, Quincy</td>
<td>Welding Technology</td>
</tr>
<tr>
<td>49er ROP, Auburn</td>
<td>Automotive Technology</td>
</tr>
<tr>
<td>49er ROP, Bear River</td>
<td>Automotive Technology</td>
</tr>
<tr>
<td>49er ROP, Colfax</td>
<td>Automotive Technology</td>
</tr>
<tr>
<td>49er ROP, Nevada City</td>
<td>Automotive Technology</td>
</tr>
<tr>
<td>49er ROP, Grass Valley</td>
<td>Automotive Technology</td>
</tr>
<tr>
<td>Coastline ROP, Costa Mesa</td>
<td>Automotive Technology</td>
</tr>
<tr>
<td>Shasta Trinity ROP, Redding</td>
<td>Construction Technology</td>
</tr>
<tr>
<td>Portola High School, Portola</td>
<td>Construction Technology</td>
</tr>
<tr>
<td>Portola High School, Portola</td>
<td>Welding Technology</td>
</tr>
<tr>
<td>Rio Linda HS, Rio Linda</td>
<td>Construction Technology</td>
</tr>
<tr>
<td>Rio Linda HS, Rio Linda</td>
<td>Drafting Technology</td>
</tr>
<tr>
<td>Southeast ROP, Cerritos</td>
<td>Automotive Technology</td>
</tr>
<tr>
<td>Turlock High School, Turlock</td>
<td>Electronics Technology</td>
</tr>
<tr>
<td>Acalanes HS, Lafayette</td>
<td>Graphics Technology</td>
</tr>
<tr>
<td>Eureka High School, Eureka</td>
<td>Construction Technology</td>
</tr>
</tbody>
</table>

California Community College Efforts

The Chancellor's Office continues to promote the integration of academic and vocational education through a variety of services which are available to both urban and rural locales in the state. Serious efforts toward the integration of academic and vocational education have been significantly assisted through the State's direction of $4.2 million in Title IIA Leadership funding for this type of integration. The findings of the statewide needs assessment, conducted as a foundation for the 1994-96 Perkins State Plan, elevated the issue of academic integration to a wide audience in California.
Integrating Applied Academics Into Vocational Education

That heightened awareness resulted in many activities being focused on the issue of academic integration.

Required Tech-Prep coordinators meetings, along with other technical assistance workshops through the vocational education community, further increased vocational education practitioners' skills in performing the various tasks associated with building curriculum for academic integration. Coordinators, faculty, and counselors participated in state seminars and workshops addressing applied academics, integrating academics and vocational education, and developing Tech-Prep programs.

California is fortunate to host several programs that further support the quality of services the state is able to deliver. For example, Project VANGUARD -- a four-year grant awarded to Sonoma State University to assist high schools in restructuring efforts aimed at improving the integration of academic and vocational education -- has provided presenters for training sessions around the state. Another resource which amplifies the efforts of the state is the National Center for Research in Vocational Education (NCRVE) at the Graduate School of Education, University of California, Berkeley. Their personnel and materials are integrated in a number of ways into the services that the State provides. Additionally, NCRVE has received funding for an "urban schools" network which provide technical assistance to local education agencies in promoting educational reforms related to Tech-Prep. California is fortunate to have its largest school district -- Los Angeles Unified -- selected as a participant. The intensive summer training program, and year round support network assists the State in its Tech-Prep programs.

Through the Tech-Prep program, California has licensed many of the CORD (Center for Occupational Research and Development) curriculum materials, thus making them available for adoption or modification statewide. These materials provide one type of academic integration through the conduct of applied, contextual learning. Another alternative for the statewide development of integrated academics is the permissive allowance of expenditures for professional and curriculum development in local Perkins plans. In fact, 4.2% of all Perkins Title II C, Section 232 (postsecondary and adult) funds were spend on professional and curriculum development. These funds are, in turn, supplemented with state categorical funds in these areas.

The Statewide Tech-Prep Program Evaluation special project, in addition to providing informal on-site technical assistance, provides an important, objective repository of "best practices" and program "pitfalls," especially concerning issues of academic integration. Additionally, through its qualitative and quantitative analysis, this project
Integrating Applied Academics Into Vocational Education

surfaces policy concerns to program administrators and state level administrators, building a climate of continuous improvement. Findings from this evaluation project are published and disseminated. Additionally, those findings are also routinely represented at professional meetings and other public venues.

