# Conditions of Education in California 1989

Policy Analysis for California Education (PACE)

DIRECTORS

James W. Guthrie University of California, Berkeley

> Michael W. Kirst Stanford University

Allan R. Odden
University of Southern California

# Conditions of Education in California 1989

James W. Guthrie Michael W. Kirst Gerald C. Hayward Allan R. Odden Julia E. Koppich Jacob E. Adams, Jr. Florence R. Webb



Additional copies of this paper, PP90-1-2, are available by sending \$12.00 plus \$1.50 shipping/handling per copy to:

# PACE School of Education University of California Berkeley, California 94720

CHECKS PAYABLE TO THE REGENTS OF THE UNIVERSITY OF CALIFORNIA (California residents add appropriate sales tax.)

Policy Paper No. PP90-1-2
Policy Analysis for California Education (PACE)
Berkeley, California
January 1990

# **Contents**

List of Figures	v11
Foreword	xi
Policy Analysis for California Education	xiii
The Evolving Context of California Education	1
Rapid Pupil Growth and Diversity	2
The Changing Educational Policy Context	3
Educational Reform Alternatives	5
Strategies for Future Reform	6
Capital Perspective	9
Highlights	9
Enrollment and Student Characteristics	15
Highlights	15
•	
The state of the s	
Human Resources	30
Highlights	30
	List of Figures Foreword Policy Analysis for California Education  The Evolving Context of California Education  Highlights California's Economy and Demography Rapid Pupil Growth and Diversity Other Socio-Demographic Trends The Changing Educational Policy Context Educational Reform Alternatives Strategies for Future Reform Concluding Comments  Capital Perspective  Highlights Proposition 98 Provisions The Campaign Historical Perspective: The Fiscal Roller Coaster The 1989–90 Problem The 1989 Session  Enrollment and Student Characteristics  Highlights Enrollment Projections Private School Enrollment Minority Enrollment Language Minorities Inter-ethnic Differences in School Attendance and Graduation Family Composition and Income Pregnant and Parenting Teens Teens with Aquired Immune Deficiency Syndrome (AIDS)  Human Resources  Highlights Profile of California Teachers Administrator Profile

	Professional Credentials	32
	Teacher Misassignments	34
	Class Size	34
	The Future: Teacher Supply and Demand	35
	Factors Influencing Teacher Supply	
	California Basic Educational Skills Test	
	Alternate Routes of Certification	
	District Recruitment Efforts	
	Creating a Professional Work Environment	
	Mentor Teacher Program	
	Staff Development	
	Reforms in Credentialing, New Teacher Support	
	The Trust Agreement Project	
5	Organization and Control	42
	Highlights	42
	State and Local Organization of Education	
	Central State Actors	
	Intermediate Agencies	
	District Characteristics	
	Public School Characteristics	
	School Calendar	
	Private School Characteristics	
	Classroom Organization	
	Who Controls California Schools?	
	California School Boards	
	School Boards in Operation	
	Loss of Local Discretion	
	Accountability: Trading Dollars and Performance	
	Direct Control by Caifornia's Electorate	
	Influence of the Courts	
	Enhancing Local Flexibility: Possible Future Directions	
	Discretionary Funding	
	Devolving Authority to Individual Schools	
	"Restructuring"—New Watchord of School Reform	
	Choice	
	Commission Reports	55
6	Curriculum and Special Programs	59
	Highlights	59
	State Legislative Action	59
	State Board of Education and State Department of Education	
	Textbook Adoption	
	The California Assessment Program	

	Higher Education	65
	High School Curricular Changes	
	Course-Taking Patterns	
	Class Size	69
	Performance Reporting	69
	National Trends	
	California Compared to the Nation	70
	Categorical Funding	
7	Student Performance	77
	Highlights	
	Elementary and Secondary Test Scores, California Assesment Program	
	College Admission and Achievement Tests	
	Advance Placement Exams	
	Are California's Minority Students Closing the Gap?	99
	What Do the Findings Mean?	100
8	Fiscal Resources	101
	Highlights	
	Sources of Public School Revenues	
	National Comparisons	105
	Current Expenditures	108
	School Finance Equalization	108
	Future Revenue Needs	
	Construction of School Facilities	112
	The State School Building Lease-Purchase Program	112
	Local General Obligation Bonds	114
	The Mello-Roos Community Facility Act of 1982	114
	Developer Fees	114
	Year-Round Schools	115
	Conclustion	115
	California School Finance and the Property Tax	116
	Correcting Inequities	
	Conclusion	
9	Special Feature: Conditions of Children in California	119
	Introduction	119
	Chapter 1: Introduction	
	Chapter 2: A Sociodemographic Portrait	
	Chapter 3: Family Life	
	Chapter 4: Economic Status	
	Chapter 5: Child Care and Early Childhood Programs	
	Chapter 6: Education	
	·	

Chapter 7:	Chapter 7: How Children Spend Their Time and How Community		
•	Factors Affect Their Well-Being	124	
Chapter 8:	Health	124	
Chapter 9:	Mental Health	127	
Chapter 10:	Child Abuse and Child Welfare Services	127	
Chapter 11:	Children, Delinquency, and the Law	128	
Chapter 12:	Income Support Programs	129	
Chapter 13:	Policies for Children with Multiple Needs	129	
Chapter 14:	State Policymaking for Children	130	
Working Pa	per:		
An Explorat	ion of County Expenditures and Revenues 131		
for Children	's Services	131	
Working Pa	per:		
Child Care	Quality from the Child's Perspective:		
A Hypotheti	cal Account and Research Review	131	

# **List of Figures**

Enrollment	and Student Characteristics	
Figure 3.1:	Public K-12 Enrollment by Grade	16
Figure 3.2:	Public K-12 Enrollment by Grade,	
_	1981-82, and 1987-88 to 1988-89	16
Figure 3.3:	Public School Enrollment Trends and Projections	18
Figure 3.4:	Projected Enrollment Increases by County: Northern, Central,	
_	and Southern California, 1987-1992	19
Figure 3.5:	Private Enrollment as a Percent of Total Enrollment, 1976-87	
Figure 3.6:	Private and Public School Enrollment,	
	1983–84 through 1987–88	20
Figure 3.7:	Private School Enrollment by Grade	
Figure 3.8:	Growth in Minority Enrollment as Percent of Total Enrollment,	
	1967 to 1989	22
Figure 3.9:	Percent of Total K-12 Enrollment by Ethnic Group, 1971-72	
	and 1986-87 through 1988-89	23
Figure 3.10:	Number of Limited-English-Proficient Students by Primary	
	Language, 1988	24
Figure 3.11:	Growth in Number of Limited-English-Proficient Students in	
	California's Public Schools, 1977–1988	25
Figure 3.12:	Number of Dropouts in California Public High Schools	
	by Ethnic Group, Class of 1988	26
Figure 3.13:	Women Householders Without Spouse	27
Figure 3.14:	Women's Hourly Wages, 1986	27
Figure 3.15:	Income of All California Families With Children, 1977-1986	27
Figure 3.16:	Proportion of California and United States Children Below the	
	Poverty Line, 1969–1986	28
Human Res	ources	
Figure 4.1:	California Teachers' Years of Experience, 1987–88	31
Figure 4.2:	Percent of Elementary and Secondary	
1 16010 1.2.	· · · · · · · · · · · · · · · · · · ·	32
Figure 4.3:	California State University Recommended Credentials by	
i iguio 4.5.	Ethnicity, 1987–88	33
Figure 4.4:	CBEST Number Tested and Percent Passing by Ethnicity,	
i iguio ii ii	1985–86 through 1987–88	37
Figure 4.5:	CBEST Passing Rates by Ethnicity	
Organizatio	n and Control	
Figure 5.1:	Governance Structures for Public Education in California	12
Figure 5.1:	Number of California School Districts for Selected Years,	43
- 15010 0.2.	1935–1985	44

# **Curriculum and Special Programs**

Figure 6.1:	Percentage Changes in Subject Matter Enrollments, 1982–83 to 1988–89 and 1987–88 to 1988–89	67
Figure 6.2:	Percentage Changes in Student Enrollment and Courses Taken,	
	Grades 9-12, 1982-83 to 1988-89 and 1987-88 to 1988-89	.68
Figure 6.3:	Subject Enrollment as a Percentage of Total Courses, 1982–83 to 1988–89	.68
Figure 6.4:	Average Class Size, Selected Subjects, 1988-89	
Figure 6.5:	Course Enrollments, Statewide Averages from the Performance	
	Report for California Schools	.70
Figure 6.6:	Course Enrollment Trends, Statewide Averages from the	
	Performance Report for California Schools	.71
Figure 6.7:	Percentage of High School Graduates Who Took Selected Mathemat	ics
	Courses, by Race/Ethnicity, 1982 and 1987	.72
Figure 6.8:	Percentage of High School Graduates Who Took Selected Science	
	Courses, by Race/Ethnicity, 1982 and 1987	.73
Figure 6.9:	Average Number of Credits Earned by High School Graduates	
	in Various Subjects, 1982 and 1987	.73
Figure 6.10:	Enrollments in Science Courses in Grades 9-12 by Level	.74
Figure 6.11:	Enrollments in Math Courses in Grades 9-12 by Level	.75
Figure 6.12:	Selected Categoricals, 1988-89 School Year	.76
Student Peri	formance	
Figure 7.1:	Average CAP Scores by Grade Level and Content Area, and	
	Difference in Scores by Year, 1979-80 through 1988-89	.78
Figure 7.2:	Reading, Writing, and Math CAP Scores for Grade 3, 1979–80 through 1988–89	.79
Figure 7.3:	Reading, Writing, and Math CAP Scores for Grade 6, 1979–80	
•	through 1988–89	.80
Figure 7.4:	CAP Scores for Grade 8, 1983–84 through 1988–89	.81
Figure 7.5:	CAP Reading, Writing, Spelling, and Math Scores	
•	<u> </u>	.82
Figure 7.6:	Scholastic Aptitude (SAT) Scores for California and	
•	the Nation, 1971-72 through 1988-89	.82
Figure 7.7:	Scholastic Aptitude Verbal Test Scores for California	
<b>0</b>	and the Nation, 1971-72 through 1988-89	.83
Figure 7.8:	Scholastic Aptitude Math Test Scores for California	
J	and the Nation, 1971-72 through 1988-89	.84
Figure 7.9:	SAT Scores by Number and Percent of Seniors Scoring	
•	over 450 and 600 Verbal and 500 and 600 Math,	
	California and the Nation, 1984 to 1989	.85
Figure 7.10:		
_	and the Nation, 1988	.86
Figure 7.11:	Differences Between National and California College Board	
_	Achievement Scores, 1981–88	27

Figure 7.12:	College Board Achievement Tests	88
Figure 7.13:	SAT and Verbal and Math Scores for California, the Nation and	
	Five Urban States Which Predominantly Use the SAT, 1988	89
Figure 7.14:	Total Sat Scores for California and Five Urban States Which	
	Predominantly Use the SAT, 1988	90
Figure 7.15:	SAT and Selected College Board Achievement Test Scores for	
	California Five Urban States, and the Nation as a Whole, 1988	91
Figure 7.16:	California and National Advanced Placement Comparisions	
Figure 7.17:	CAP Scores by Ethnic Group, 1986–87 through 1988–89	93
Figure 7.18:	Ethnic Group SAT Scores for California and the Nation, 1978-87	94
Figure 7.19:	Ten-Year Increase in SAT Scores for Ethnic Minorities, 1979–89	95
Figure 7.20:	Number of Graduates by Ethnic Group and Percentage of Graduate	S
	Completing University of California a-f Requirements	95
Figure 7.21:	1989 California SAT Scores: Distribution by Gender	96
Figure 7.22:	Changes From Previous Year in Grade 8 CAP Reading Scores	97
Figure 7.23:	Changes From Previous Year in Grade 8 CAP Math Scores	97
Figure 7.24:	CAP Scores of Limited English Proficient (LEP) Students,	
	Grades 3, 6, 8, and 12, and Index of LEP Progress,	
	1979-80 through 1987-88 (In Two Parts)	98
Fiscal Resou	ırces	
Figure 8.1:	Total K-12 Education Revenues, Nominal and Real,	
	1980–81 to 1989–90	. 102
Figure 8.2:	Education and General Fund Budget Changes,	
	1988–89 to 1989–90	103
Figure 8.3:	Sources of K-12 Education Funding, 1980-81 to 1989-90	
Figure 8.4:	Percent Revenues for K-12 Education by Source,	
J	1980–81 to 1989–90	105
Figure 8.5:	Education and California General Fund Expenditures	
Figure 8.6:	California Revenue for K-12 Education as a Percent of	
J	Personal Income	106
Figure 8.7:	Comparison of Selected School Finance Variables, California	
J	Versus Five Other Large States	107
Figure 8.8:	School District General Fund Expenditures, 1986–87	108
Figure 8.9:	Expenditures Per School, 1985–86	
Figure 8.10:	<del>-</del>	
•	Base Revenue Limit by District Type	111
Figure 8.11:	Projections of K-12 Education Revenue Requirements,	
•	1989–90 through 1998–99	111
Figure 8.12:	State School Building Lease-Purchase Program	
_	Bond Measures Approved by Voters: 1980-88	113
Figure 8.13:	Annual Distribution of State School Building Lease-Purchase	
	Program: General Obligation Bond Proceeds	113
Figure 8.14:	Annual Appropriation of Tideland Oil Funds to the State School	
	Building Lease-Purchase Fund: 1984-85 through 1988-89	113

# **Foreword**

This Publication is based upon compilations and syntheses of information collected by other agencies and individuals. These sources are noted throughout the text. We wish here to express our appreciation to these others, upon whose efforts we depend so heavily. Also, PACE undertakes a substantial amount of original data collection and analysis. We make specific mention of this throughout the text also.

This is the fifth edition of *Conditions of Education in California*. Over time, the content and format have changed, in keeping with suggestions made by readers. Again, we welcome your comments.

James W. Guthrie

Michael W. Kirst

Allan R. Odden

# Policy Analysis for California Education

Policy Analysis for California Education, PACE, is a university-based research center focusing on issues of state educational policy and practice. PACE is located in the Schools of Education at the University of California at Berkeley, Stanford University, and the University of Southern California. It is funded by the William and Flora Hewlett Foundation and directed by James W. Guthrie, Michael W. Kirst, and Allan R. Odden. PACE also operates a satellite center in Sacramento.

PACE efforts center on five tasks: (1) collecting and distributing objective information about the conditions of education in California, (2) analyzing state educational policy issues and the policy environment, (3) evaluating school reforms and state educational practices, (4) providing technical support to policy makers, and (5) facilitating discussion of educational issues.

The PACE research agenda is developed in consultation with public officials and staff. In this way, PACE endeavors to address policy issues of immediate concern and to fill the short-term needs of decision makers for information and analysis.

PACE publications include Policy Papers, which report research findings; the Policy Forum, which presents views of notable individuals; and Update, an annotated list of all PACE papers completed and in progress. The analyses and conclusions in these publications are those of the authors and are not necessarily endorsed by the Hewlett Foundation.

# **Advisory Board**

Joseph Alibrandi
Chief Executive Officer,
The Whittaker Corporation

Warren Bennis
Distinguished Professor
of Business Administration,
University of Southern California

Mario Camara
Partner,
Cox, Castle & Nicholson

Gerald C. Hayward
Deputy Director,
National Center for Research
in Vocational Education

Robert Maynard
Editor and President,
The Oakland Tribune

A. Alan Post
California Legislative Analyst,
Retired

Sharon Schuster
President,
American Association of University Women

Floraline Stevens
Director,
Program Evaluation and Assessment
Los Angeles Unified School District

Eugene Webb Professor, Graduate School of Business Stanford University

Aaron Wildavsky
Professor of Political Science
University of California, Berkeley

# Chapter 1

# The Evolving Context of California Education

The purpose of this chapter is to analyze major demographic, economic, and governmental conditions that serve as a backdrop for educational policy making in California. These conditions are constantly shifting, hence the label "evolving context."

California's schools have improved measurably since 1983, the year in which a major reform bill (Senate Bill 813) was enacted. However, even if better, they are generally judged not to be good enough to fulfill the personal hopes of students and their families or the public needs of the state economy and civic culture. Additional improvement is likely to be difficult to achieve, however. The schools are caught in an increasingly tight socio-demographic vice, which may have negative political consequences for education. Most of the state's students (51 percent) are now minorities. Most of the state's voters (80 percent) are white. The absolute number of students is growing rapidly. The voting population is aging almost as quickly. An appeal must be identified that succeeds either in elevating voters to higher levels of public altruism or impressing upon them the link between an effective educational system and their long-term private welfare.

The problem is not with ideas. There is currently no shortage of technical and strategic suggestions for the reform of schools. For example, the California education summit organized in December 1989 by Superintendent of Public Instruction Bill Honig resulted in a multi-faceted school reform agenda. The problem is elsewhere. Future school improvement in California depends crucially upon the construction of a critical mass of public support, political leadership, professional commitment, and financial resources.

# CALIFORNIA'S ECONOMY AND DEMOGRAPHY

California's educational system is embedded in a dynamic, growing, and diversified state. Overall population growth is

### HIGHLIGHTS

- California schools have improved measurably since 1983 when the state's major school reform law (Senate Bill 813) was enacted.
- However, additional improvement is required and will depend crucially on public support, political leadership, professional commitment, and financial resources.
- The number of school-age children is expected to increase by 140,000 to 150,000 each year to the end of the century.
- By 2000, ethnic minorities will compose half the state's total population and 58 percent of all children (birth to 18 years).
- Enrollment growth alone will trigger the need for 46,000 additional teachers and classrooms, 2,100 new schools, and an additional \$20 billion in current operating resources.
- When contrasted with enrollments of a quarter century ago, today's students are more likely to come from poverty households, to have both parents employed outside the home, to be recent immigrants with only a limited command of English, and to have parents with education levels lower than that of a prior generation.
- California's educational context changed dramatically in 1989 as a result of Proposition 98, an unexpected state surplus, and bipartisan political agreement.
- While 1989 was a year for fiscal progress for education, its impact on educational programs and pupil attainment is unclear.
- Fiscal decision making remains highly centralized, and its future is uncertain.

#### continued

accelerating. California's population growth rate is double the nation's. It became the home of one in every four new U.S. residents in the 1980s. The state has added approximately two million residents since 1987. Projections anticipate that the current population of 28.5 million will reach 35 million by the year 2000.

The number of new residents to the state will average 550,000 a year until the year 2000, with half of this increase coming from births and half from immigration. By 2000, ethnic minorities will compose half the state's total population and 58 percent of all children (from birth to 18 years).

California is also experiencing an increase in the proportion of families with children. (This condition is declining nationally.) The number of school-age children is expected to increase by 140,000 to 150,000 each year to the end of the century.

The state's growth is not geographically uniform. In percentage terms, Sacramento is the fastest growing region, followed by San Diego. However, in absolute terms, the Los Angeles basin will add three million residents by 2000. The L.A. basin's current population of 13.8 million is exceeded by only two states: New York and Texas. The San Francisco Bay Area will add one million more people by 2000.

Hispanics and Asians will account for more than 80 percent of the growth in the state's future labor force. During the next decade more than one in two new workers will be Hispanic, but the proportion of Hispanics among younger age groups will be even higher.

# RAPID PUPIL GROWTH AND DIVERSITY

California's educational system has experienced such dramatic pupil growth that achieving or moving beyond the goals of the 1983 school reform bill (Senate Bill 813) has been difficult. State officials have been preoccupied with increasing resources to help meet enrollment growth. This condition, coupled with inflation, requires a revenue increase of seven percent each year. Maintaining this financial commitment to education has been especially difficult given the fiscal constraints imposed by Proposition 13 and the state spending limit (analyzed below). The 1989 budget agreement, that is, Proposition 4, also known as the Gann limit, however, enables the state to meet some of the changing conditions of children if state revenue continues to grow as it did in 1988–89. What are some of these challenging conditions?

In 1988, California had 7.3 million children (ages 18 and under) but by the year 2000 it will have 8.7 million, an increase of 20 percent. California will have one out of eight of the

 Despite clear signs of hard-won progress, student performance measures continue to lag behind aspiration levels held by many policy makers, professional educators, and parents.

nation's children in 2000. Assuming current ratios, annual enrollment increases of approximately 140,000 will necessitate more than 4,600 additional teachers and classrooms and more than \$2 billion in added revenues each year for the next decade.

In the aggregate, these enrollment increases alone will trigger a demand over the next decade for approximately 46,000 new teachers, raising the state total to 234,000; more than 2,100 new schools (California now has approximately 7,200); and an additional \$20 billion in current operating finances (the state will spend \$23.4 billion in 1989–90).

Surprisingly, this remarkable expansion is not the greatest in the history of California's schools. In the decade following World War II, the impact of incoming students was greater in terms of growth rates and overall numbers. Between 1950 and 1960, enrollments more than doubled as a percentage and increased absolutely by 1.8 million students.

Compared to their immediate post-World War II predecessors, however, today's students in California are far more heterogeneous ethnically, live in homes with a far greater incidence of poverty, more frequently are overseas immigrants who have not yet learned English, and come from households in which the aggregate median educational level has declined over prior generations.

# OTHER SOCIO-DEMOGRAPHIC TRENDS

In addition to rapid growth, there are six major socio-cultural trends that will challenge California's schools.

- 1. At any particular point in time, 75 percent of children live in two-parent families (including step-parents). However, California families are structured differently now than in the past. About one-half of all children will live for some time in a single-parent family.
- 2. There have been major shifts in female and teenage work patterns. The high percentage (60 percent) of mothers in the workforce with children under age 18 means that child care quality is increasingly important. High-quality child care costs about \$5,000 per year per child. Public support for child care covers only 25 percent of the eligible low-income population that desires assistance. The increase in hours that

teenagers work—about 45 percent work 16 hours or more a week—leaves less time for students' leisure activities and homework.

- 3. The number of children in poverty in California has grown since 1973 and is now 23.6 percent; this is above the national average of 21 percent. Poverty is associated with numerous problems, including low educational performance, poor nutrition, child abuse, and delinquency. In part reflecting this rise in poverty, the aggregate median educational level of parents in California has dropped below the national average. The parent education index has been an accurate past predictor of children's educational attainment. The income gap between the richest fifth of families and the poorest fifth is growing; thus, the ability of families to invest their own resources in children is diverging.
- 4. California's children are becoming more diverse linguistically, culturally, and ethnically, and the experiences of children in various subgroups will be quite different. A majority of California's children are now "minorities." Among these, Hispanics and Asians are the fastest growing populations. By the year 2000, children in California will be approximately 42 percent white, 13 percent Asian, 36 percent Hispanic, and 9 percent black. The gap between white and nonwhite populations (except Chinese and Japanese) is large in terms of family finances to invest privately in children. White children as a whole are better off economically than at any time in history.
- 5. The number of immigrant children in California is the largest of any state (one out of every six pupils) and is growing. California receives 29 percent of the nation's legal immigrants and an estimated 50 percent of illegal immigrants, but it has only 11 percent of the nation's total population. Immigrant children from other cultures will experience difficulty in adapting to U.S. institutions, but it is difficult to predict their success. Much of the recent Asian immigration to California is from Laos and Cambodia, rather than China or Japan. Immigrant parents with low levels of formal education frequently have children with high educational performance. However, the experience of immigrants from different cultures will likely vary and may require different public policies.
- 6. Analysts find many encouraging signs regarding the health of California's children. Ninety-seven percent of California kindergartners have received adequate immunization for measles, rubella, and mumps. Death rates from communicable diseases such as tuberculosis and pneumonia have fallen by a hundredfold in the past 50 years as a result of antibiotics, sanitation, and other advances. Fewer than 10 percent of California's children are considered to have serious

health problems or chronic disabilities that limit their activities. On the negative side, recent estimates maintain that approximately 15 percent of babies born in big city public hospitals are drug or alcohol addicted.

# THE CHANGING EDUCATIONAL POLICY CONTEXT

California's educational context changed dramatically in 1989 as a result of Proposition 98, an unexpected state surplus, and bipartisan political agreements. PACE's concluding emphasis in *Conditions of Education in California 1988* was that "it is improbable that solutions to education's fiscal problems caused by population growth and diversity could result solely from actions of elected state officials." Elected officials were constrained by state and local constitutional spending limits. Rather, voter action would be necessary if the 1989 fiscal stalemate was to change.

In fact, subsequent voter action, through passage of Proposition 98 in November 1988, and a related state legislative attempt to modify the state spending limit has moved California closer to breaking the fiscal logjam that has impeded increased spending on education.

In order to understand the changed policy context, it is necessary to review the fiscal situation prior to passage of Proposition 98 in fall 1988. For several years, voter-enacted revenue restraints (Proposition 13 and Proposition 4) inhibited the ability of state policy makers to meet the challenge of added numbers of students and simultaneously to strive for educational excellence. Proposition 13, enacted in 1978, and Proposition 4, the so-called Gann spending limit, enacted in 1979, put California public school revenues in an unprecedented fiscal bind: California simultaneously subjected school spending to both local and state constitutional fiscal restraints.

Proposition 13 removed school revenue raising from the province of locally elected officials. It crippled the state's conventional mechanisms for local fiscal control of education by capping the property tax. School boards have scant discretion over property tax rates because they can request only small parcel tax increases by a vote of two-thirds of the electorate. (Fewer than 10 districts each year pass such a tax.) These tax limitations, when taken in tandem with legislated solutions to court decisions in landmark school finance cases such as *Serrano v. Priest*, effectively converted California into a state system of school finance.

In May 1988, the legislature and governor were confronted with an unexpected one billion dollar budget deficit caused by 1987 tax law changes. The state intended a revenueneutral tax bill to conform to the new federal tax act, which eliminated many loopholes and cut tax rates. But state tax rates were actually reduced, and a state government deficit resulted. This led to a 1988–89 education appropriation act that was slightly less than inflation plus enrollment growth. This level of appropriation was insufficient to move California toward even the national average per-pupil spending, much less render it competitive with high-spending states like New York, Oregon, Connecticut, or New Jersey.

In November 1988, voters approved Proposition 98 by a margin of less than one percent. Devised by the California Teachers Association (CTA) and supported by State Superintendent Bill Honig, the California Federation of Teachers (CFT), the Association of California School Administrators (ACSA), and other educational interest groups, Proposition 98 earmarked for K-14 education a minimum percentage of the state's general fund and revenues collected by the state in excess of the 1979 voter-imposed state spending limit (Gann). It created a constitutionally mandated priority for education within the state's general fund that might have caused severe cutbacks in other public services if 1989 state revenue had not been unexpectedly high. Over the two-year period between 1987-88 and 1989-90, Proposition 98 increased state funding for education beyond growth and inflation by 1.8 percent, a surprisingly small increase. (This is discussed further in Chapter 8.) Its long-term impact is less clear.

Proposition 98 did nothing, however, to restore local tax flexibility through local votes on ad valorem property taxes for current operating budgets. There was no separate and distinct state "politics of education" in 1989 because increased school funding was part of a complex package that included a proposed nine cent gasoline tax increase for highways; revision of Proposition 98 and the state spending limit; and increases for health, welfare, and other programs. All these issues were considered in a budget package that also encompassed a broad-ranging constitutional amendment for the June 1990 ballot. Clearly, the state fiscal logjam has been pierced but not yet broken. The legislature and governor agreed to make changes in four major policies:

- 1. The Gann state spending limit was modified for 1989-90 and long-run revisions were placed on the June 1990 ballot.
- 2. Proposition 98 also was modified for 1989-90 and would be fundamentally altered through the June 1990 ballot issue. If the initiative passes, education will receive a lower base than it would under the original provisions of Proposition 98.

- 3. Transportation improvements are also part of the 1990 ballot issue, including a nine cent gasoline tax.
- 4. All the above items were integrated within the state budget passed on June 30, 1989.

Total educational revenues increased 18 percent between 1987–88 and 1989–90. This amount was more than the 4.64 percent required to provide a cost-of-living-adjustment (COLA) each year for the revenue limit base. However, it was not much more than the COLA for all educational revenues plus three percent pupil growth. Proposition 98 requirements added about \$1 billion to the likely amount education would have received for 1989–90 and \$500 million to the appropriated 1988–89 total, the total to be spent in the 1989–90 school year. A longer-term fiscal solution, however, depends on passage of the 1990 initiative and other possible actions to restore local property tax flexibility. The 1990 ballot initiative proposes to change Proposition 98 and the Gann spending limit in fundamental and complex ways.

Some observers were surprised that 1989 did not include much progress on substantive educational issues such as school management restructuring, parental choice, or teacher professionalism. A large state spending increase has traditionally included new programs as well as an increase in existing categorical financial aid programs. Moreover, several California educational commissions in 1987–88 produced useful lists of proposed new reforms and drastic proposed changes in the school system. None of the recommendations in these reports was implemented, however, despite the state fiscal "surplus" that appeared unexpectedly in May 1989.

The 1989 legislative budget priority for education was fiscal, and it stressed equalization defined as equal expenditures per pupil. More than \$250 million was allocated in 1989-90 to clevate lower spending districts, particularly those with low dollar amounts from categorical financial aid programs. This legislative interpretation of equalization favored suburbs over big cities. In effect, the legislature returned to the fiscal equity focus of the 1970s (with a suburban priority) rather than the academic excellence and school restructuring themes featured in recent commission reports.

This outcome was surprising because 1989 opened with predictions of state fiscal shortfalls and extremely tight school budgets. The governor's January budget proposed cuts in health and welfare programs in order to fund education, but it did not keep education even with inflation, much less add new funding formulas.

The lack of a substantive educational focus also was

surprising given the growing realization that some of the most vexing educational problems remain in California's biggest city school districts. New state test data showed that, since 1983, student achievement has dropped or at best stayed the same in many big city districts such as Los Angeles, Long Beach, and Oakland, while significant achievement gains have been made in the remainder of the state.

# **EDUCATIONAL REFORM ALTERNATIVES**

The 1989 state budget establishes a framework for financing reforms that will meet the future challenges of pupil growth and diversity. But what substance should these reforms contain? There is no lack of ideas; the recommendations of four major statewide reports and commissions are full of new, and in many cases bold, proposals.

Passage of Senate Bill 813 in 1983 is generally regarded as the beginning of the current cycle of state educational reform. The Nation At Risk report was released that year, but California's legislative educational reform deliberations were already underway. The 1983 context linked more money with school reform as a quid pro quo. Surprisingly, this linkage was absent in 1989 as other-than-fiscal issues were pushed into the background. The 1989 budget focused on the distribution of money and increases in existing categorical financial aid programs, but it did little for galvanizing a second wave of substantive reform. It is now appropriate to look backward and forward because California has implemented Senate Bill 813 but has no consensus on where to go next. Will there be a second wave of school reform or is the momentum spent?

Key stimuli undergirded the first wave. A linkage between international (and interstate) economic competition and education was presumed. An educated work force was considered crucial to higher productivity and adaptability to rapidly changing labor markets. Economic competition in the 1990s will require both highly technical personnel and well-trained workers who will no longer be expected simply to perform repetitive manufacturing routines. For example, one claim for Japan's recent international economic success is that the Japanese are reputed to have the best academic bottom quartile in the world. The linkage of education with economic growth maintained its hold on public opinion in 1989, and "competitiveness" is now a cliché in Washington and most state capitals. This continued interest in education by top-level politicians keeps reform discussions lively.

A second key assumption underlying California statutes from 1983 to 1989 is a basic reliance on the school *intensification*. This strategy assumes that education does not need to

be fundamentally changed. Under this strategy, the existing educational delivery system and the state's categorical programs are intensified (meaning that more of the same is provided) to meet economic challenges. The proposals of the California Commission on the Teaching Profession, or ideas to drastically reorganize secondary schools, had little appeal in the legislature. Commission reports by such varied groups as the Governor's Office, Association of California School Administrators, California State Department of Education, and California Business Roundtable largely were shunted aside. These reports contained elements that moved beyond intensification.

The intensification strategy assumes that more time on more difficult academic content is beneficial, and all students can meet increased academic expectations. The curriculum can be narrowed, and vocational education pruned, without much increase in dropouts, the reformers contended. Values can be taught through direct instruction, but they also need to be woven throughout curricular subjects. Both the state and localities centralized and aligned curriculum so that there was more uniformity but also emphasized higher-order thinking skills. The high school was given top priority because achievement scores had not increased at the secondary level commensurate with elementary test gains in the 1975 to 1983 period.

There is also concern in California about the state's ability to attract and retain teachers and simultaneously to increase staff development activities and pay for existing teachers. But before the first wave of reform was half over, a Carnegie Corporation-sponsored forum in 1986 termed the 1983 to 1986 changes "cosmetic" and called for a drastically "restructured" and "professionalized" work force. The Carnegie Forum recommended a new National Board for Professional Teaching Standards (NBPTS) with a new concept of teacher assessments. It also called for a greater voice for teachers in operating schools and "lead teachers," who are similar to British headmasters. Except for the Mentor Teacher Program, however, these proposals have not captured policy attention in California.

As of late 1989, there was no clear consensus concerning the next stage of educational reform in California. The state's economy grew sufficiently to provide revenues for a 1989 round of educational reform, but little was done beyond fiscal formula changes and increases in categorical financial aid programs. A crucial problem is the lack of widespread enthusiasm for any new reform concept similar to the academic excellence and standards of 1983. For instance, the California Commission on the Teaching Profession featured

"teacher professionalism" as a rallying cry. However, the teacher empowerment recommendations were distressing to school boards and administrators. The current concept of school "restructuring" is unclear to state politicians and is not likely to provide an influential emotive symbol.

The concern about at-risk youth has resulted in a few token state dropout and preschool programs but nothing substantial or widespread as yet. A recent national report by MDC. Inc. remarks:

"Some 45 states report having legislation that addresses the problems of at-risk children. But most of it is piecemeal in nature, typically supporting a limited number of pilot programs.... With awareness has come a good deal of casting about by the states, almost all of it characterized by a certain haphazardness, not necessarily indicating lack of direction as much as lack of central planning purpose....No single state has an overarching policy addressed to at-risk, school-aged youth."

This conclusion accurately summarizes the California policy scene. But the at-risk youth issue remains linked in many state policy makers' minds with economic competitiveness and may be building political momentum. Significant political advances for disadvantaged children depend primarily upon economic trends and major social or political movements. The depression of the 1930s galvanized huge federal efforts to relieve the suffering of the poor. The civil rights movement in the 1960s was a crucial event that created a climate of opinion favorable for governmental programs targeted at disadvantaged children. Recent changes in job requirements and the labor force stimulate new concern for the productive potential of disadvantaged children. This may translate into governmental interventions designed to upgrade the skills of those who do not meet the minimum threshold for employment skills in a rapidly changing economy. However, for this to happen the socio-demographic voting trends described at the opening of this chapter must be overcome.

# **Strategies for Future Reform**

When the time is propitious for a second wave of reform, there are several alternative strategies.

1. Intensification of Existing Service Delivery System. The focus would be on more of the 1983 priorities such as academic courses, staff development, and a revamped curriculum that stresses higher-order skills such as analysis, synthesis, and inference. For example, a major overhaul of U.S. science curriculum would include new curriculum, texts, tests, and a staff development effort similar in scale to the

1960s under the National Science Foundation. There could be more centralized curriculum alignment, cross-role teams to help implementation, and long-term staff development to help teachers implement higher-order skills. This approach assumes the current school structure is adequate but needs to be intensified.

A subpart of intensification is an *informational* approach. Here the focus is on outcome performance, because it does not change the existing model or structure. For example, merit schools would stress state payment for results based on an index of indicators that includes test changes plus increases in other relevant outcomes. Some feasibility issues concern the precision of the output measures and how to link financial aid formulas to increases or decreases of an index that includes dropouts, achievement, attendance, course-taking patterns, and the like. The output strategy would focus on the school site as the unit for financial aid distribution rather than the school district. Florida has such a program entitled "merit schools" that allows local districts to establish different performance criteria. Schools that do not increase outcomes and are at the bottom of state achievement tests would be candidates for "state takeover."

2. Professionalization or Restructuring. The varied approaches in Dade County, Florida; Rochester, New York; and Chicago, Illinois, are encompassed here, including the "restructuring of schools" to include more teacher decision making, peer review of teacher effectiveness, and an end to the 50-minute, six-period, lockstep school day. This approach assumes the current model or structure of schooling is fundamentally flawed and needs basic change. It often focuses on redistributing policy decisions from the central office to the school site. California has used its School Improvement Program (1978) to create school site councils that allocate flexible state grants (about \$75 per pupil). These site councils do not have teacher majorities, however, which is part of the professionalism strategy.

A subpart of professionalization is capitalization. This is a technology strategy whereby major increases in computers, VCRs, and other electronic devices would drastically revamp the teacher's role. Technology would also allow reconfiguring the teaching force to use more aides with fewer but much more highly paid professionals who manage the technology.

3. Privatization or a Consumer-Driven Strategy. This strategy, called "choice," includes a broad-based voucher system, vouchers only for particular groups such as the disadvantaged in low-performing schools, and expanded choice within the public system, including eliminating all boundaries between public school districts. Minnesota has

passed a version of public school open enrollment (both within and between school districts) that is attracting the interest of other states. California deferred all choice bills to the 1990 session but planned extensive analyses of choice options during fall 1989.

4. Socialization—The Comprehensive Student Services Strategy. Several analysts and policy makers contend that the bottom one-third of the achievement band needs drastic change in the current children's services delivery system and an overall attack on out-of-school influences that inhibit school attainment. This might include expanded choice as well as closer linkages with employers to impart work skills. National reports such as PACE's Conditions of Children in California (1989) highlight the need to improve and coordinate activities such as: children's health, child care, income support, and protective services in order to affect children with multiple needs. Schools cannot provide all these services, but they can perform better at brokering services for individual children who are particularly at risk. Schools could be funded to provide case managers to bring fragmented services together for individual children. Out-of-school influences are crucial to improving performance in school, and new integrated service delivery systems could be a part of this. Many California school officials realize that they cannot meet the challenges of at-risk youth alone. There is a new willingness to cooperate with other public and private agencies in order to integrate services. Effective services need to be intensive, continuous, and comprehensive. As Chapter 9 indicates, the existing California service system for children suffers from underservice, gaps, and extreme fragmentation.

Ironically, it is the lowest one-third of school achievers that are the most threatened by impending changes in the labor market. According to the United States Department of Labor, the average level of education needed for the lowest-level jobs is rising. It is the at-risk youth who are needed to fill many jobs that require more than repetitive low-skill operations.

An analysis of alternative strategies, then, should focus on which mix is optimal for which types of pupils. In general, the top two-thirds of the achievement band can benefit from the intensification strategy because changing the content that these pupils study may result in enhanced academic attainment. For example, state legislators reason that most students who study French know more about French than students who take Spanish or no foreign language. The bottom-third, many of whom are inner-city, at-risk youth, may need such approaches as residential schools, or a coordinated service delivery system, that exist almost nowhere today between public and private agencies.

Whatever strategy is used must last over time. Research suggests that reforms that last usually involve: (1) a structural or organizational change, (2) easy monitoring, and (3) creation of a powerful and lasting constituency. The academic excellence reformers, for example, galvanized more math and science courses and used media and emotional appeals to create support (for example, "rising tide of mediocrity"). But the restructuring strategy, so far, lacks a committed local constituency. Experiments like policy trust agreements. which combine cooperative labor relations with substantive school reforms and bring together school boards, school administrators, and teachers, are not widespread. National union leaders for the National Education Association and the American Federation of Teachers, however, are endorsing many restructuring concepts and communicating this to California union leaders.

State policy makers are not clear what "restructured" schools would look like or what the appropriate state role is for stimulating this type of second reform wave. In short, as of 1989 the restructuring strategy needs more clarity on concept and a more cohesive constituency before it can build up a great deal of momentum for widespread change in California schools. The new assessment models for teachers being developed by the National Board for Professional Teaching Standards might have a major impact on teacher education and teacher evaluation in the 1990s. California is now using most of its mentor teachers to help induct new teachers into the profession. The state also sponsors a number of other pilot programs to assist new teachers in their first three years. These programs are useful but do not require much change in school structure.

Further, a comprehensive strategy for at-risk students has not yet found a place on legislative agendas. This focus may be the most critical for California's future.