Impact

One real impact of services provided by the state was the continuing development of new curriculum. In addition to the many instances of pilot testing Tech-Prep courses developed from staff development, other locations reported the institutionalization of Tech-Prep curriculum, replacing traditional curriculum with proven Tech-Prep curriculum. Anecdotal reports suggest that real benefits to students derive from Tech-Prep curriculum, most notably higher grade point averages and student satisfaction.

A particularly satisfying aspect of this trend is the growing recognition of the value of Tech-Prep curriculum for all learners. One example is found in the consortium anchored by El Camino College of Torrance, California. In that program, modules of the applied academic curricula are now being utilized at work sites via the college's Workplace Learning Resource Center.

Another impact of services provided by the state is the growing readiness of local Tech-Prep consortia to integrate national reform movements into their programs, most notably SCANS competencies in curriculum and School-to-Work Opportunity Act precepts into programs.

The impact of academic and vocational education integration efforts to date will affect student performance, including that of special populations, by being more effective for a variety of learning styles, through more complete reinforcement from subject area coherence, and through the resultant curriculum enhancement which occurs in cross-discipline dialog. Additionally, the state is better prepared to implement new federal and state initiatives, including the School-to-Work Opportunities Act and Goals 2000.
SECTION XII

CAREER GUIDANCE & COUNSELING

Career guidance and counseling is an integral component of the comprehensive services offered to students in secondary schools, Regional Occupational Centers/Programs, adult schools, and the California Community Colleges.

Activities and services designed to enhance effective career guidance and counseling of students were offered in two major categories: those which are imbedded in larger programs and those which are explicit programs aimed at meeting specific needs and/or developing specified products.

Career guidance and counseling is part of the mission of each of the program areas in California. Subject matter leadership programs, as well as programs for Single Parent/Displaced Homemakers, Sex Equity, Community Based Organizations, Consumer Homemaker Education, and Tech Prep, all have devoted significant resources toward improved guidance and counseling services.

In California, the Tech Prep programs have a particularly well developed component in this area. All of the 85 local Tech Prep consortia as well as the 6 resource consortia have developed materials and strategies for providing improved guidance and counseling services. To provide leadership for these efforts, a statewide "Student Outreach and Guidance" project was established. This project has developed a variety of materials and provided professional training in support of career guidance and counseling.

The impact of these activities relate to many aspects of students' experiences in vocational education programs, and their subsequent experiences transitioning from the educational institutions into the workforce or seeking further education. Those impacts are reflected in students' pre-enrollment preparatory services; matriculated career and program explorations and choices; academic performance via often-reported enhanced motivation and purpose; work-competency related academic attainment; increased effectiveness in the transition from study to related employment or the pursuit of further...
education, training, and skills; and longer range success in the world of work and careers.

As previously mentioned, another track for the improvement of career guidance and counseling is found outside of vocational education student program areas, per se. These activities are generally conducted through special projects which further enhance the State's efforts in this area. In addition to assisting in the impacts as described above, these programs offer the additional benefit of strengthening professional development, and building capacity and delivery systems for career guidance and counseling. Better student support services and curriculum design translates into a high standard of performance for placement, and better stewardship of public funds. These project activities are described below.

- **Center for Cooperative Work Experience Education.** Housed at Diablo Valley College, this center provides a variety of resources and training activities for field-based professionals. Both staff development and curriculum development focus on: 1) industry standards 2) linkages between Cooperative Work Experience Education, career development, job placement, Tech-Prep and School-to-Work transitions and 3) placement of students who are members of special populations. This program provides all California community college cooperative work experience programs with up-to-date reference materials on a variety of related subjects, and improves the provision of career guidance and counseling.

- **Coop Work Experience Advisory Committee.** Facilitated by Santa Rosa Junior College, the advisory body provides expert study, counsel and recommendations for state policy and administration in this area. Career guidance and counseling is an essential aspect of this area for this delivery system.

- **Vocational Guidance and Career Counseling Advisory Committee.** This body addresses a scope of work concerned directly concerned with the Content and delivery of vocational career development information. The advisory body provides expert study, counsel and recommendations for state policy and administration.

- **National Career Development Guidelines.** This project is charged with the development and dissemination of career development training modules based upon the National Career Development Guidelines intended for career development providers, including counselors, instructors, and paraprofessionals.
Career Guidance and Counseling

- **The California Institute for Career Development (CICD).** The CICD, operated out of the Orange Coast College Foundation, has the mission of developing and delivering career development inservice training to counseling service providers utilizing enhanced technology communication resources. That focus earned for California the designation of "model site" for career development activities by the National Occupational Information Coordinating Committee (NOICC). Significant collaboration is occurring to develop training modules utilizing technological communication systems. This project assumes responsibility for the professional development activities provided through a placement information network to serve as a clearinghouse and a model for job placement in community colleges.