# CONCLUDING COMMENTS

While 1989 was a year for fiscal progress for education, its impact on educational programs and pupil attainment is unclear. Moreover, fiscal decision-making remains highly centralized and its future is uncertain (polls suggest that Senate Constitutional Amendment 1, designed to modify Proposition 98 and Proposition 4, will have difficulty gaining voter approval in June 1990). Political consensus on somewhat more equalized spending per pupil was attained, but agreement on reforming educational programs beyond 1983's Senate Bill 813 remains elusive. Moreover, the entire state finance plan, including schools, transportation, and long-term

funding depends on passage of the June 1990 ballot proposition through a coalition that requires extraordinary political leadership and resources.

Despite clear signs of hard-won progress, student performance measures continue to lag behind aspiration levels held by many policy makers, professional educators, and parents. Overall statewide academic achievement is about average, slightly above average in the elementary grades and slightly below average at the secondary level. Though having increased over time, the number of academic courses taken by secondary students is below the national median. Statewide average Scholastic Aptitude Test scores are above average for the nation, particularly in math.

Class sizes in California are among the largest in the United States. Teachers' salaries, though above the national average generally, when adjusted by California's cost of living and the high seniority of the teacher work force, come close to the middle of the U.S. in terms of actual purchasing power. The 1989 school finance legislation could change this somewhat if most of the new state dollars are devoted to teacher salary increases.

Overall per-pupil spending in California is just under the national average. In 1989, statewide average per-pupil spending ranks somewhat below similar industrialized states such as New York, Illinois, Pennsylvania, and Michigan; on a per-classroom basis, California spent \$75,000 (\$2,500 per child) less than New York. Even when faced with the dual challenges of enrollment growth and diversification, however, there are clear instances where school district local leadership, vision, and community commitment are being combined in an unusually effective manner.

Nevertheless, even if in less complex times, post-World War II policy makers and professional educators met stiff challenges. They had to employ thousands of new teachers and build thousands of new schools. Not only did public officials and educational professionals meet the post-World War II challenge of growth, they did so in a manner that maintained California as a lighthouse system of schooling. Through local property taxes and added levels of state funding, public officials from a quarter century ago generated the necessary resources. The 1989 school finance legislation, however, continues to rely exclusively on the state revenue base to meet all pupil growth without an added local component of property tax flexibility. This condition may be the principle impediment to California's ability to advance a multi-faceted school reform agenda.

Data in this section are derived from the Center for Continuing Study of the California Economy (CCSCE), California Population Characteristics (Palo Alto, CA: CCSCE, 1989).

Conditions of Children in California (Berkeley, CA: University of California at Berkeley, Policy Analysis for California Education, PACE, 1988), 90.

Ibid., 205.

Serrano v. Priest, 96 California Reporter 601, 437, p. 2d 1241 (1971), known as Serrano I.

Olsen, Lynn (1988), "States and the At-Risk Issues," (Education Week, September 21), 14.

Allan Odden and David Marsh, How State Education Reform Can Improve Secondary Schools (Berkeley, CA: University of California at Berkeley, Policy Analysis for California Education, PACE, 1987).

# Chapter 2

# Capital Perspective

In Conditions of Education in California 1988, PACE argued the apparent demise of the period of school reform initiatives. That report also highlighted the dilemma encountered by state policy makers in the dual constraints of Proposition 13 and the Gann limit on the one hand and enormous enrollment growth and increased student diversity on the other. At that time, PACE questioned the capacity of the state to respond adequately to these new challenges through traditional budget processes. Subsequently, the state education budget for 1988–89 failed to move California school appropriations toward the national average in per-pupil expenditures.

The California Teachers Association, convinced as well that the legislature and governor could not adequately respond, and armed with public opinion data revealing citizen support for a tax increase for education, utilized its substantial financial and human resources to promote a statewide revenue increase initiative, Proposition 98. Their efforts were enhanced by the active involvement and support of Superintendent of Public Instruction Bill Honig and most of the state educational interest groups.

# **PROPOSITION 98 PROVISIONS**

Conceptually, Proposition 98 is straightforward. It is designed to guarantee a floor for school expenditures, equaling the percentage of state general funds for school districts and community colleges received in the 1986-87 fiscal year. In 1986-87, schools and community colleges received approximately 40 percent of the state general fund; under Proposition 98 they would continue to receive approximately 40 percent of state general funds in subsequent years. As a sweetener, Proposition 98 also provides that if a prior year's revenues per student from state and local sources (adjusted for inflation and growth) produce a higher level of support, schools and community colleges will be entitled to the higher

# HIGHLIGHTS

- In Conditions of Education in California 1988,
  PACE questioned the capacity of California to
  respond adequately through traditional budget
  processes to the challenges of enormous enrollment growth and increased student diversity in the
  face of restrictions posed by Proposition 13 and
  the Gann spending limit.
- Subsequently, Proposition 98, financed largely by the California Teachers Association and supported by State Superintendent of Public Instruction Bill Honig and the other major education groups, was narrowly approved by California voters over the opposition of Governor Deukmejian, anti-tax advocate Paul Gann, the University of California, and virtually all nonschool state and local agencies.
- With education spending levels dictated by Proposition 98, the Governor's insistence on rebuilding the state's exhausted budget reserve in 1989-90 meant that other programs would have to absorb major cuts in resources.
- The first three months of the 1989 legislative session focussed on the bad news of the belowinflation revenue increases that were to be made to all programs except education, as evidence mounted that the legislature and the governor were becoming increasingly frustrated over their inability to establish budgetary priorities.
- However, at the time of midyear revenue projections, the state was surprised to find much higher revenues than had been expected.
- A period of intense negotiation ensued resulting in a modification of Proposition 98, and legislative approval to place Senate Constitutional Amendment 1 on the June 1990 ballot.

# continued

amount. Additionally, Proposition 98 requires, in those years in which the state has funds in excess of the Gann appropriation limit, that schools receive those excess dollars up to a maximum of four percent of the total general fund dollars appropriated to K~14 education.

In response to critics who argued that schools would waste the additional money, Proposition 98 also provides, as a condition of receiving its funding guarantee, that each school district develop and maintain a School Accountability Report Card, with minimum specified components for each school. Districts are required to compare their local report cards to similar state report cards at least every three years.

To assure skeptics that the money will flow directly to support schools and not be funneled away by state and local bureaucracies, the initiative provides, first, that funds are allocated directly to school districts and community colleges on a per-pupil basis, bypassing the normal state budgetary process. Second, the initiative provides that expenditures are restricted to "instructional improvement and accountability" purposes, defined in the act as expenditures "for instructional activities for school sites which directly benefit the instruction of students," including: lower pupil-teacher ratios; instructional supplies, materials, and equipment; direct student services; staff development; and teacher compensation.

# THE CAMPAIGN

Over the opposition of Governor George Deukmejian, antitax advocate Paul Gann, the University of California, and virtually all non-school state and local agencies, Proposition 98 was narrowly approved by voters in the November 1988 general election. The campaign, financed generously by the California Teachers Association, was designed to persuade voters that:

- It was reasonable to guarantee a minimum level of support for schools.
- Expenditures were to go only for instructional purposes.
- Schools would be held accountable through the report card mechanism.
- There would be no tax increase (perhaps most important).
  - Opponents, in a campaign that was never well-funded or well-conceived, countered that:
- Any decrease in a tax rebate is essentially a tax increase.
- Schools ought not to be so specially advantaged.
- Other social services (for example, health, fire, and

- If approved by the voters in June, SCA 1 will modify the Gann spending limit, increase gasoline taxes, and modify Proposition 98 with the effect of reducing guaranteed school benefits so as not to beggar other social services.
- Approval of SCA 1 is far from certain, and if it is not adopted, the state will revert to the prior provisions of Proposition 98 and the Gann limit.
- This debate over funding and the ensuing resolution of the current situation sent the strongest possible signal that the press for educational reform has ebbed in California as political discussions focussed not on the reform recommendations of the 1980s, but on issues that dominated the 1970s, the fairness and adequacy of the fiscal allocation mechanism.
  - police protection) inevitably would be reduced.
  - Instructional and accountability mechanisms were ineffectual.
  - The bulk of the money would go into teachers' salaries without improving the quality of instruction.

# **Policy Maker Concerns**

Proposition 98's small margin of approval created a wave of reaction that proved to be the dominant school-related issue of the 1989 legislative session. First, the governor and legislators from both parties, faced with an overall revenue shortfall from the prior year, were convinced they did not have sufficient money to satisfy all budgetary demands. By holding the largest segment of the budget (education) harmless from any budgetary shortfall, substantial and disproportionate adjustments would have to be made in other critical areas of the budget: higher education (except the community colleges), health care, welfare, the courts, transportation, and prisons.

Elizabeth Hill, the legislative analyst, warned that the governor's budget was overly optimistic, balanced, as it was, on the assumption of passage of several new pieces of legislation, many of which were problematic. The analyst also noted that even if state revenues were to increase dramatically, the state's proximity to the Gann appropriations limit precluded utilizing new revenues for additional expenditures. She also concluded that current state and local governmental service levels could not be maintained within the appropriations limit established by Gann.

Jess Huff, director of the Department of Finance, testified in budget hearings that the governor might consider a Gann

Capital Perspective 11

limit modification. Proposition 98 effectively had changed the rules of the game, and the governor and legislature now had virtually no flexibility in budgetary matters. Evidence mounted almost daily that the legislature and governor were becoming increasingly frustrated over their inability to establish budgetary priorities. To underscore his point, the governor asserted that by combining the impact of statutory cost-of-living adjustments, the Gann limit, and Proposition 98 he and the legislature now had discretion over only eight percent of the state budget.

# HISTORICAL PERSPECTIVE: THE FISCAL ROLLER COASTER

Recent legislative history provides an appropriate perspective. In 1986-87, state revenues exceeded the Gann appropriations limit by approximately \$1.1 billion. Policy makers faced two options:

(1) the legislature and governor could agree to statutory technical adjustments allowing the added state revenues to be spent on mutually agreed upon, high-priority items; or (2) the money would be returned to taxpayers through a tax refund. Attempts at reaching political agreement failed, and taxpayers received the full \$1.1 billion. Although there was no majority favoring any single proposal, many legislators believed that the rebate did not serve the state's highest priorities. This failure to act added to the view that in times of crisis, the legislature and governor were frozen into inaction by partisan concerns.

In the following year, 1987–88, the appropriations limit was not the issue. Due primarily to unexpectedly low incometax receipts, the state's fiscal situation was reversed. No longer were policy makers attempting to allocate excess revenue; rather their concern was to reduce expenditures or to obtain additional revenue. This revenue shortfall required that the state exhaust its reserves for that fiscal year.

#### THE 1989-90 PROBLEM

Exhausted budget reserves exacerbated fiscal problems in 1988–89. The governor insisted that a "prudent reserve" of \$1 billion to \$1.2 billion be restored, itself a major state expenditure. Without agreement on technical changes to the Gann appropriations limit, the state would be required to reduce funding below the level required to keep pace with inflation for several programs, particularly health and welfare. Since Proposition 98 exempted education from any reduction, all cuts would, therefore, be spread over fewer spending catego-

ries, producing substantially larger reductions for other services. The appropriations limit problem had been exacerbated by passage of Proposition 98. A consensus was gradually emerging that statutory modifications to the restrictions could be agreed upon.

#### THE 1989 SESSION

The first three months of the 1989 session focused on the bad news of the below-inflation revenue increases that were to be made to all programs except education. Every other major, high-priority program faced the prospect of being unable to keep pace with increased costs and workload. Partially in response to this concern, as well as concern over the inadequate transportation infrastructure, a coalition formed of business, labor, health, local government, and higher education officials. Their efforts, dubbed Project 90, were designed to modify the appropriations limit, Proposition 98, and related provisions. Senator John Garamendi introduced Senate Constitutional Amendment 1 (hereafter, SCA 1) as the vehicle for such a change.

The second quarter of the session was dominated by the unexpected news that, instead of a revenue shortfall, the state personal income tax was generating revenues far beyond expectations. In late spring, the legislative analyst estimated that revenues would be up by \$750 million in the current year. She presented two alternatives for legislative action. First, do nothing. In this case schools and community colleges would receive almost all the excess; taxpayers would receive virtually all the remainder. Other segments of the budget would receive nothing. Option two would require the governor, legislature, and educational groups to agree to transfer excess appropriations limit authority to the state to allow greater state expenditures within the Gann limit. Under this alternative, school districts and community colleges would receive less than they would under option one, but they would still be substantially ahead of the current year (about \$300 million in 1988-89). Absent agreement on option two (or a similar option) there would be substantial increases for education and substantial reductions in other budget categories.

In mid-May, the governor announced greater-than-projected revenues of \$1.1 billion in 1988-89 and \$1.4 billion in 1989-90. He also surprised legislative leaders by announcing that he would not submit the traditional May revisions to the budget at the normal time but would instead meet with legislative leaders and discuss alternatives and budget reforms that could be incorporated in a new budget proposal at a later date. Prospects for failure were high.

Problems now faced by state operations other than education were critical. Without legislation to modify the Gann spending limit, which had to be enacted by June 30, practically all excess revenues would go to schools, community colleges, and taxpavers. Because the state was within \$200 million of its Gann appropriation limit, approximately 40 percent, or \$80 million, of that amount would be available for K-14 education in the 1988-89 year. The \$900 million remaining from the \$1.1 billion excess was also available for Proposition 98 allocation and tax rebates in 1988-89. Of this \$900 million, schools and community colleges were limited to no more than four percent of the prior year general fund appropriated to K-14 education, or approximately \$560 million, with taxpayer rebates composing the remainder. The total allocated to schools in 1988-89 would thus be \$640 million (\$80 million plus \$560 million) in new allocations beyond the governor's budget. Only approximately \$120 million would be available for all other state-supported programs, leaving approximately \$340 million for taxpayer rebates.

It is important to note that Proposition 98 allocations become the base guarantee for the next fiscal year. Any budgeted amounts for the 1988–89 fiscal year could become the new base for 1989–90, and this new base would supersede the 40 percent of general fund base established in 1986–87. The result was that most of the \$1.5 billion in projected additional revenues for 1989–90 would first have to go to schools to guarantee this new base. Even with Gann modifications, schools and community colleges could reasonably expect to receive about 40 percent of the new revenues, or about \$440 million in 1988–89.

Meanwhile, the budget committees separately were going about their work, increasing the K-12 cost of living adjustment (COLA) to 4.6 percent and providing for growth in all programs. Budget committees were charged with utilizing all available state dollars fully to deplete any room in the Gann appropriations limit. At the same time, leaders of both caucuses in the Assembly and Senate were meeting with the governor's staff to craft a complicated, multifaceted approach to the complex set of problems including SCA 1, the budget, the Gann limit, Proposition 98, and transportation.

In early June, the Assembly Republican leadership dropped a bombshell on the budget process by proposing a novel concept: equalization of categorical funds. The Republicans initially proposed approximately \$400 million to be allocated to districts with low amounts of categorical aid (for example, transportation, special education encroachment, regional occupation centers and programs, adult education, gifted and talented education, and economic impact aid).

The proposal, as later refined, called for the averaging of categorical aid allocations for districts and then the comparison of each district with the state average for districts of comparable size and type. Revenue from some 27 categorical programs would be added to a district's revenue limit and then divided by total regular average daily attendance to determine a new revenue limit. By the same mechanism, a statewide average for comparable types and sizes of districts would be computed. Districts below the average would "level up," receiving more aid per pupil (not to exceed \$100) the farther below the state average they started. Districts that rank relatively low in general expenditures and in categorical funding would receive the most. High-expenditure, highcategorical-aid districts would receive nothing. Eligible districts would receive funding regardless of whether they have needs for which the categorical programs were intended (for example, limited-English-proficient students or small-district school bus replacement needs), but expenditures would be limited to the purposes of at least one of the 27 categorical aid programs.

The winners in this arcane public policy, called by cynics the "non-need factor," are suburban districts. For that reason, this provision garnered bipartisan support from legislators representing the state's heavy-growth, suburban legislative districts. Proponents of the new provisions argued that there had been decades of support for urban, rural, and disadvantaged districts and during that time the average, suburban school district had been badly neglected. The new "equalizing" formula, ultimately adopted at a funding level of \$180 million, is the culmination of a long-smoldering resentment on the part of suburban legislators toward the receipt of categorical funds by urban school districts. Generated over the years primarily for the benefit of the urban school districts, especially Los Angeles, these categoricals were promoted by urban legislators as the price one had to pay to get general, unrestricted aid.

In normal budget years this proposal would have been summarily dismissed by the Democratic, urban leadership. This was a political year, however, even more than most. The legislative leadership, reeling from a series of scandals and increasingly conscious of criticism from the press and the general public about its repeated inability to act in times of crisis, felt the pressure to succeed in finding a compromise on the budget, Gann modification, and Proposition 98 changes. There simply were too many constituent groups who would be negatively affected by the legislature's failure to act. The failure of 1987 was still fresh on the minds of legislators and the governor, and there was deep and genuine concern that the

Capital Perspective · 13

system could not afford to break down again. In addition, this agenda greatly attracted both parties. The Republicans desperately wanted more money for prisons and transportation, the Democrats for health and welfare. None of the excess funds would be available absent a resolution of the issues regarding public schools.

As discussions continued, the educational lobby, frustrated by what it perceived as the desire to dismantle Proposition 98, lashed out at the legislature and governor. Ed Foglia, president of the California Teachers Association, led the charge by arguing that education had been willing all along to agree to modify the Gann limit statutorily to assist other state agencies, to relinquish half the excess Gann revenues an unmodified Proposition 98 would generate for schools, and to support a constitutional amendment to alter the provisions of that limit. The educational coalition particularly balked at any attempts to remove the initiative's basic funding guarantee. Almost simultaneously, CTA released public opinion poll results that showed considerable public support for full implementation of Proposition 98. State Superintendent Bill Honig, along with other members of the educational coalition. held a press conference just days before the June 30 deadline in which they made clear that the coalition would take its fight to the general public. In rhetoric reminiscent of Paul Gann, the state superintendent referred to the "politicians in Sacramento" in pejorative terms and threatened to oppose any statewide ballot issue that permitted a gas tax increase to support highways.

Finally, an uneasy compromise was tentatively reached, and SCA 1, the third part of the legislative jigsaw puzzle, passed the legislature overwhelmingly. If approved by voters in a general election to be held in June 1990, SCA 1 significantly will alter the way the state does business. Most importantly, the proposed amendment triggers the multiple agreements reached statutorily in the last days of fiscal year 1988–89. If SCA 1 fails, the entire package is rendered inoperable, and the state will revert to prior provisions of Proposition 98 and the Gann limit. SCA 1 has the following major provisions.

- 1. Gann limit modification: (a) alters the index used to compute the state-level inflation rate to personal income change instead of the lesser of personal income or the consumer price index, (b) excludes gasoline tax increases from the limit, and (c) eases the limits for local government.
- 2. Gasoline taxes are increased by nine cents per gallon.
- 3. Proposition 98 modifications: (a) alters the guaranteed base to make adjustments for average daily attendance

declines, (b) limits the amount of revenue required to be folded into the district's base to 1.5 percent of the state general fund, (c) provides that schools will receive 50 percent of any Gann excess with the remainder to go to taxpayers, rather than an amount not greater than four percent of the state general fund, and (d) provides that excess Gann monies no longer become part of the ongoing base guarantee.

These provisions reduce considerably the school benefits previously guaranteed by Proposition 98. The educational establishment finds itself in an extraordinary situation. Realizing that in the long run the state is ill-served by public policies that beggar other social services at the expense of education, and facing an increasingly hostile legislature and governor who can be creative in inflicting pain, the school community has opted, for the moment, to agree to a potential modification of the provisions of Proposition 98 that advantage schools. Combining a genuine concern for social services with a healthy dose of political reality, the educational establishment finds itself in the delicate position of agreeing to kill its golden goose.

Approval of SCA 1 by voters in 1990 is far from certain. Most political observers rate its early chances as a toss up. Everyone can agree that a strong anti-SCA 1 effort by State Superintendent Honig and the educational hierarchy will doom the measure. The legislature, governor, and other public officials will tread lightly with the educational establishment, seeking its active support in the SCA 1 campaign. Educational policy makers find themselves in an awkward position, and this may be the irony of ironies. For the first time in memory, the educational lobby found itself in an advantageous budgetary position. The problem was that it was too advantageous. Now educational leaders are seriously weighing the consequences of modifying the very initiative they fought so hard to achieve.

More importantly, the debate and ensuing resolution of the current situation sent the strongest possible signal that the press for educational reform has ebbed. One might logically assume that with the unexpected additional revenues suddenly available, the legislature would focus on enacting the major reform proposals (for example, the Commons Commission recommendations) that had been presented, endorsed, but not enacted earlier. Lack of adequate funds was the reason most frequently cited for reform failures in prior years.

In a year of increased resources, this year's discussion focussed not on which reforms ought to be continued, enhanced, or begun, but rather on issues that dominated the 1970s: the fairness and adequacy of the allocation mechanism. Proponents of a reform agenda in California had been

unable to sustain policy interest for a time long enough to garner passage of legislation that reflected a school reform agenda. When educational historians look back on this period, they may best characterize it as an era of lost opportunity.

California has become the "good news, bad news" state virtually every year. In some years, the good news is that revenues are high; the bad news is that the Gann limit denies the state its ability to spend its largesse. In other years, the good news is that appropriations will be below the Gann limit; the bad news is that revenues are down.

# Chapter 3

# **Enrollment and Student Characteristics**

In 1988-89, more than 4.6 million students attended California public schools. This total represents an increase of 129,722 students or 2.9 percent over 1987-88. This rate of increase was slightly higher than the 2.5 percent rate experienced the prior year. Housing these additional students requires 4,324 new classrooms (at 30 students per classroom). Almost half the statewide growth was experienced in four counties: Los Angeles, San Bernardino, San Diego, and Riverside. Enrollment increases in these counties totaled 63,466 students. Statewide, the rate of growth continues to be strong. California now educates 11.2 percent of the nation's public school students.

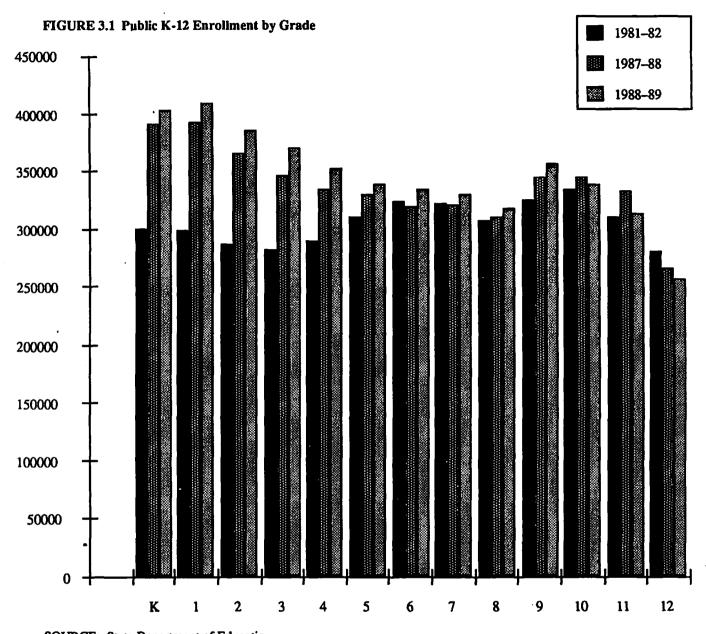
White students within the school population became a minority during the 1988-89 school year. In 1987-88, they accounted for 50.1 percent of total enrollment. That figure changed to 48.8 percent in the fall of 1988. State Superintendent Bill Honig commented on this transition by stating, "These children of today—the Hispanic, Asian, Black, and American Indian—are the vanguard of California's future," and he called for "celebrating the richness of this diversity."

Enrollment continued to increase in most counties, with Los Angeles (1,333,445), San Diego (367,722), Orange (351,004), San Bernardino (254,930), and Santa Clara (224,539) accounting for 55 percent of the total student population. Santa Clara is the only county among these located in the northern part of the state.

The most rapidly growing counties were Riverside (8.7%), San Bernardino (7.4%), and El Dorado (7.3%). San Bernardino and Riverside now account for 441,651 students or 9.6 percent of the students in the state's 58 counties. Student enrollment in Los Angeles County (1,333,445) is the equivalent of total enrollment in the 48 smallest counties.

# HIGHLIGHTS

- K-12 enrollment reached 4.6 million in 1988-89, a
   2.9 percent increase over 1987-88.
- Student enrollment is increasing in most counties in California, with the heaviest enrollment growth concentrated in the southern part of the state.
- The largest enrollment growth is in kindergarten and first grade, with another peak in ninth and tenth grades.
- By 1996, 16,600 more students will be enrolled in elementary schools (K-8) than were enrolled in all public schools (K-12) in 1981.
- Approximately 528,561 students attended private schools in the state in 1988-89.
- The percentage of racial and ethnic minority students has increased consistently since 1967. In 1987-88, 2.2 million students, or 49.9 percent of the total K-12 enrollment, were members of racial or ethnic minority groups. In the first semester of the 1988-89 school year, that percentage increased to 51.2 percent, and "minorities" became the "majority."
- Approximately 14.5 percent of California students were limited-English-proficient in 1988. Los Angeles County alone accounted for 45 percent of the statewide total. The vast majority of LEP students speak Spanish as their first language.
- By 1992, 250,000 pregnant and parenting teens are expected to live in California. While the birth rate for 16-18 year olds has declined, the birth rate for teens under age 14 continues to increase.
- Although relatively few students of high school age (24) have diagnosed cases of AIDS, it is estimated that an additional 220 adolescent students are carrying the AIDS related complex (ARC) and AIDS.



SOURCE: State Department of Education

Enrollment in California is unevenly distributed across grade levels (Figure 3.1). The largest groups of students were enrolled in kindergarten and first grades, with another peak in ninth and tenth grades (Figure 3.2). Compared with 1987–88, there were substantially more students at every level, except in tenth, eleventh, and twelfth grades. The largest increase occurred in grade three (6.8 %) with grades one through four, six, and nine all exceeding the state average growth of 2.9 percent. As the smallest classes from recent years reached middle and high school ages, enrollment in tenth, eleventh, and twelfth grades decreased by 1.8 percent, 5.7 percent, and

3.3 percent, respectively. Seventh and eighth grade classes showed modest growth of 2.6 and 2.3 percent, respectively.

Eleventh grade enrollment may appear artificially high. One possible explanation centers around administration of the California Assessment Program (CAP) test. Under recent state regulations, many schools have redefined their technical requirements for becoming a "senior." As a result, students who would formerly have been classified as seniors are now sometimes counted as juniors. The percentage of students moving from ninth to tenth grade increased slowly over the past 10 years, as did the percentage moving from tenth to

FIGURE 3.2 Public K-12 Enrollment by Grade, 1981-82, and 1987-88 to 1988-89

Level	1981–82 Enrollment	1987–88 Enrollment	1988–89 Enrollment	Percent Change Between 1987–81 and 1988–89
K-12	4,046,156	4,488,398	4,618,120	2.9
K	300,239	392,112	403,229	2.8
1	298,341	393,533	409,600	4.1
2	287,652	366,613	385,920	5.3
3	282,464	347,207	370,866	6.8
4	290,323	335,078	352,066	5.1
5	310,874	330,395	339,983	2.9
6	324,324	319,686	335,419	4.9
7	322,264	321,898	330,408	2.6
8	307,429	311,579	318,822	2.3
Other				
Elementary	45,878	51,903	65,703	26.6
Subtotal				
Elementary	2,769,788	3,170,004	3,312,043	4.5
9	326,143	345,654	356,645	3.2
10	334,287	345,144	338,785	-1.8
11	311,518	332,980	313,893	-5.7
12	280,818	266,028	257,327	-3.3
Other				
Secondary	23,602	28,588	39,427	37.9
Subtotal				
Secondary	1,276,368	1,318,394	1,306,077	0.9

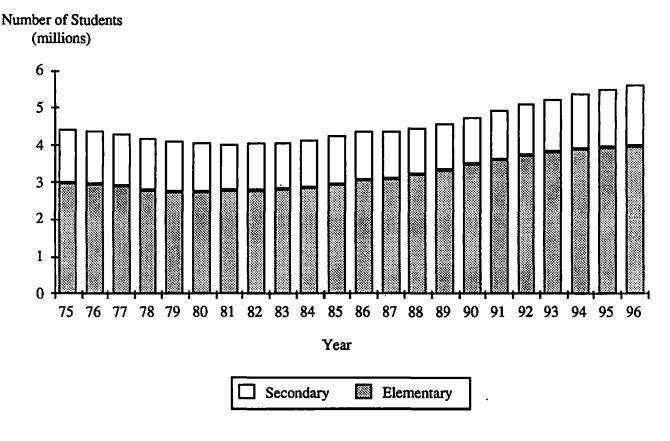
SOURCE: California Basic Educational Data System (CBEDS).

eleventh grade. In contrast, the percentage moving from eleventh to twelfth grade declined 10 percent, with the largest declines in the last three years, the period during which new testing requirements have been in force. During the same period, the percentage of seniors actually graduating increased from 86 percent in 1981 to 94 percent in 1985. Either students, reclassified to avoid testing, are graduating six months later, or the reclassification reduces the senior class to that proportion most likely to graduate.

# **ENROLLMENT PROJECTIONS**

Elementary enrollment is expected to increase from three million in 1986 to four million in 1996. During the same period, enrollment in grades nine to twelve is expected to increase from 1.3 million to 1.6 million. By 1996, 16,600 more students will be enrolled in elementary schools (K-8) than were enrolled in all public schools (K-12) in 1981. The State Department of Finance anticipates that 1.35 million more students (equal to the current enrollment in Los Angeles County) will attend public schools in 1996 than attended in

FIGURE 3.3 Public School Enrollment Trends and Projections



SOURCE: California Department of Finance, Population Research Unit

1986, a 25 percent increase (Figure 3.3). Peak enrollment in first grade is anticipated in 1993, after which enrollment is expected to decline once again.

Student populations are increasing most rapidly in southern and central valley counties (Figure 3.4). The largest rates of growth are predicted to occur in the following counties: Riverside (62.7%), San Bernardino (58%), San Joaquin (55.6%), Kern (42.2%), Sacramento (42.1%), Stanislaus (38.7%), Tulare (35.7%), and Fresno (35.5%). These counties also have large proportions of Hispanics.

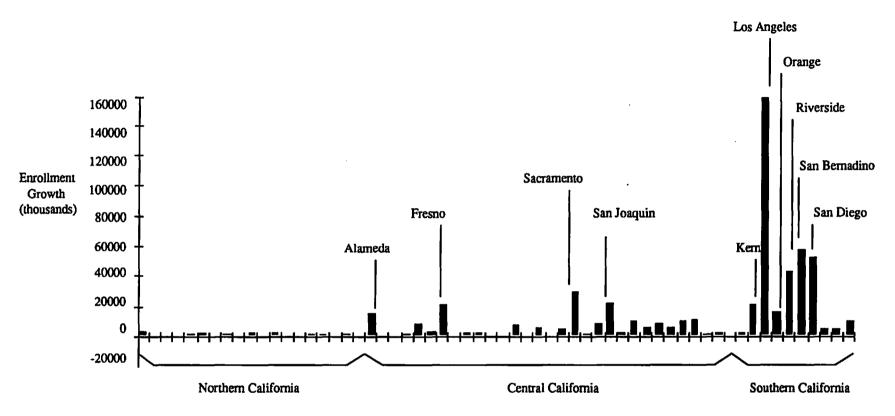
While student enrollment in Los Angeles County is predicted to increase by "only" 24.8 percent between 1986 and 1996, this represents more than 300,000 new students, a monumental increase in absolute numbers for one county to absorb. In the next 10 years, Los Angeles County will require an additional 10,000 classrooms (at 30 students per class) to house these students.

By comparison, enrollment in the five San Francisco Bay Area counties and in the counties of Northern California is expected to increase less rapidly. While enrollment growth is a key characteristic of California education, growth is much more rapid in southern and central valley counties than in the northern part of the state.

### PRIVATE SCHOOL ENROLLMENT

In 1987–88, there were approximately 528,561 students enrolled in California private schools, a decrease of 2,622 students from 1986–87. Figure 3.5 displays the relationship between private school enrollment and total enrollment. The proportion of students enrolled in private schools increased to a peak of 11.7 percent in 1983 but has declined since then. Figure 3.6 indicates that this is the result of relatively stable private school enrollment during a period of rising public school enrollment; however, the number of private schools has steadily expanded over the same period (see Chapter 5). Consequently, there is a trend toward fewer students in more schools. Between 1986–87 and 1987–88, enrollment increased in the elementary grades and grade twelve (Figure 3.7).

FIGURE 3.4 Projected Enrollment Increases by County: North, Central, and Southern California, 1987-1992



Note: Northern California = counties of Butte, Colusa, Del Norte, Glenn, Humboldt, Lake, Lassen, Mendocino, Modoc, Nevada, Plumas, Shasta, Sierra, Siskiyou, Sutter, Tehama, Trinity, and Yuba.

Central California = counties of Alameda, Alpine, Amador, Calaveras, Contra Costa, El Dorado, Fresno, Inyo, Kings, Madera, Marin, Mariposa, Merced, Mono, Monterey, Napa, Placer, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Solano, Sonoma, Stanislaus, Tulare, Tuolomne, and Yolo.

Southern California = counties of Imperial, Kern, Los Angeles, Orange, Riverside, San Bernadino, San Diego, San Luis Obispo, Santa Barbara, and Ventura.

SOURCE: PACE analysis of California Department of Finance data.

FIGURE 3.5 Private School Enrollment as a Percent of Total Enrollment, 1976 to 1987

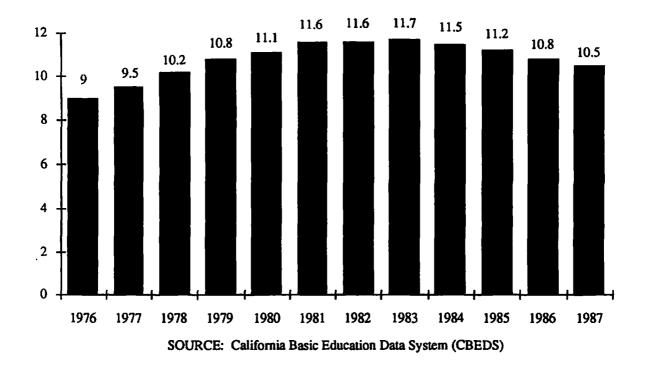
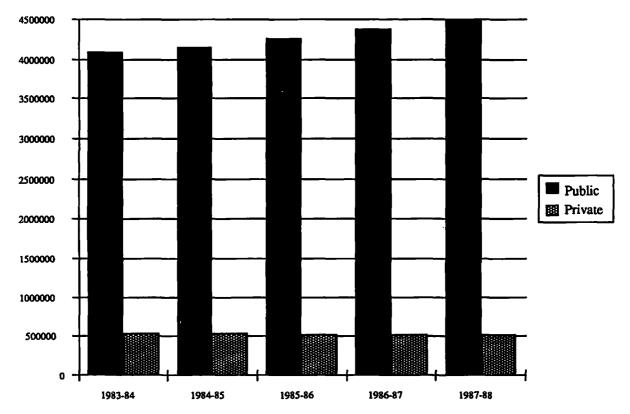
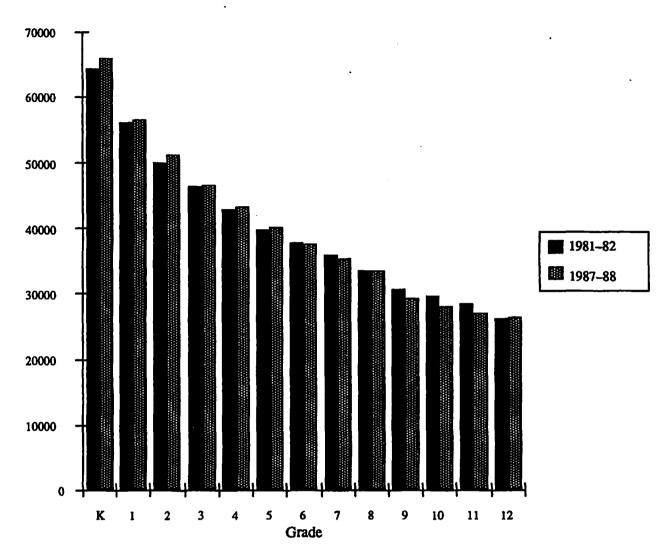


FIGURE 3.6 Private and Public School Enrollments, 1983-84 to 1987-88



SOURCE: State Department of Education

FIGURE 3.7 Private School Enrollment by Grade



SOURCE: State Department of Education

With a 1987-88 private school enrollment of 205,401, Los Angeles County accounts for approximately 39 percent of all students attending private schools. Los Angeles and Orange counties together account for 47 percent of total private school enrollment. This high percentage not only reflects the concentration of total population in Southern California but also indicates that private schools are themselves disproportionately concentrated in the southern part of the state.

Nearly two-and-a-half times as many kindergarten students as seniors attend private schools. This pattern probably reflects both preference and price issues. Many families prefer to send their children to private schools for preschool and early elementary and subsequently to transfer them into public schools. Some of this difference may be associated with the fact that private schools frequently provide childcare in addition to instructional services. (At least one suburban public school district observed that fewer out-of-district permits were requested when public schools provided school-site childcare.)

Private school costs also increase by grade level, thus making private secondary education more expensive than its elementary counterpart. However, as Figure 3.7 shows, private school enrollment in grade twelve increased between 1986–87 and 1987–88. Many parents apparently believe that the additional expense of secondary tuition is warranted, since enrollment in grade twelve exceeded what would have been expected using grade progression ratios alone.

Just over 74 percent of students enrolled in private schools attend church-affiliated schools. Of those students, 61 percent (or 45.6 percent of all private school students) attend Roman Catholic schools. This percentage is down from 61.9 percent in 1984–85.

It is difficult to predict how the relationship between private and public school enrollment will evolve. A larger percentage of school-age children are from poor, minority, and immigrant families, which historically have been underrepresented in private schools. Nevertheless, Hispanic families, even those with low incomes, have often preferred to send their children to parochial schools. As the proportion of Hispanics in the total population increases, private school enrollment may also increase if neighborhood parochial schools are available.

In addition, black families increasingly send their children to parochial schools, even though frequently they are not themselves Catholic, in order to obtain what may be perceived as an education superior to that offered in local public schools. Thus, the effect of the increasing proportion of children from poor, minority, and immigrant families on private school enrollment may be mixed. The trend of the recent past, during which public school enrollment has increased while private school enrollment has declined both in absolute numbers and as a percentage of total enrollment, may not continue.

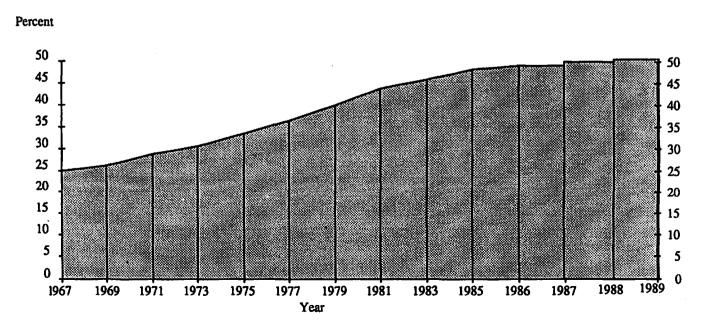
### MINORITY ENROLLMENT

Ethnic and racial minorities compose an increasingly large number and proportion of California's public school enrollment. In 1987–88, 2.2 million students, or 49.9 percent of total public K–12 enrollment, were members of racial or ethnic minority groups. In the first semester of the 1988–89 school year, that percentage increased (to 51.2 %) and minorities became the "majority."

Indeed, as Figure 3.8 indicates, the percentage of racial and ethnic minority students enrolled in California public schools has increased consistently since 1967. Further, in recent years minority students have composed the bulk of new enrollment. While the rate of minority enrollment growth seems to be declining, minorities as a percentage of total enrollment, which exceeded the 50 percent level recorded early in the 1988–89 school year, would have been even higher if minority dropout rates were not so high. The white, non-Hispanic "minority" school population currently accounts for 48.8 percent of total school population, falling from just over 70 percent in 1971.