- **Vocational Education Technology Instructor and Career Counselor Inservice Training Funds.** This program provides staff development opportunities to encourage internships in business and industry for job placement personnel, cooperative work experience education coordinators, gender equity coordinators and special populations coordinators.

- **High School Education Office (HSEO).** The HSEO was created to lead California high school restructuring and reform efforts. One of the major initiatives in 1993-1994 was the establishment of the High School Networks Project involving 100 high schools statewide. A major emphasis of this program is career counseling and guidance. Project events included a statewide conference on career education attended by 450 educators, a conference for 60 counselors from degree- and credential-granting institutions, a staff review of career guidance implications of federal and state initiatives including Perkins, and the updating and dissemination of the Career Information Delivery System Handbook which analyzes available computerized career guidance systems for use by vocational students.
### 1993-94 VATEA Special Projects Final Performance Report Summary

**APPENDIX A**

<table>
<thead>
<tr>
<th>Grant #</th>
<th>College/District</th>
<th>Project Director</th>
<th>Fax #</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Funding Period to</th>
<th>Phone #)</th>
</tr>
</thead>
</table>

#### Please Report by Funding Source

Fill in unshaded boxes appropriate to your funding

<table>
<thead>
<tr>
<th><strong>II-A</strong></th>
<th><strong>II-B</strong></th>
<th><strong>II-B</strong></th>
<th><strong>III-A</strong></th>
<th><strong>III-B</strong></th>
<th><strong>III-E</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>State Ldrship</td>
<td>Single Parent</td>
<td>Gender Equity</td>
<td>CBO</td>
<td>CHE</td>
<td>Tech Prep</td>
</tr>
</tbody>
</table>

1. Amount of Federal Funds *Awarded* $<br>
2. Amount of Federal Funds *Spent* $<br>
3. Estimated Federal Funds *Spent in*<br>
   - Curriculum Development $<br>
   - Local Advisory Committees $<br>
   - Professional Development $<br>
   - Research/Data Collection $<br>

Direct services to students:<br>
- Adaptive Services $<br>
- Clubs (VICA/FFA) $<br>
- Counseling/Assessment $<br>
- Dependent Care $<br>
- Mentoring $<br>
- Recruitment $<br>
- Textbooks $<br>
- Transportation $<br>
- Tutoring $<br>

4. Number of Students Served<br>
   *indicate duplicate count with an *<br>
   - Female<br>
   - Male<br>
   - Total<br>

5. Number of Students Served<br>
   *indicate duplicate count with an *<br>
   - Secondary<br>
   - Post-Secondary<br>
   - Total<br>

6. Number of Professional Staff Served<br>
   - Secondary<br>
   - Post-Secondary<br>
   - Total

---

166
### Please Report by Funding Source

Fill in unshaded boxes appropriate to your funding.

<table>
<thead>
<tr>
<th>Funding Source</th>
<th>II-A State Ldrshp</th>
<th>II-B Single Parent</th>
<th>II-B Gender Equity</th>
<th>III-A CBO</th>
<th>III-B CHE</th>
<th>III-E Tech Prep</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Number of CBOs Participating</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. High Schools in Tech-Prep Consortium</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td># of H.S. Participating</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td># of H.S. Not Participating</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Number of Programs (Curricula)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Added (New)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expanded</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deleted</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. Participation in Statewide Eval. Projects

*(please circle Yes or No)*

<table>
<thead>
<tr>
<th>Project</th>
<th>Y</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAM (ETI)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematica</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ETI - Evaluation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Atma - Student Follow-up</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The following items require a listing of brief narrative response *(not to exceed two pages)*:

11. All projects utilizing Title IIIA (CBO) funds must provide a list of CBOs participating (Name of CBO and Address) and a list of services provided by each CBO.

12. All projects utilizing Title IIA (Leadership) funds must provide a list of programs added (new), expanded or deleted.

13. Describe the outcomes of the project in two paragraphs or less. **Note that outcomes are not activities, but the impact of the activities.**

14. Briefly describe any exemplary aspects of the project and/or activities that were particularly effective, and state the criteria used for determining that these were "exemplary or particularly effective."

15. Attach one sample copy of any work products that resulted from the project (brochures, videos, handbooks, newsletters, posters, etc.).

Above data and attached narrative submitted by: [Signature/Date]

Approved by: [Signature/Date]