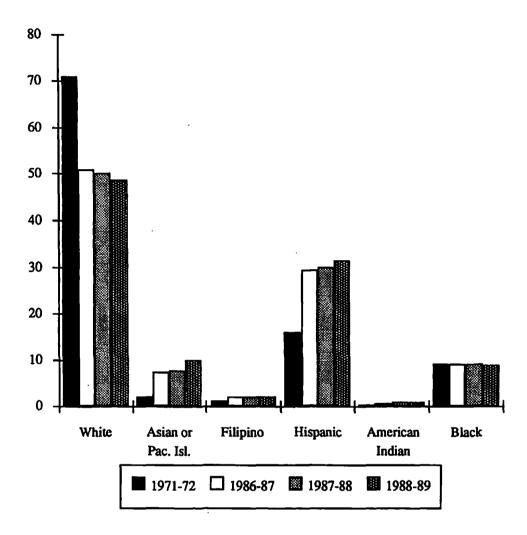
The percentage of minority enrollment differs by grade level. In 1987–88, it accounted for 51.3 percent in elementary grades and dropped to its lowest point, 40.4 percent, in twelfth grade. Figure 3.9 demonstrates that the minority composition

FIGURE 3.8 Growth in Minority Enrollment as Percent of Total Enrollment, 1967 to 1989



SOURCE: Department of Finance, Population Research Unit

FIGURE 3.9 Percent of Total K-12 Enrollment by Ethnic Group, 1971-72 and 1986-87 to 1988-89



SOURCE: California Basic Education Data System (CBEDS)

of school enrollment changed markedly between 1971 and 1989. The proportion of blacks is virtually unchanged at just under nine percent. Hispanic representation increased from 16 percent in 1971 to 31.4 percent in 1989.

The largest rate of increase in school enrollment is among students of Asian and Pacific Island backgrounds, followed by Hispanics. Filipino enrollment also has been growing at a rapid rate. Although still a relatively small proportion of total enrollment, Asian and Pacific Island enrollment has increased most rapidly, from 2.2 percent to 10.2 percent of the total.

Preliminary reports from the Los Angeles County Office of Education indicate that in 1987 there was a substantial decline in districts with large Hispanic enrollments. It remains to be seen whether students have gone to other districts, are remaining home, or have returned to Mexico with their

families because of the 1987 immigration law. Although the new immigration law may result in a lower rate of increase in the near term, political and economic instability in Latin America and the Philippines may once again lead to increasing enrollment from these areas in the future.

While there has been much discussion of the performance of minorities in public schools, little analysis has been conducted of minority performance disaggregated by generation and by rural or urban origins. These kinds of analyses are important because new immigrants need to learn both a new language and a new culture before being able to perform well in school. The difficulty of this task is often compounded if immigrants are from rural as opposed to urban areas.

As Conditions of Education in California, 1986-87 reported, attendance rates and performance for students of

All Others 31.7 Arabic Portuguese Armenian Japanese Farsi Mandarin Lao 11.5 Korean 11.6 Hmong 13.3 Pilipino Cambodian Cantonese 20.3 Vietnamese Spanish 50 100 150 200 250 300 350 400 450 500

FIGURE 3.10 Number of LEP Students by Primary Language, 1988 (Thousands)

Source: Department of Education

Mexican descent improve each year toward the norm for all Californians. Enrollment in public elementary and secondary schools for children of Mexican-born parents reflects the norm for all Californians by the second generation. Similar data for other immigrant subgroups could help identify enrollment patterns and trends across generations and disentangle long-term effects from short-term difficulties shared by all new immigrants.

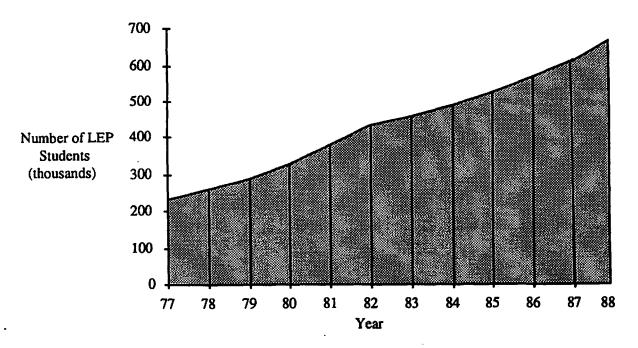
#### **LANGUAGE MINORITIES**

Reflecting the diversity of California's public school student population, about one-quarter of enrolled students in 1987–88 spoke a language other than English. About half of these

students were English-proficient and half were limited-English-proficient (LEP). Approximately 14.5 percent of students (652,439) were limited-English-proficient in 1988. Seventy-two percent of the state's LEP students were identified in six counties: Alameda, Los Angeles, Orange, San Diego, San Francisco, and Santa Clara. Los Angeles County alone enrolled more than 293,850 LEP students, accounting for 45 percent of the statewide total. The vast majority of LEP students speak Spanish as their first language, as Figure 3.10 indicates.

Figure 3.11 displays the rapid, steady growth in the number of LEP students in California public schools over the past decade. The number has nearly tripled from about 230,000 in 1977 to 652,439 in 1988. While approximately

FIGURE 3.11 Growth in Number of Limited-English-Proficient Students in California's Public Schools, 1977-1988



SOURCE: California State Department of Education.

50,000 students become English-proficient each school year (or are reclassified as English-proficient), more than 91,800 LEP students enroll in kindergarten each year, and additional students are identified as limited-English-proficient in upper grades.

The number of limited-English-proficient students will almost certainly continue to increase, at least over the next 5 to 10 years, although the recent immigration law may substantially reduce the rate of growth, as explained in the previous section. Predictions have been as high as 650,000 students by 1990 and almost 900,000 by 2000. Of course, these figures are determined to a large degree by immigration policies and practices. If immigration patterns change, LEP student populations will change also.

## INTER-ETHNIC DIFFERENCES IN SCHOOL ATTENDANCE AND GRADUATION

Not only have the numbers and percentages of minority students relative to total enrollment increased, but there also has been a steady growth in the proportion of minority students attending racially isolated schools. Previously this indicated racial isolation in a system dominated by white students. Now no one racial or ethnic group predominates.

The number of minority students attending schools in which minorities constituted 50 percent or more of the enrollment increased from 301,936 in 1967 to 1.4 million in 1984. The number and proportion of white students attending these schools also increased between 1967 and 1984. The percentage of Hispanic students in racially isolated schools increased from 33 percent to 48 percent.

The percentage of black students attending racially isolated schools also increased, from 75 percent in 1967 to 77

FIGURE 3.12 Number of Dropouts in California Public High Schools by Ethnic Group, Class of 1988

	Enrollment	Three-Year	
Ethnic Group	Grade 10 (85–86)	Dropout Rate	
American Indian/			
Alaskan	2,873	23.8	
Asian	25,042	15.2	
Pacific Islander	1,647	25.4	
Filipino	6,881	17.6	
Hispanic	90,907	30.9	
Black	37,172	31.8	
White	203,419	17.3	
State Totals	367,941	22.1	

Source: Department of Finance, Demographic Research Unit

percent in 1984. However, blacks are becoming a relatively smaller proportion of California's minority student population.

When statistics were first compiled in 1967,49 percent of California's minority students attended schools in which minority enrollment exceeded 50 percent. In 1984, 70 percent of California's minority students were enrolled in racially isolated schools in 355 districts. In 1967, 987 schools were racially isolated, compared with 2,694 in 1984. The number of districts having racially isolated schools increased from 212 in 1967 to 355 in 1984, a 67 percent increase. However, the minority student proportion of total enrollment in racially isolated schools has declined in the intervening 17 years.

For the state as a whole, the proportion of graduates differs substantially by ethnic group. This can be seen when graduates are compared with corresponding tenth grade enrollment (Figure 3.12). Approximately 50 percent of both black and Hispanic students enrolled in tenth grade in 1985–86 failed to graduate from high school three years later. That compares with 15 percent of Asian and 26 percent of white students.

Nationally, higher dropout rates and lower performance have been observed in schools in which minority and poor students predominate. This is also true in California districts with high proportions (more than 50 %) of enrollment of students from minority groups. Furthermore, adjusted lifetime income for a high school dropout has been estimated to be \$187,000 less for males and \$122,000 less for females than for high school graduates.<sup>2</sup> Additional costs in lost tax revenues and in welfare and unemployment expenditures can be traced to the individual and social costs of dropping out.

If only half the seniors who failed to graduate with their high school class in 1986–87 had completed school, and if the graduates were equally distributed between male and female, then an additional \$1.7 billion in adjusted lifetime income might have been anticipated for California's economy. If half of the 1984–85 tenth grade class members who failed to graduate with their high school class in 1986–87 had completed school, then an additional \$9.6 billion in adjusted lifetime income might have been anticipated. These computations are based on several critical assumptions regarding the state's overall economy and the nature of the individuals dropping out. However, these figures suggest the range of funds that might be considered in establishing cost-effective dropout prevention programs.

#### FAMILY COMPOSITION AND INCOME

Despite widespread impressions to the contrary, the vast majority of California children—about 75 percent—live in households where two parents are present. About one in five California children lives in a household where only the mother is present, a figure that also holds for the nation and that has shown only a small increase in recent years. However, for children in poverty, only half live in two-parent families.

There are sharp differences in this aspect of family structure among the major ethnic groups in California that are not simply a reflection of socio-economic status. Seventy-eight percent of white children live in families where both parents are present. The figure is even higher for Asians (82 percent), but for Hispanics it is 72 percent and for blacks only 46 percent.

FIGURE 3.13 Women Householders Without Spouse

	With Child Under18:		With Child	l Under 6:		
	Below Poverty	Total Nur	nber	Below Poverty	Total Nu	mber
1977	240,000	565,000	42.5%	105,000	168,000	62.5%
1981	239,000	583,000	41.0%	116,000	199,000	58.3%
1986	300,000	648,000	46.3%	161,000	275,000	58.5%

SOURCE: Current Population Survey, California State Census Data Center.

FIGURE 3.14 Women's Hourly Wages, 1986

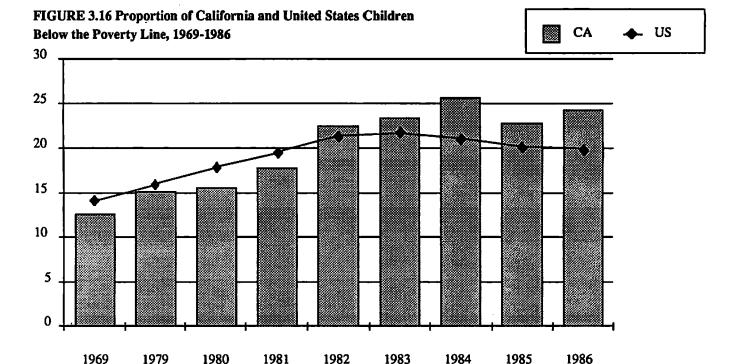
Hours Worked per Week	Men's Wages	Women's Wages	Women with Spouse and Children	Single Women with Children
35 +	\$10.00	\$7.21	\$7.32	\$6.40
20-34	\$8.57	\$6.87	\$7.20	\$6.38
1-19	\$7.27	\$6.35	\$7.07	\$5.00

SOURCE: Current Population Survey, California State Census Data Center.

FIGURE 3.15 Income of All California Families With Children, 1977-1986

	Median Income of Quintile					
	I (1-20%)	II (21-40%)	III (41-60%)	IV (61-80%)	V (81-100%)	
1977	9,796	18,988	28,879	39,783	61,167	
1978	9,915	19,137	30,113	41,697	62,964	
1979	9,800	19,827	30,113	43,129	67,110	
1980	9,639	19,413	29,703	43,734	69,675	
1981	9,396	19,148	29,050	41,233	63,254	
982	8,406	17,678	27,663	39,934	65,401	
983	8,211	17,354	27,116	39,857	67,223	
1984	8,274	17,672	27,493	40,131	66,813	
1985	9,098	19,280	29,029	41,943	68,488	
1986	8,919	19,682	29,892	43,673	69,662	
Net Change	-9.0%	3.7%	3.5%	10.0%	14.0%	

SOURCE: Current Population Survey, California State Census Data Center.



SOURCE: Current Population Survey Profile, 1986, California State Census Data Center.

Of female-headed households with a child under age 18, 46 percent or 300,000 families lived below the poverty level in 1986. Of female-headed households with children under six years of age, 59 percent or 161,000 had incomes below the poverty standard. This represents a lower percentage but a larger number than in 1977 (Figure 3.13). As Figure 3.14 displays, in 1986 single women with children earned less per hour than their female counterparts with spouse and children, and less than the average hourly wages for males and females.

As Figure 3.15 indicates, median incomes for those in the lowest income quintile fell between 1977 and 1986, while median incomes for those in the fourth and fifth quintiles increased much faster than the rate of inflation. A family in the highest quintile earned \$8,000 more in 1986 than in 1977. Not only is the number of children from families earning below poverty-level incomes increasing, their relative situation is worse compared to a decade ago.

The proportion of California children living below the poverty line has exceeded the U.S. proportion since 1982. Both California and U.S. proportions increased until 1983. Thereafter, the proportion of U.S. children living in families with incomes below the poverty level decreased, while the proportion of California children living in poverty, although erratic, has remained higher than the National Average (Figure 3.16). The average percentage of children living in poverty in California is 18 percent per county.

#### PREGNANT AND PARENTING TEENS

Teen pregnancy has been associated with increased dropout rates for women, especially for those of Hispanic origin. Although teen birth rates have dropped consistently since 1970 for those between ages 16 and 18, the rate for 15-year-olds has remained relatively stable. However, the birth rate for teens under age 14 has actually increased during the same period. If that trend continues as the larger age cohorts reach puberty, then larger and larger numbers of babies will be born to mothers age 14 and under.

Approximately 18,000 students attended programs for pregnant and parenting teens in 1985–86, which represents 11.7 percent of the estimated population of 157,000 pregnant and parenting teens 18 years old and younger. The estimated proportion of students, by racial or ethnic group, attending the programs differs from the proportion of the group in the population of teen mothers and in the population of female students younger than 18 years. Although the State Department of Health statistics collects comprehensive data on live births and infant deaths, there is no comparable data on school attendance for this group.

The proportion of students attending programs in 1985 was estimated from a telephone survey of 140 programs for teen mothers conducted by PACE for the Assembly Office of Research. By 1992, 250,000 pregnant and parenting teens are

expected to live in California (Figure 3.18). A clearer understanding of the extent to which teen mothers attend school and receive special services, whether childcare or parenting classes, would assist policy makers in improving services to this specific population.

## TEENS WITH ACQUIRED IMMUNE DEFICIENCY SYNDROME (AIDS)

As of September 1987, 36 children in California age 13 years and under had diagnosed cases of AIDS. Although relatively few students of high school age (24) had diagnosed cases of AIDS, it is estimated that an additional 220 adolescent students are carrying the AIDS related complex (ARC) and

AIDS. Comprehensive education programs at all school levels might be useful in halting the spread of the disease in the sexually active adolescent population.

<sup>1</sup>Angel Sanchez, Findings from Survey of School District Enrollments, Fall 1987 (Los Angeles, CA: Los Angeles County Office of Education, in press.)

<sup>2</sup>James S. Catterall, "On the Social Costs of Dropping Out of School," (Stanford Education Policy Institute: Stanford University, Stanford, California, 1985) in Andrew Hahn and Jacqueline Danzberger, *Dropouts in America: Enough is Known for Action* (Washington, D.C.: Institute for Educational Leadership, March 1987).

## Chapter 4

# **Human Resources**

California elementary and secondary public schools employed 230,567 certificated personnel in 1987-88. This number, which represents a 2.8 percent increase in professional staff over 1986-87, includes classroom teachers, administrators, specialists, and other nonteaching professionals. The average teacher in California has 15 years experience in education; the average administrator has 21 years experience.

As the student population shifts to reflect California's changing demographics, the composition of the schools' professional staff remains predominantly white. Eighty-two percent of California's teachers are white, as are nearly 80 percent (77.5%) of the state's administrators. Teaching remains a female-dominated occupation (68% of California teachers are women), while a majority of administrative positions (58%) continue to be filled by men.

California and the U.S. have now experienced seven years of a nationwide educational reform movement. A key component of the current school reform movement continues to revolve around the issue of upgrading the teaching profession and re-evaluating the roles and responsibilities of classroom teachers and school administrators.

California's recent efforts to reform the schools include a refocusing of the Mentor Teacher Program, alterations in state-funded staff development, initiation of the New Teacher Project, and changes in the composition of the Commission on Teacher Credentialing. Experiments in reform, such as the Trust Agreement Project, also are under way. These and other issues are explored in this chapter on California's teachers and administrators.

#### PROFILE OF CALIFORNIA TEACHERS

California employed 198,163 classroom teachers in 1987–88, an increase of three percent over 1986–87. This number represents 86 percent of all certificated employees serving in California schools. Most teachers (82% are white. Hispanics constitute 7.0 percent of the teaching force, blacks 6.1 percent, and Asians 3.4 percent.

#### HIGHLIGHTS

- California elementary and secondary public schools employed 230,567 certificated personnel in 1987–88, a 2.8 percent increase in professional staff over 1986–87.
- In 1987–88, the average California teacher's salary was \$33,238.
- The average teacher in California has fifteen years experience in education; the average administrator has 21 years experience.
- According to the State Teachers Retirement System, for every two individuals who teach to retirement age, seven will resign from teaching a year and a half after entering.
- California's recent efforts to reform the schools include a refocusing of the Mentor Teaching Program, alterations in state-funded staff development, initiation of the New Teacher Project, and changes in the composition of the Commission on Teacher Credentialing. Experiments in reform, such as the Trust Agreement Project, also are underway.
- The number of basic credentials for K-12 classroom teachers increased by 6.6 percent in 1986-87, compared to a 21 percent increase in 1985-86.
- California continues to issue an enormous number of emergency credentials. Emergency credentials represented 23 percent of all first-issue and added credentials in 1986-87.
- Median class size in California classrooms is 29:1 in elementary grades and 30:1 in high school.
- Although more new teachers were hired in California in 1987–88 than the previous year; the state is expected to continue to experience a shortage of qualified teachers.
- The trend of continued improvement in the passing rate on the California Basic Education Skills
   Test (CBEST) was maintained.

Human Resources 31

Men compose slightly less than a third (32%) of the K-12 teaching population. However, men continue to predominate in secondary schools, especially in math (60.7%), physical education (60.4%), science (65.4%), and social science (64.6%). Female teachers continue to far out-number males in the early elementary grades. Just 3.0 percent of kindergarten, 4.0 percent of first grade, and 6.5 percent of second grade teachers are men.

The average California teacher is nearly 43 years old and has taught for at least 15 years (Figure 4.1). Twenty-three percent of the state's teachers have five or fewer years of teaching experience. More than one-third (36%) of California teachers hold master's degrees.

The average teacher salary in California in 1988–89 was \$33,238, reflecting a 6.7 percent in-crease over 1986–87. Salaries ranged from \$22,500 for a novice teacher to nearly \$50,000 for some senior teachers.

California continues to employ large numbers of new teachers. Four percent of the total teaching population (9,249 teachers) have one year or less of teaching experience.

New teachers were hired to accommodate the state's increasing student enrollment and retirements of nearly six thousand experienced teachers. Interestingly, the number of

teacher retirements remained fairly steady in the decade between 1978 and 1988. Moreover, conventional wisdom notwithstanding, the majority of California teachers are not close to retirement age. The average age of members of the State Teachers Retirement System (the vast majority of whom are K-12 teachers) is 43 years.

However, new teachers are hired not only to accommodate increasing student population and educator retirements, but also to replace individuals who leave teaching prior to retirement. A new study recently completed by the State Teachers Retirement System (STRS) reveals a high teacher attrition rate.

STRS found that in 1987 the average age of a new teacher (as measured by age of entry into the retirement system) was 32 years. Individuals who taught to retirement could be expected to retire at approximately age 60. However, STRS reports that three times as many individuals leave teaching (withdraw from the retirement system) prior to retirement as teach to retirement age. Moreover, the age at which most individuals leave teaching is 33.5, on average, just one and a half years after beginning a teaching career. Stated another way, according to the STRS study, for every two individuals who teach to retirement age, seven will resign from teaching (at least in California) a year and a half after entering teaching.

Number of Teachers 40,000 35,000 30,000 25,000 20,000 15,000 10,000 5,000 0 1-5 6-10 11-15 16-20 21-25 26-30 31-35 Years of Experience

FIGURE 4.1 California Teachers' Years of Experience, 1987-88

SOURCE: California Basic Educational Data System (CBEDS).

#### ADMINISTRATOR PROFILE

California's 17,314 administrators make up 7.5 percent of the total K-12 certificated staff. The average California school administrator is 47 years old, white (77.8%), male (58%), and has at least 21 years of experience in education. Minorities represent a larger share of administrator positions than teacher positions. In 1987-88, 8.7 percent of all administrators were black, 9.3 percent were Hispanic, and another 4.2 percent represented other minority groups, for a total of 22.2 percent minority administrators. However, only five percent of superintendents are members of a racial or ethnic minority group.

Women accounted for nearly 42 percent of all administrators in 1987–88, but only 9 percent of superintendents. Slightly more than 87 percent of California administrators hold at least a master's degree. Nearly 12 percent have earned doctorates.

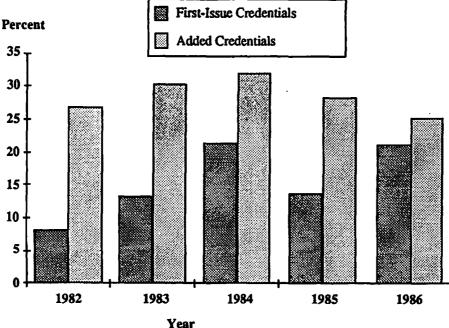
The average salary for a California superintendent in 1987–88 was \$63,248. Other California administrators earned an average of \$49,518.

#### PROFESSIONAL CREDENTIALS

The Commission on Teacher Credentialing (CTC) issued 94,931 credentials in 1986–87, the most recent year for which complete data are available. This number includes all multiple- (elementary) and single-subject (secondary) credentials, children's center permits, administrative services credentials, pupil personnel credentials, specialist credentials in areas such as bilingual education and special education, renewals of old standard and general credentials, and emergency credentials. In all, the state issued 4.5 percent more credentials in 1986–87 than in 1985–86, compared to a nearly 20 percent increase in the number of credentials issued from 1984–85 to 1985–86. The number of multiple- and single-subject credentials, the basic credential for K–12 classroom teachers, increased by 6.6 percent in 1986–87, compared to a 21 percent increase in 1985–86.

Not all credentials represent new people entering the teaching profession. Slightly more than one-third (35%) of the credentials were "first issues" to individuals new to teaching or new to teaching in California. Another 40 percent represent renewals of existing credentials. One-quarter of the

FIGURE 4.2 Percent of Elementary and Secondary Teaching Credentials that are Emergency



Note: "First-issued" credentials are granted to individuals who have never been licensed to teach. Added credentials are granted to licensed educators who have become authorized to teach in new subject areas or to perform additional services in areas for which they were not previously licensed.

SOURCE: "Credential Profile, 1981-84," "Credential Profile, 1984-85," "Credential Profile 1985-86," and "Credential Profile, 1986-87." (Sacramento, CA: Commission on Teacher Credentialing).

credentials granted in 1986–87 reflected experienced teachers adding new teaching designations to existing certificates.

The state continues to issue an enormous number of emergency credentials (Figure 4.2). Emergency credentials represented 23 percent of all Ryan first-issue and added credentials issued by CTC in 1986–87, up from 20 percent in 1985–86. Among first-issue multiple- and single-subject credentials issued in 1986–87, 23 percent were emergency credentials, up from 14 percent in 1985–86.

The large number of emergency credentials is particularly significant in the areas of special education and bilingual education. In 1986–87, 30 percent of all special education credentials issued were emergency certificates, an increase of 9 percent over 1985–86. Of the elementary (multiple subjects) credentials issued, 22 percent were emergency credentials; of those 79 percent were emergency bilingual certificates.

The number of administrative credentials issued in 1986-87 jumped by 23 percent, to 5,946. This increase is compared to a 10 percent rise in the number of administrative credentials awarded between 1984-85 and 1985-86. CTC has compiled some 1987-88 data for a recent report, A Report on Teacher Supply: Enrollments in Professional Programs During 1987 and 1988 (July 1989). Those data paint a somewhat different picture of credential preparations than do the 1986-87 data.

According to the recent CTC report, enrollments in multiple-subject credential programs increased by 9 percent in 1987–88 over 1986–87. The number of candidates completing these programs increased by 14 percent. Single-subject credential program enrollments increased by 9 percent in 1987–88; the number of candidates completing these pro-

grams increased by 21 percent.

In 1987–88, enrollments in a variety of single-subject preparation programs increased: health science (40%), foreign language (37%), and industrial arts (34%). Those subjects that experienced enrollment decline were government (13%) and history (8%).

The number of candidates completing programs in a variety of disciplines also increased: math (25%), health science (40%), life science (12%), English (14%), physical science (13%), social science (15%), and foreign language (13%).

Half of all California teachers receive their professional preparation at one of the 19 California State University (CSU) campuses. That number rises to 70 percent when one includes teachers who come from out of state and enroll at a CSU campus to take only one or two courses needed for a California credential.

CSU has established a statewide data base, the Teacher Education Database System (TEDS), which maintains information on all of CSU's students-turned-teachers. CSU statistics have been compiled for 1987–88.

CSU recommended to CTC the issuance of 12,037 teaching credentials for 1987–88, an increase of 21 percent over 1986–87. This number represents first-issue single-subject credentials (28%), multiple-subject credentials (43.6%), and advanced credentials, including designated subject, administrative services, and specialist credentials (28.4%). Of the total number of individuals recommended by CSU for teaching credentials, the majority (84.1%) were white, up from 66.4 percent in 1986–87. Hispanics accounted for 7.8 percent of CSU's newly minted teachers, Asians received 3.0 percent of the credentials (up from 2.2%), and blacks received 3.0 percent, up from 1.9 percent (Figure 4.3).

FIGURE 4.3 California State University Recommended Credentials by Ethnicity, 1987-88

Ethnic Group	% of Total	% of Single- Subject Credentials	% of Multiple- Subject Credentials	
White	84.1	86.0	83.9	
Hispanic	7.8	6.4	8.7	
Asian	3.0	2.8	2.8	
Black	3.0	2.6	2.4	
Other Groups	2.0	2.3	1.8	
Unknown	17.3	15.9	12.2	

SOURCE: Division of Analytic Studies, California State University systemwide.

The pattern of minority representation evident in the total recommended credentials held within credential categories. Of the 3,398 individuals recommended by CSU for single-subject credentials, 86 percent were white, 6.4 percent were Hispanic, 2.8 percent were Asian, and 2.6 percent were black. In the multiple-subjects credential category, of the 5,251 individuals, 83.9 percent were white, 8.7 percent were Hispanic, 2.8 percent were Asian, and 2.4 percent were black. Single-subject credential recommendations increased in all subjects, including sciences and foreign languages. Women accounted for a majority of multiple-subject (85.6%), single-subject (54.4%), specialist (83.3%), and service (72.7%) credential recommendations.

Slightly more than 50 percent of individuals recommended by CSU for an initial multiple- or single-subject credential were 30 years of age or older. As was true in 1986–87, individuals in the 25–29 year old age group received the largest percentage (32.9%) of basic credential recommendations in 1987–88. Students in the 20–24 age category were recommended for slightly less than 15 percent of initial multiple- or single-subject credentials.

#### TEACHER MISASSIGNMENTS

The fact that teachers have credentials, even emergency credentials, which authorize them to teach specific grades and subjects does not prevent school districts from assigning teachers to classes outside their designated fields. A 1987 Commission on Teacher Credentialing study concluded that eight percent of all California teachers are "misassigned" to one or more classes daily. Stated another way, five percent of elementary and secondary classes in California are taught by individuals who are teaching subjects or grades for which they are not credentialed. In rural areas of the state, seven percent of all elementary and secondary classes are taught by misassigned teachers. The number of classes taught by inappropriately credentialed teachers is largest in the areas of mathematics (26 percent of the classes are taught by misassigned teachers), social science (21%), science (21%), and English (15%), according to this CTC report.

Teachers in junior high and middle schools are slightly more likely (10%) to be misassigned than are teachers in senior highs (8%). The emergence of the middle school has created additional misassignment problems, as sixth grade teachers with elementary credentials are put into departmentalized settings. The situation at the senior high level, however, is compounded by misassignments within departments. Individuals in social science and science departments,

for example, may be teaching within the correct department but outside their particular major and minor fields.

A law covering teacher misassignments (Senate Bill 435) became effective January 1, 1988. This statute (1) authorizes CTC to establish "reasonable sanctions" for the misassignment of teachers and (2) establishes a teacher assignment monitoring and reporting system. Effective July 1, 1989, teachers who believe they are misassigned must report their misassignments to the county superintendent's office. That office then has 15 days to determine the validity of the claims. Sanctions (for example, letters of reprimand or suspensions from the job) will be imposed on the administrators responsible for illegal teacher assignments. Also, effective in 1988-89, each school district must implement procedures to monitor teacher assignments. The superintendent must provide a district teacher assignment report to the local governing board by December 15 of each year. Districts are also required to submit a teacher assignment report to the county superintendent. Effective July 1, 1990, county superintendents must submit annual teacher assignment reports to CTC. CTC will provide a comprehensive teacher assignment report to the legislature every other year.

#### **CLASS SIZE**

Class size is both a teaching and a learning condition. Teachers need classes small enough to enable them to provide some measure of individual attention to each student. Students need the individual attention teachers can offer only in classes of manageable sizes.

Measuring class size is not a straightforward endeavor. The pupil-professional (certified staff) ratio is not an accurate measure of class size because certified staff includes professionals who teach in classrooms and many who do not, such as bilingual and special education support personnel who operate "pull-out" programs, pupil-personnel staff (that is, counselors and psychologists), coordinators of categorical programs, and school administrators. The "average" pupil-teacher ratio also is not the desired measure because many teachers have nonclassroom duties. Moreover, the notion of "average" class size fails to take into account necessarily small classes, such as those for special education and advanced placement students.

The class size measure desired is the actual number of students in a typical classroom. Data recently analyzed by the State Department of Education show that the median ratio of students to teachers in California's classrooms in 1987-88 was 29:1 for K-8 self-contained classes, 29:1 for grades 7-8

departmentalized classes, and 30:1 for grades 9-12 departmentalized classes. Class size is, of course, higher in some districts and lower in others.

#### THE FUTURE: TEACHER SUPPLY AND DEMAND

Although more new teachers were hired in California in 1987–88 than the previous year, the state is expected to continue to experience a shortage of qualified teachers. The most recent California data were gathered for a 1986 PACE study. That analysis projected that, for the period through 1994–95, California will face a total demand for new teachers of between 160,000 and 183,000. According to the PACE study, between 86,000 and 104,000 teachers will be needed to compensate for attrition in grades K-8. Between 29,000 and 35,000 teachers will be needed to compensate for attrition in grades 9-12. Thirty-eight thousand teachers will be needed due to elementary enrollment growth, and 6,500 teachers will be needed due to a 14.4 percent secondary enrollment growth beginning in 1990.

The report also calculated the effect of specific educational improvements on teacher supply and demand. According to the 1986 report, three then-proposed educational reforms—reducing pupil-teacher ratios to 20 to 1, eliminating emergency credentials, and requiring teachers to instruct only in their fields of expertise—would increase the overall demand for teachers.

Given these reforms, between 79,000 and 84,000 more teachers will be needed in California by 1994–95, according to the PACE report. The report projected that class size reductions would increase teacher demand by 59.3 to 64.2 percent, elimination of emergency credentials would increase teacher demand by 4.9 to 5.4 percent, and between 5.7 and 6.3 percent more credentialed individuals would be needed if teachers were to instruct only in their fields of expertise.

The PACE study projected a teacher supply shortfall of between 40,000 and 83,000 by 1994-95 without educational reforms. The teacher supply shortfall increases to between 120,000 and 167,000 by 1994-95 if the pupil-teacher ratio is reduced to 20 to 1, if no emergency credentials are issued, and if teachers are allowed to instruct only in their fields of expertise.

Class size has not been statutorily reduced since the PACE report was issued. However, under two recently enacted laws, teachers are now prohibited from teaching outside their areas of expertise and emergency credentials are scheduled to be eliminated by 1994–95.

#### **Factors Influencing Teacher Supply**

No California teacher supply and demand study has been conducted since the PACE report was published. Nonetheless, it would appear from available data that the number of individuals entering and completing credential programs may be beginning to level off, pre-retirement teacher attrition rates are high, and the student population is increasing, particularly in certain areas of the state. Thus, the issue of teacher supply—both attracting sufficient numbers of individuals into teaching and persuading them to make teaching a long-term career choice—remains an important policy concern.

Several factors influence the supply of qualified teachers in California, including the California Basic Educational Skills Test and teachers' professional working conditions. In addition, school districts throughout the state are in intense competition for the available supply of teachers.

#### California Basic Educational Skills Test

The California Basic Educational Skills Test (CBEST) was administered for the sixth year in 1987–88. This exam, a test of basic skills in reading, writing, and mathematics, focuses on the application of principles and problem-solving. Passing standards were set by the superintendent of public instruction in 1983 and have remained unchanged since that time. Under current CTC regulations, CBEST is required for first-issue teaching and administrative credentials, for admission to some teacher preparation programs, and for individuals returning to teaching after an absence of 39 months or longer from the classroom. Those who fail to pass CBEST on their first attempt may take the test as often as they like, but they are not required to retake any section they passed previously. Typically, passing rates decline for individuals who take the test multiple times.

In 1987–88, 36,351 individuals took CBEST. This number reflects a 19.8 percent decrease from 1986–87 in first-time CBEST takers. In previous years, increases had been experienced each year. The sixth-year passing rate remained approximately the same at 76 percent. Importantly, a higher percentage of nonwhites were first-time test takers in 1987–88 (22.6%) than was the case in 1986–87 (18.2%).

Although CBEST was not designed as an admission test, an increasing number of teacher preparation programs are using CBEST results to screen potential teacher-training enrollees. The number of individuals taking CBEST prior to application to a credential program decreased by nearly 27 percent (26.6%) last year. Slightly less than three-fourths of

this group (74%) passed the test on the first attempt. The number of people who took CBEST subsequent to application but prior to admission to a teacher preparation program also decreased in 1987–88, down 26 percent from 1986–87. Seventy-nine percent passed the test on their first attempt. The number of individuals who took CBEST once they had been admitted to a professional preparation program declined by 23 percent in 1987–88. Seventy-one percent passed the test on their first attempt. The number of individuals who took CBEST once they had started student teaching continued to decline, down to 1.3 percent in 1987–88. The passing rate for this group was 6.6 percent.

Among those pursuing teaching credentials, the CBEST passing rate was highest (82%) for those seeking emergency credentials. Among those who already held California credentials, the passing rate was highest (78%) for those seeking to have their names included on a substitute teaching list.

Approximately five percent of individuals taking CBEST for a nonemergency credential planned to apply for a teaching credential with a bilingual emphasis, down from seven percent the previous year. Passing rates for this group of test takers continued to be lower than for test takers seeking a credential without bilingual emphasis. The passing rate for people seeking a multiple-subjects (elementary) credential was 73 percent; for a multiple-subjects credential with bilingual emphasis, the passing rate was 54 percent, up two percent from last year. Among those working toward a single-subject (secondary) credential, the CBEST passing rate was 77 percent. Slightly more than half (52%) of individuals seeking a single-subject credential with a bilingual emphasis passed the test in 1987–88, up one percent from 1986–87 passing rates.

The passing rates for first-time test takers on each section of the test rose slightly. In 1987–88, 88 percent of first timers passed the reading portion of CBEST, compared to 85 percent in 1986–87. Eighty-four percent passed the math section on the first try in 1987–88, compared to 81 percent the previous year. Passing rates on the writing section showed slight improvement as well. Eighty-two percent passed on their first attempt in 1987–88, compared to 79 percent in 1986–87.

Blacks and Hispanics, other than Mexican-Americans, made the greatest gains in first-time CBEST passing rates in 1987–88 (Figure 4.5). Mexican-Americans and whites lost some ground. Asians gained slightly. In both 1986–87 and 1987–88, Asians accounted for approximately three percent of first-time CBEST test takers. Passing rates for this group were 61 percent in 1986–87 and 62 percent in 1987–88. Five percent of test takers were black in 1986–87; four percent were black in 1987–88. In 1986–87, 34 percent of blacks

passed CBEST on the first try; that number increased to 41 percent in 1987–88. In 1986–87, Mexican-Americans accounted for 4.0 percent of CBEST first timers; in 1987–88, 6.3 percent were Mexican-Americans. In 1986–87, 59 percent of the Mexican-Americans taking the test passed it the first time. That number declined to 56 percent in 1987–88. Other Hispanics, who composed two percent of first-time test takers in 1986–87 and four percent in 1987–88, had a 51 percent passing rate in 1987–87 and a 62 percent passing rate in 1987–88. Whites account for the largest share of CBEST takers, composing 82 percent in 1986–87 and 77 percent in 1987–88. In 1986–87,81 percent of whites taking CBEST for the first time passed. The following year that figure was 80 percent.

#### **Alternate Routes to Certification**

California, unlike some other states, has not chosen to attempt to expand its supply of teachers by offering a variety of ways in which individuals can bypass traditional teacher preparation programs. The primary alternate route to certification is via the Teacher Trainee Program.

The Teacher Trainee Program was established as part of Senate Bill 813 (1983). The program was envisioned as a way to encourage second career professionals into teaching by allowing them to bypass traditional teacher preparation programs. Originally limited to prospective teachers in grades 9-12, legislation signed into law in 1987 allowed school districts to employ teacher trainees in grades K-8.

A school district desiring to hire a teacher trainee must certify to the Commission on Teacher Credentialing that fully credentialed teachers are not available in the required grades or subjects. The district must also be participating in the state's Mentor Teacher Program. The prospective teacher trainee is required to possess a bachelor's degree and must pass both the CBEST and the National Teacher's Exam (NTE) in the appropriate subject area or discipline. To qualify for a teaching credential, the trainee must teach successfully for two years under the supervision of a mentor teacher and must complete a professional preparation program developed in consultation with the employing school district and a cooperating college or university.

In 1986-87, 151 individuals completed Teacher Trainee programs and received Ryan credentials. Of these individuals, 82 were receiving their first teaching credentials, 59 were adding a new credential to an existing one, and 10 individuals were renewing credentials. The majority of teacher trainees work in the Los Angeles Unified School District.

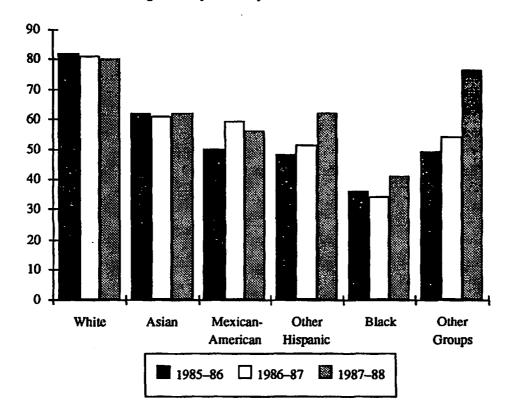
Human Resources 37

FIGURE 4.4 CBEST Number Tested and Percent Passing by Ethnicity, 1985-86 through 1987-88

	1985-86		198687		1987–88	
	Number	Percent	Number	Percent	Number	Percent
Ethnic Group	<b>Tested</b>	<b>Passing</b>	Tested	<b>Passing</b>	Testing	<u>Passing</u>
Asian	1,125	62	1,257	61	1,012	62
Black	1,997	36	2,111	34	1,532	41
Mexican-American	1,759	50	1,961	59	2,293	56
Other Hispanic	754	48	833	51	1,482	62
White	33,563	82	37,088	81	28,124	80
Other Groups	1,421	49	2,076	54	1,908	76
Total	40,619	76	45,326	76	36,351	75

SOURCE: "Sixth Year Passing Rates on the California Basic Educational Skills Test (CBEST) and Passing Rates by Institution Attended" (Sacramento, CA: California Commission on Teacher Credentialing, September 1987).

FIGURE 4.5 CBEST Passing Rates by Ethnicity



Source: "Sixth Year Passing Rates on the California Basic Educational Skills Test (CBEST) and Passing Rates by Institution Attended" (Sacramento, CA: California Commission on Teacher Credentialing, 1988)

#### **District Recruitment Efforts**

Far West Laboratory for Educational Research and Development (San Francisco) conducted a study of teacher recruitment and retention in California. To gather data for the report, Far West conducted seven regional meetings throughout the state in fall 1987 with representatives of teacher preparation institutions, school districts, and county offices of education. The report was released in 1988.

Districts reported employing a wide range of strategies, some more successful than others, for both in-state and out-of-state recruitment of teachers. School districts have several sources for new teachers: recent graduates of teacher preparation programs, properly credentialed substitute teachers, paraprofessionals who enter programs to earn teaching credentials, people with credentials who reenter the market, teachers transferring from other districts in California, and teachers from out of state. The strategies used by districts to recruit teachers vary, depending on the source of the applicants and the finances available to the district.

According to the Far West report, in order to attract recent graduates and credentialed teachers within the state, most districts engage in a few standard practices. Among these strategies are placing advertisements in local and regional newspapers, listing available positions with job placement services, attending or sponsoring recruitment "fairs" for potential job applicants, visiting teacher education programs at nearby colleges and universities to encourage job seekers to "give our district a try," and attending meetings of professional organizations (for example, the California Association of Bilingual Educators and the Council for Exceptional Children). These strategies, however, do not seem significantly to enlarge the size of the applicant pool.

A substantial source of new teachers for most districts is the substitute pool. Districts prefer to hire substitutes and student teachers because district administrators have had ample opportunity to see these individuals work. The substitute pool, however, is not an adequate source of new teachers. Many districts, for example, reported they are experiencing a substitute shortage.

A few districts are developing unique recruitment strategies. For special education and bilingual education, some districts are encouraging regular classroom teachers to return to school to secure these credentials. A half dozen districts are developing career programs to assist paraprofessionals in earning teaching credentials. Whether these strategies significantly can increase the size of the teaching pool is yet to be determined. At least one district sponsors an open house

which allows prospective applicants to "interview" the district. This open house is held during spring break, and principals and teachers are available to answer questions and interview prospective teaching applicants.

Districts of all kinds reported extensive out-of-state and out-of-country recruitment efforts. These efforts tend to focus primarily on recruiting special education, bilingual education, and minority teachers. Out-of-state trips are the result of districts' assumptions that sufficient numbers of applicants are not available within the state.

School districts and county offices of education that were part of the Far West study journeyed across the country in search of teachers in 1987. Among the states most frequently mentioned as recruiting targets were Washington, Utah, Oregon, North Carolina, Virginia, Texas, Massachusetts, Ohio, Oklahoma, Arizona, and New Mexico. In addition, these districts and county offices of education sought teachers in Canada, Germany, England, Spain, China, Colombia, and Mexico.

District and county office of education personnel rated their out-of-state and out-of-country recruiting efforts as "relatively expensive and not altogether successful." They stressed, however, that they will continue the recruiting trips because they believe these trips are an essential source of teachers. According to the report, district and county representatives report that they locate on the average of one or two successful candidates per trip. It is not uncommon, they said, for a qualified candidate to sign a job contract and then fail to appear for the job. Sometimes, they said, "prime candidates" move to California and then are unable to secure a California credential, either because they fail to pass CBEST or because they are unable to meet some other California credential requirement.

Because these recruitment strategies are often less than fruitful, several districts are developing longer-range programs to attract students into the teaching profession. These "grow your own" programs attempt to interest high school students in teaching. Fresno has developed a Teachers of Tomorrow Club; San Juan, in the Sacramento area, is hiring high school students as aides in the hope that many of them will be lured into teaching; the University of Southern California and the Los Angeles Unified School District have begun a "Future Teachers Day" for college students at which information is provided about teacher preparation programs and financial aid. A special focus of all these efforts is attracting minority students.

## CREATING A PROFESSIONAL WORK ENVIRONMENT

California's contemporary educational reform thrusts are largely focused on individual programs, discrete aspects of teacher preparation, and district-led pilot programs. Some of the efforts are explored in this next section.

#### **Mentor Teacher Program**

Established by Senate Bill 813 in 1983, the Mentor Teacher Program was envisioned by the legislature as the first rung of an emerging teacher career ladder. Selected by a committee of their peers, mentor teachers are provided an additional \$4,000 pay in exchange for assuming enhanced professional responsibilities.

For the first five years of the program, the focus of mentors' work in most districts was curriculum development. A 1986 study of the program by the State Department of Education revealed that the majority of school districts treated the program as "extra work for extra pay," with mentors typically completing individual projects under general supervision and submitting logs detailing their work and the hours spent on it.

Recently, the Mentor Teacher Program has undergone something of a metamorphosis as a shift in program focus seems to be underway. The State Department of Education reports that districts are moving away from the individual project orientation of the program. Districts are now beginning to turn to mentors to provide professional support to their novice colleagues. Districts report they are investing time and money in providing training for mentors in observation, feedback, and coaching. The state is encouraging this return to what the legislature envisioned as the original intent of the program.

The Mentor Teacher Program was fully funded for the first time in 1988–89. The state appropriated \$63,595,000, up from just \$10 million in the program's first year, 1983–84. More than 10,500 teachers in 958 California school districts are current program participants.

The State Department of Education has begun to take a fresh look at the Mentor Teacher Program, with an eye to a new evaluation. Specifically, the state is reviewing long-range training and professional development options to support mentors, and reexamining the mentor recruitment and selection process.

#### Staff Development

A new law, enacted in 1988 and funded in 1989, represents a state-initiated effort to refocus professional development programs for teachers and administrators. The law grew out of the California Staff Development Study, a joint project of PACE and Far West Laboratory. The study was initiated by the legislature and governor in response to the steady escalation in the number and funding levels of staff development programs. Researchers analyzed professional development offerings in 32 California school districts to produce a descriptive inventory of policy and program choices reflected in district-level staff development.

According to the staff development study, both teachers and administrators believe professional growth improves teachers' effectiveness in the classroom. Nearly 70 percent of teachers say they want more, not less, staff development. Eighty-four percent of new teachers want additional professional growth opportunities.

Teachers believe, so the PACE/Far West study concluded, that their main incentive for professional development is their own "felt obligation to be and stay competent." Access to new ideas and materials and contact with colleagues are the most compelling reasons, teachers say, for participating in staff development. Teachers also report that the most worthwhile staff development is (a) measured in days, not hours, (b) scheduled during the salaried workday with substitutes, (c) accompanied by follow-up, (d) reflects an integrated combination of subject-area content and pedagogy, and (e) is voluntary. In most districts, administrators have more influence than teachers in determining staff development offerings. At the school-site level, however, teachers and administrators express a preference for joint decision making.

Finally, more than three-quarters of teachers (79%) say they believe teachers should be leading staff development activities. Administrators agree. Yet just 17 percent of the educators say that teachers regularly act as staff development providers.

The new staff development law changes the focus of professional development programs from district-centered to school-centered. Teams of teachers and administrators from individual schools will develop school-based professional development plans designed, according to the legislation, to strengthen subject-matter knowledge and instructional strategies, including the use of educational technology. Each school will also be required to develop annual school improvement objectives.

Governing boards and district central administrative staff will play a supportive, rather than directive, role under the new legislation. Each district must establish a district plan designed to support coordinated professional development for teachers, administrators, and classified employees. Districts are also encouraged to establish resource agencies or consortia to assist schools and districts in developing plans and providing access to out-of-district professional development resources. Each resource agency or consortium will be advised by a committee comprised of a majority of classroom teachers.

Staff development funds also will flow differently under the new law. While some money for professional development will remain at the district level, the law requires that governing boards appropriate an amount not less than \$4,000 per year to each school that has developed and is implementing site-based staff development.

#### Reforms in Credentialing, New Teacher Support

Senate Bill 148, authored by Senator Marian Bergeson and signed into law in September 1988, changes various credentialing statutes, alters the composition of the Commission on Teacher Credentialing, and establishes the California New Teacher Project.

The legislation moves the state toward a two-tier credentialing process. Tier 1 will be a preliminary teaching credential, which will require possession of a baccalaureate degree in a subject other than education, completion of an accredited professional preparation program, and either passage of a subject matter examination or assessment, or completion of an accredited subject matter preparation program and passage of CBEST. Tier 2, the professional credential, will require passage of a state subject-matter examination or assessment and completion of a paid supervised teaching residency that includes assessments of subject matter knowledge and instructional ability.

In order to develop the residency program, Senate Bill 148 established the California New Teacher Project. Fifteen pilot projects are currently operating in 110 school districts throughout the state. The purpose of these pilot projects is to test the most effective ways to provide support to beginning teachers and to assess their professional skills. The projects focus not on written standardized tests, but on methods for assessing beginning teachers' ability to integrate subject matter knowledge with teaching skills and teach children from diverse backgrounds. Assessment techniques include simulations, demonstrations, interviews, and observations. A final

evaluation and report of these beginning teacher projects will be presented to the legislature and governor by March 1, 1992.

Senate Bill 148 also alters the composition of the Commission on Teacher Credentialing and changes credentialing requirements. As of July 1, 1989, CTC has a larger complement of classroom teachers. The newly constituted 15-member commission includes six teachers, four public members, one member of a school board, one administrator, one "other credential" holder, one representative of higher education, and the superintendent of public instruction.

Some credentialing statutes were also modified by Senate Bill 148. Effective July 1, 1990, the requirements for emergency teaching permits are increased to a B.A. and either passage of a subject-matter examination or completion of 18 units (9 upper division) in the appropriate subject for a singlesubject permit, or 40 units for a multiple-subject permit. The new law also requires CTC to approve a district's justification of need for emergency permits, and requires emergency credential holders to attend an orientation and receive ongoing training which will lead to a full credential. Moreover, as of 1990, persons on emergency permits will be required to "teach only with the assistance and guidance of a certificated employee with at least four years of teaching experience." Finally, the law abolishes emergency credentials as of July 1, 1994, or whenever CTC certifies "that an adequate number of certified teachers is available."

Finally, Senate Bill 148 expresses legislative intent that CTC replace the current program approval method of credentialing with an accreditation process that focuses on the individual prospective teacher. Specifically, the law requires that CTC appoint an 18-member Accreditation Advisory Committee, comprised of professional educators and university representatives, and adopt an accreditation framework. The framework is to be in place by September 15, 1990. By February 15, 1991, CTC will disseminate a request for proposals for accreditation assessments. CTC must select at least one nongovernmental accrediting entity by September 15, 1991. New accreditation standards are to be based on assessments of individual candidates.

#### The Trust Agreement Project

For the past two years, 12 California school districts and their teachers' unions have been experimenting with a new form of labor accord called an Educational Policy Trust Agreement. The Trust Agreement Project is designed to enable school management and teachers, as represented by their union, to develop written agreements on professional issues which,

Human Resources 41

arguably at least, fall outside the scope of traditional collective bargaining. The project is a test of the proposition that labor relations and school reform can be effectively linked. Thus far, the results are encouraging.

The Trust Agreement Project is a cooperative effort of the California Federation of Teachers, the Association of California School Administrators, the California School Boards Association, and the California Teachers Association under the auspices of PACE.

Twelve school districts ranging in enrollment from 2,000 to more than 100,000 students participate in the project. These districts run the gamut from urban to rural to suburban. Some of the districts have relatively homogeneous populations. Others mirror California's increasing racial and ethnic diversity. Some project districts have a long history of cooperative labor relations. In others, at least at the outset of the project, the relationship between the union president and superintendent was less-than-cordial.

Trust Agreements have no inherent subject matter. Districts are urged to diagnose local problems rather than engage in imitation. Thus, each Trust Agreement district selected a policy area in which it would attempt to craft an agreement. The project, therefore, encompasses a wide range of policy areas. Some districts have developed peer assistance and review programs, in which experienced teachers support and evaluate their novice colleagues. Other districts have initiated site-based management projects, in which teams of teachers and site administrators are given the authority and responsibility to craft their own school programs. Still other Trust Agreements involve the development of career ladders or teacher-directed professional development programs.

Ideally, Trust Agreements will result in workplace reforms that will enhance the educational capacity of schools. In the 12 project districts, Trust Agreements appear to be altering the way in which educational decisions are made. Teachers and school administrators are assuming collective responsibility for educational processes and outcomes, and union and management are acting as a team in their efforts to design creative responses to significant educational challenges.

### Chapter 5

# The Organization and Control of California Schools

The organization and control of California's schools are exceedingly complex. Balanced atop any single class-room are a variety of regular and specialized instructional programs; thousands of schools attendance areas and districts; dozens of county offices of education; a state department employing more than 2,500 professionals; and a chief state school officer, State Board of Education and activist legislature.

Still others vie to control such fundamental decisions as what is taught, to whom, by whom, and with what effect. Colleges and universities, courts, nationally known "reformers," test makers, text publishers, accrediting agencies, interstate networks of professional or lay issue-advocates, and a multitude of organized special interests all attempt to control what government does or does not do regarding elementary and secondary education. Instructing California's more than five million pupils involves different levels of government, thousands of employees, and a multitude of interests, ambitions, and goals.

## STATE AND LOCAL ORGANIZATION OF EDUCATION

Education in California is a constitutional responsibility of the state. The legislature, in fact, is charged with providing and funding a system of free public schools; it also holds the power to incorporate and organize school districts to deliver educational services.<sup>1</sup>

Traditionally, the state has ceded considerable authority to local districts. A widespread ideology of local control and unhampered use of the property tax assured school districts the authority and flexibility to act independently in establishing standards and programs.

Only during the past 20 years has the state emerged as the primary policy and fiscal agent in the delivery of educational services to California's school children. Court decisions and legislative prescriptions regarding the equalization of school funding, and loss of property tax discretion through Proposi-

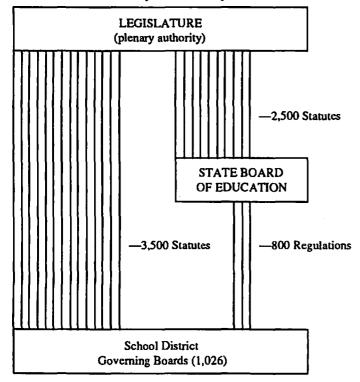
#### HIGHLIGHTS

- One thousand eighteen school districts operate in the state today: 625 elementary, 282 unified, and 111 high schools.
- California's largest 25 school districts (2.5% of all districts) serve approximately 34 percent of the state's public school students.
- There were 7,125 public schools in California in 1987-88, including 4,636 elementary, 716 intermediate, 240 junior high, and 822 high schools.
- One-third more private schools operated in California in 1987-88 than existed four years earlier.
   Nevertheless, total private school enrollment during this period dropped two percent.
- In many respects, California schools now constitute
  a state system that is operated locally. The state
  controls approximately 94 percent of school funding
  and uses an eight-and-a-half volume Education Code
  for regulation.
- Though the balance of control has clearly shifted to the state, there still is no single, central point where decisions are made or control exercised.
- Accountability mechanisms are an increasing manifestation of state control over the products of local school districts.
- California voters continue to use the initiative to shape educational policy, most recently using Proposition 98 to guarantee public schools a base funding level
- State and federal courts provide another powerful influence on local education policy. In 1989, approximately 72 active suits against the State Department of Education involved all areas of local school operations.
- Four current policy mechanisms—discretionary funding, devolution of authority to school sites, restructuring, and choice—are expanding local discretion for governing boards and administrators.

Organization and Control 43

FIGURE 5.1 Governance Structures for Public Education in California

**Elementary and Secondary Schools** 



tion 13, contributed heavily to this transformation. The state's own capacity to act expanded as well.<sup>2</sup> The sheer number of legislative staff increased, enlarging the institution's policy, oversight, and research capabilities. Similarly, federal educational programs required the state department of education to approve local applications for federal funding and provided federal dollars for state administrative purposes. This both expanded the number of professional staff at the state level and provided a measure of state control over the delivery of educational programs locally.

During the same period, increasing turbulence<sup>3</sup> locally (collective bargaining, desegregation, taxpayer revolts, and the like), coupled with declining test scores, eroded the public's confidence in local officials and professional educators. State testing and minimum proficiencies for students and staff followed. Omnibus legislation, which included a required core curriculum, and accountability programs further chipped away at the discretion of local governing boards and superintendents to establish a local agenda. Alignment of state tests, texts, and curriculum guides created a "one best system" impression of schooling statewide.

Finally, education came to be seen as centrally and crucially important to the state's ability to remain competitive economically and to train a diversifying workforce to succeed in an increasingly technological labor market. The state's interest in educational productivity and economic development became intertwined. From the state perspective, the need to secure a competitive economic capability overshadowed its former ideological reliance on local control. In short, local turbulence, public distrust of local officials, new state capacity to intervene, and a belief that higher, uniform educational standards served the state's overall interests compelled state officials to assert control it long ago ceded to local agencies.

In many respects, California schools now constitute a state system that is operated locally. The state controls approximately 94 percent of school funding and uses an eight-and-a-half-volume Education Code for regulation (Figure 5.1). The instruments of state educational governance include the governor, legislature, chief state school officer, State Board of Education, State Department of Education, and other state agencies.

#### **Central State Actors**

Because of its constitutional authority, control over school funding, and elaborate policy apparatus, the legislature is the central arena for school governance. In California, as in other states, it is rightfully regarded as "the big school board." Similarly, because of his line-item veto and command of public attention, the governor, potentially, is a powerful influence on school policy. During the last eight years in California, however, the governor's role is more aptly characterized as shepherding limited state resources rather than providing educational policy innovation and leadership. Under different circumstances, the role of the governor could be quite different.

In contrast, the superintendent of public instruction has limited formal powers at his disposal. He serves as the secretary and executive officer of the State Board of Education and chief executive officer of the State Department of Education. He also sits as an ex officio member of the Board of Trustees of the California State University, Board of Regents of the University of California, and other commissions. Traditionally, the state superintendent has provided considerable policy leadership, though his strength is limited in large measure to the bully pulpit and his role as implementor of state statutes. He shares no formal role in establishing the state's budget for public schools. In California, the superin-

tendent of public instruction is one of seven constitutional officers, elected statewide, for a four-year term, and thus is independent of the governor.<sup>5</sup>

The State Board of Education, on the other hand, is appointed by the governor. Its responsibilities are limited primarily to "issuing guidelines for legislatively enacted statutes, distributing admonitions to local districts," and adopting textbooks.

The State Department of Education, over which the state superintendent presides, is the primary administrative agency for public schooling. Included among its responsibilities are the apportionment of funds to all local educational agencies. It also develops curriculum standards and guidelines, provides technical assistance to districts in implementing statutes, administers statewide testing programs, collects and distributes data, coordinates staff develop activities for administrators and teachers, issues individual school accountability profiles, administers federal educational programs, ensures compliance with categorical program laws, and administers adult education programs and state special schools for the deaf, blind, and neurologically handicapped. An independent commission handles teacher certification. The State Department of Education reports administratively to the state superintendent, not to the State Board of Education.

#### **Intermediate Agencies**

County offices of education operate between California's state and local educational agencies. Earlier regarded as an arm of the State Department of Education, county offices played a substantial regulatory role, for example, ensuring compliance with state standards. Also, in the early 1960s county offices of education worked closely with county tax assessors in developing projections for school revenues and budgets. Since the state has assumed responsibility for funding schools, however, the fiscal function of county offices has diminished.

To a growing degree, county offices have come to offer direct services to school districts, often providing system efficiencies through cost containment and cost reduction programs. Examples include educational telecommunications networks, staff development training and coordination, transportation management, centralized payroll data processing systems, library and film distribution, business services consulting, and coordinated or centrally provided student instructional services. In specialized areas such as services for the handicapped and in vocational education, services for

which there can be substantial economies of scale, county offices have assumed actual operating functions. In general, smaller and more rural areas depend to a greater extent on the services of county offices.<sup>10</sup>

Recent reports by blue-ribbon panels examining school reform have called for a reconceptualization of the intermediate unit in California's school governance structure. The governor's California Commission on Educational Quality, for example, proposed abolishing the current county offices and reconstituting them as regional service centers. The commission report argued that increased regionalization of program and service delivery would effect substantial management efficiencies and cost containment in the K-12 system. Similarly, the Association of California School Administrators' Commission on Public School Administration and Leadership described the state's current system of county offices as "more [rooted] in history than in practicality."11 It recommended that regional service centers could achieve substantial economic efficiencies and improve the availability of technical resources.

#### **District Characteristics**

As extensive and active as state educational entities have become, local school districts still are the basic operating unit in school organization. They also are the most numerous units of local government. It is at this level that services are delivered to clients and the success or failure of an instructional system is most strongly determined.<sup>12</sup> To an extent, districts serve two masters: local decisions are made at this level regarding the management and operation of a community's schools, but districts also are the primary implementors of state policy.<sup>13</sup>

California has an unusually complex formal arrangement of school district structure. Typically, school districts fall into one of three classifications: elementary, including K-6 or K-8; high school, including 7-12 or 9-12; or unified, including K-12. Citizens often live in two school districts, one for elementary and another for high school. Many districts are not contiguous with city, town, or any other identifiable border. The city of San Jose, for example, has 21 school districts within its boundary.

One thousand eighteen school districts operate in the state today. Six hundred twenty-five of these districts are elementary, 111 are high school, and 282 are unified. District enrollments range from 10 (Flournoy Union Elementary in Tehama County) to 592,881 (Los Angeles Unified). California's largest 25 school districts (2.5% of all districts)

serve approximately 34 percent of the state's public school students. More than one-third of California's school districts (363) enroll fewer than 500 students. One hundred and five districts (10.3%) enroll fewer than 100 students.

Encouraged by state financial incentives, many school districts unified or consolidated into larger districts. This has reduced the total number of districts from 3,000 in 1935 to 1,018 today (Figure 5.2). Prior to Proposition 13, the legislature provided unification bonuses, 14 but few consolidations have taken place since 1970. Indeed, just as many proposals for secession from larger districts have been on the state board's agenda in the last decade. The public is unwilling to surrender the sense of local control embodied in a small school district.

#### **Public School Characteristics**

There were 7,125 public schools in California in 1987–88. These included 4,636 elementary schools, 716 intermediate schools, 240 junior high schools, and 822 high schools. The most common types of school organization are:

- elementary—usually organized as K-6, K-7, or K-8
- intermediate—usually organized as 4–6,
   4–8, 5–8, 6–8
- junior high—usually organized as 7–8 or 7–9
- high schools—usually organized as 9–12 or 10–12

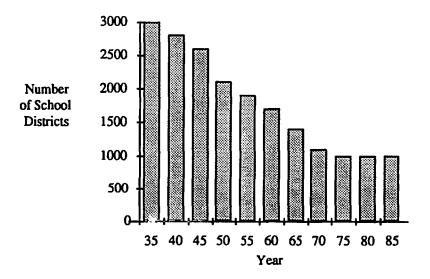
The most common configurations of schools within unified school districts and between elementary and high school districts include either K-8, 9-12; or K-6, 7-8, 9-12; or K-6, 7-9, 10-12; or K-5, 6-8, 9-12.

In addition to elementary, intermediate, junior high, and high schools, there are over 700 schools of other types in California. These include continuation high schools (425 schools), county superintendent-operated schools (frequently for special education), and other types of schools, such as alternative schools, opportunity schools, and schools for pregnant minors (together numbering 286 schools).

Median enrollment for elementary schools is approximately 450 pupils; for intermediate and junior high schools, approximately 650; and for high schools, approximately 1,500. But just as for districts, these numbers mask great variances, ranging from one-room elementary schools in remote areas, frequently enrolling 10 or fewer students, to massive urban high schools with enrollments exceeding 4,000. Continuation high schools, schools for pregnant minors, and other special schools typically enroll substantially fewer pupils.

In accord with their specialized function, that is, to prevent dropouts and provide a more flexible program, continuation secondary schools generally enroll smaller numbers of students. Information from the California Basic Edu-





SOURCE: California Basic Educational Data System (CBEDS). "Selected Education Statistics, 1984-85" (Sacramento, CA: California State Department of Education, 1985).

cational Data System for 1985-86 indicated that 55 percent of continuation schools have an enrollment of fewer than 100 students.

Continuation schools are alternatives for pupils having difficulty adjusting to the normal high school organizational structure. Although many of these students are at risk of dropping out, continuation schools also provide an alternative for students not having academic difficulty but requiring a flexible time schedule for their studies (for example, those whose economic situation requires them to work during the academic day, or those who spend a large part of their day in rigorous training for athletic competition). With more than 80 percent of continuation schools having the same graduation requirements as traditional high schools in their districts, continuation schools provide an alternative means of high school completion which features part-time attendance, smaller class sizes, and individualized instruction.

#### School Calendar

The overwhelming majority of California schools operate on the traditional September to June schedule. However, rapidly rising enrollments and scarce school facilities have encouraged some school districts to experiment with year-round schedules. That is, they have reorganized their school calendars into instructional "blocks" and vacations that are distributed evenly across the calendar year.

For example, the most common year-round schedule is the so-called 45–15 model. Here students are divided into four instructional blocks. Each block attends school for 45 days, then vacations for 15. The cycle is repeated throughout the calendar year. Students attend school the same number of days as they would under the conventional calendar (180), but with a year-round schedule, learning is continuous. In fact, some districts operate remediation, enrichment, and acceleration programs during the intersessions, adding additional flexibility to a school's curriculum. Seventy-four percent of teachers responding to a State Department of Education query reported that they preferred the year-round schedule, arguing that it produced better-quality instruction. Forty percent of students in that same study said they learned more as a result of the continuous instruction. <sup>16</sup>

Year-round schooling, however, is foremost an expedient way to handle burgeoning enrollments when there is no state money to build new schools. It is chosen in lieu of other alternatives for handling overcrowding, such as busing, split sessions, portable classrooms, and new schools. Under a year-round schedule, instructional blocks are staggered. While one

is on vacation, another can use its space. The 45–15 model, for example, increases the capacity of a district's existing facilities by 33 percent. Almost 300 California schools utilize year-round schedules. Most of these are in Southern California where enrollment growth is greatest. Parent response has been mixed, 17

#### **Private School Characteristics**

One-third more private schools operated in California in 1987–88 than existed four years earlier (an increase from 4,578 to 6,270). Nevertheless, total private school enrollment during this period dropped two percent. Likewise, in 1987–88 private schools enrolled 10.5 percent of all elementary and secondary students in the state (public and private combined), down from 11.7 percent in 1983.

Although there continues to be strong support for California's public education system, an increasing number of parents of *preschool* children indicate a preference for private school education. A recent California Teachers Association (CTA) survey indicates that there was a 10 percent increase in the number of parents with preschool children who express an intention to send their children to private schools. <sup>18</sup> The limit on private school growth is more a problem of supply than demand.

In 1987–88, there were approximately 528,500 students enrolled in 6,270 private schools. Forty-two percent of these schools enroll four or fewer students and are typically "home schools." The 37 percent increase in the number of private schools in California since 1983 is wholly accounted for by the rise in these small, home schools. Similarly, 48 percent of California's private schools enrolled 10 or fewer students, 26.6 percent enrolled between 11 and 100 pupils, 22.8 percent enrolled between 101 and 500 students, and 2.2 percent enrolled 500 or more students. Most private schools are elementary (4,691 or 75%). Four hundred forty-two (7%) are secondary, 934 (15%) are K-12, and 203 (3%) are ungraded. The vast majority of private schools (88%) are coeducational. Six percent, however, serve boys only, and six percent serve only girls. Almost all private schools (93%) are day schools; the rest offer a residential boarding alternative.

Religious and church-affiliated schools in California account for 75 percent of all private school enrollment. The majority of church-affiliated schools are Roman Catholic (61%), followed by Baptist (8%), Lutheran (6.1%), Seventh-Day Adventist (4%), and Assembly of God (3.7%).

#### **Classroom Organization**

The bulk of classes in California schools are so-called regular classes<sup>19</sup> and are essentially of two types.

- 1. Self-Contained. These classes exist primarily in elementary schools in which an instructor teaches a full array of subjects—mathematics, science, reading, writing, social studies, and art—to the same students for a full school day. Some of these classes combine more than one grade (grades are frequently combined in cases in which there are insufficient students in a single grade to compose a full class of students).
- 2. Departmentalized Classes. These classes, typically found in middle, junior, and senior high schools, are characterized by subject matter instruction; that is, rather than one teacher instructing a class of students in all subjects, the instructor teaches the same subject matter to more than one set of students during the school day. Subject-matter classes also occur in elementary schools when a specialist, in art or music for example, may be employed to teach a single subject across grade levels or in more than one school. Subject-matter classes are normally organized into departments. The most frequently offered classes, in descending order by department, occur in: English, mathematics, social science, physical education, special education, and science.

There are literally hundreds of different classes ranging from small, scattered-enrollment classes in subjects such as archaeology, third-year Portuguese, hardware/building, or cinematography, to classes with massive statewide student enrollment in such basic, required courses as comprehensive English, United States history, or algebra.

#### WHO CONTROLS CALIFORNIA'S SCHOOLS?

Recent opinion polls demonstrate widespread misconceptions about who controls California education. The public believes there is much more local discretion than actually exists and seriously underestimates the state role. It believes that local sources of funding are larger than state sources, when actually the reverse is true. The actual control of schools involves many actors and agencies that compose a complex mosaic of influence.

#### California School Boards

School boards, clearly, are controlling bodies, acting in the interests of their constituencies but within the statutory and constitutional boundaries established by the state. School

boards, in other words, are agents of the state. Elected locally, they also are the principle vehicles of local control. Like other elected public officials, school board members are expected to reflect the public will in what they do.<sup>20</sup>

Among their principle duties is hiring the district's chief executive officer (the superintendent), approving budgets, determining school sites and attendance boundaries, letting contracts, collective bargaining, establishing criteria for employing school district personnel, and determining curriculum. The decision-making domain of elected school boards also encompasses evaluating students and employees, selecting instructional materials, financing capital purchases, establishing personnel assignment policies, pursuing categorical funds, and defining codes of student conduct.<sup>21</sup>

Almost 80 percent of California's school boards are composed of five members.<sup>22</sup> The remainder are composed of either seven (17.9%) or three (2.1%). Typically, these school boards meet either once (43.6%) or twice (49.4%) a month. Ninety-six percent of school boards use an at-large system to elect their members. In 1988, only one percent of California school boards experienced a recall election, suggesting that extreme political turbulence is absent from the state's school districts as a whole.

When California school board members were asked, "What is the most serious problem facing education today?" approximately three-fifths responded: financial scarcity. When they were asked, "What is the most serious problem facing your district?" almost half responded: financial scarcity. Thirty-eight percent cited school facilities needs. Not surprisingly, 93 percent agreed that changes are necessary in the current method of funding public schools. Ninety percent, in addition, believe that finding qualified teachers, especially in certain disciplines, will be an increasingly serious problem in coming years.

School board members themselves are overwhelmingly white (90.4%). More than three-quarters (76%) have earned college degrees, and 44 percent have completed post-graduate training. Males outnumber females by 23 percent. Moreover, the percentage of female board members has decreased slightly since 1983 (to 44.7%).

Most board members (40.5%) are between the ages of 40-49. However, board members are slightly older today than they were five years ago. The percentage of board members under age 29, between 30-39, and between 40-49 dropped in each category. In contrast, percentage increases occurred in each category from age 50 to over 70. Board members are also more experienced today than they were five years ago. Almost 43 percent have served between 2-5 years; another 27

percent between 6-8 years, and almost 13 percent between 12-15 years.

The ideological inclination of local governing board members is predominantly middle-of-the-road (46.9%),<sup>23</sup> and their occupations vary (professional, 28.9%; homemaker, 15.3%; education, 13%; business, 11.2%; retired, 10.6%; other, 21%).

Participation with a PTA, school or district advisory committee, school site council, or as a classroom volunteer has dropped dramatically as a prelude to serving on a school board. Still, a quarter of board members are teachers, former teachers, or spouses of teachers. Most board members ran for election because of a concern to improve quality (23.9%) or because they were recruited and encouraged (22.8%). Others had children in school (16.3.%), a high interest in public education (15.2%), or enjoy public service (13%).<sup>24</sup> In 1983, 35 percent of board members reported that they would seek reelection; in 1988 that number increased to 68 percent.

From this portrait of California's board members, the boards' principle agendas include raising money, building schools, and recruiting qualified teachers. At the same time, California school boards are becoming older, whiter, more male, and more professional at a time when California's public school community is more ethnic, limited-English-proficient, immigrant, and younger.

#### **School Boards in Operation**

Local school boards traditionally have provided lay governance of public education, although they have become neglected entities in recent educational reform movements. In omitting local boards from the reform agenda, state legislators and educational reformers have reflected a lack of confidence in educational leadership at the local level.

The Institute for Educational Leadership's (IEL) national survey of local school boards indicated that the public supports continued local governance through these boards but demonstrates a lack of interest in and understanding about their structure, role, and functions.<sup>25</sup>

Like most school boards across the country, California boards express concern about the increasing role of the state in educational policy making, particularly in the areas of curriculum and teacher evaluation, areas which have traditionally been under local control. Boards view themselves as omitted from the state reform agenda and placed in a reactive position with respect to state initiatives, rather than as partners in the reform effort. Most boards feel a lack of power in dealing with the policy-making aggressiveness of the state.

Although individual school board candidates do not necessarily identify themselves with specific constituencies within a community, it is estimated that approximately 25 percent of board members do represent special interest groups, most frequently related to support from a local teacher organization. In California, as elsewhere, newly elected board members are frequently more closely affiliated with interest groups that played a large role in their candidacy and election. According to the IEL study, board members representing diverse constituencies may help to ensure a broader range of community participation, but they may also be less accepted by traditional community leaders and less able to negotiate existing power structures.

Board members are often criticized for representing too narrow a segment of the community. The IEL study indicates that there is a national trend toward increasing the representation of diverse community constituencies on school boards. The salience of this issue in California is reflected in the introduction of a bill (defeated in the last weeks of the 1987 legislative session) which would have mandated separate electoral districts (rather than at-large elections) in hopes of achieving better community representation within large geographic school districts. Only a few cities in California do not use the at-large election option.

The degree to which school board members retain their allegiance to special groups during their tenure on the board is not known. On one hand, some observers contend that after two to five years of involvement board members often demonstrate a shift of support away from groups they initially represented. Such an example would be a school board member who was supported strongly by a

local teacher organization later "holding fast" on teacher issues or refusing to support teacher strikes. On the other hand, the IEL study suggests that the special-interest focus of some board members has resulted in less emphasis on reaching consensus on issues which are of concern to the entire community.

California school boards are concerned with issues similar to those facing schools in the IEL study: school funding, state mandates and the erosion of local control, centralization in the hands of administrators or legislators, and at-risk students (for example, pregnant teenagers and substance abusers). Additionally, California school boards must deal with rapidly changing demographics and assimilation of a large immigrant population that now includes one of every six pupils in California who was born in another country.

California school boards continue to grapple with sorting the policy-making responsibilities of a board and the administrative duties of a superintendent. In the last few years, superintendent turnover has slowed in California. Observers credit this to a more effective process of superintendent selection, resulting in greater commitment by boards which subsequently work harder to retain their selected superintendents.

The activities of California school boards are primarily related to finance, facilities, personnel, and, to some extent, instruction. With the current emphasis on accountability of administrators, teachers, and students, school boards can no longer afford to ignore the need for self-evaluation and assessment. The IEL national study reveals that 60 percent of the school boards surveyed do not assess their own performance and have difficulty communicating their effectiveness to the public. About one-fourth of California school boards are engaged in self-evaluation efforts, many of them using an evaluation package designed by the California School Boards Association.

#### Loss of Local Discretion

Changes in local school decision making during the past 25 years have transformed the image of public education. Gone are the progressive watchwords: administrative centralization, expertise, nonpolitical control, and efficiency. More common today are images of unionism, community control, and interest group bargaining. Included in this transformation are at least six changes that altered local school decision making and constrained the policy making discretion of local governing boards and district superintendents.

First, new core constituencies arose to contend for school system benefits. Parents sought decentralization of authority and community control of schools. Students gained greater freedoms over their dress and expression. Teachers organized for collective bargaining. Taxpayers reformed local finance mechanisms, shifting larger portions of the financial responsibility to the states. Minority groups pressed causes involving desegregation, dropouts, and the like. Federal and state authorities issued mandates, guidelines, court orders, and so forth. The diversity and intensity of conflict among these burgeoning interests reached a level that some analysts described as turbulence.

Second, the intensity and scope of state policy actions, like California's omnibus reform legislation, Senate Bill 813, and subsequent administrative initiatives, has shifted the balance of control away from local districts and toward the state capital.

Third, the growth of federal and state categorical pro-

grams significantly fragmented authority locally. Separate special controls and funding systems exist so that no one office locally integrates categoricals in a consistent way.

Fourth, local bargaining contracts centralized decision authority within districts but also dispersed authority to legislatures, courts, and public administrative agencies, like the Public Employment Relations Board in California.

Fifth, the turbulence in school systems has been inflamed, in part, by changes in the environments of school districts, such as enrollment declines, economic recession, demographic shifts, and roller-coaster financing, as well as by crystalizing events like AIDS and civil rights.

Sixth, an educational reform movement burst upon the scene, expressing a shift in public values from equity and choice to excellence and efficiency. This reform movement is concerned that the quality of U.S. schools is not sufficient to keep the nation competitive internationally.

In short, governmental rulings and new constituencies from the top and bottom have encroached upon the authority of local decision makers, squeezing the "discretionary zone" of their activity into a smaller area. At the same time, increasing demands from emerging special interest groups contending over fundamental values have diminished the ability of governing boards and superintendents to set a district's agenda. School board members and superintendents now more often react to other forces (changing coalitions, for example), and they do so with less public confidence. The legacy of changes over the past 25 years is that it is hard to tell who is in charge of public schools. One certainty, however, is that local decision makers are less in control.

The 1985 report by the Commission on School Governance and Management (COSGAM) examined this shift of power from the district to the state level.<sup>26</sup> According to this report, relationships among the various levels of school governance have grown more complex in recent years, and the boundaries between these levels have become less distinct.

#### Accountability: Trading Dollars and Performance

Accountability mechanisms are an increasing manifestation of state control over the products of local educational agencies. California's increased financial responsibility for public education, for example, has been accompanied by a greater interest and involvement in issues of accountability at the local level. California's 1983 omnibus educational reform bill, Senate Bill 813, in addition, underscored the state role in educational policy making and supported additional state inroads into curriculum matters and other educational issues

that formerly had been reserved for local boards.

State Testing. The California Assessment Program (CAP) test is one example of how the state "controls" the "product" of local school districts. Its purpose is to "lead" and assess state and local curriculum by including elements of the content and higher-level thinking skills now embodied in state curriculum frameworks. Since CAP is mandated for all students in grades 3, 6, 8, and 12, and scores are released to the press, local schools and districts pay close attention to their scores.

The Accountability Program. The state's recent accountability program is another example of how state standards are used to set performance expectations for teachers, students, and schools. At the core of this program are a series of "quality indicators," that is, measures against which educational progress are judged and goals for statewide improvement established. Statewide targets establish common state standards on measures such as enrollment in academic courses, CAP scores, dropout and attendance rates, and, for the college bound, scores on SAT, achievement, and advanced placement tests. Each school's performance and relative standing is published annually in a "Performance Report for California Schools."

Schools and districts also are asked to establish their own local targets and improvement strategies. In addition, the performance report includes a locally produced component which is intended to complement the state report. Local indicators include quality of the instructional program, nature of the learning environment, amount and quality of writing and homework, number and types of books read, community support, extracurricular activities, and quality of support for students with special needs.

Other state mechanisms encompass model curriculum standards, school improvement program, certification of teacher evaluators, staff development for teachers, assignment of teachers, and dropouts.<sup>28</sup>

Expansion of State Accountability. Clearly, monitoring in California is highly coordinated and increasingly sophisticated. Still, the state's accountability mechanisms were expanded and strengthened in 1989 by actions of the electorate, a legislative task force, and the federal government.

First, state accountability efforts were enhanced through voter-approved Proposition 98, the school funding initiative approved narrowly by voters in November 1988. Proposition 98 requires school districts annually to issue a School Accountability Report Card for each school within their jurisdiction. In June 1989, the State Board of Education adopted a model accountability report card. Districts may deviate from

this model. However, all local governing boards must compare their report cards to the state model every three years, and all site report cards must assess at least 13 prescribed school conditions. These include student achievement, dropout prevention, and school expenditures and services. In addition, the report cards must assess progress toward reducing class sizes and teaching loads, teacher assignments (or misassignments), quality and currency of textbooks and instructional materials, and availability of counseling and student support services. Finally, the report cards are required to address the availability of qualified substitute teachers, school safety and facilities, classroom discipline and learning climate, employee training and curriculum improvement, and quality of instructional leadership.

The main objective of the accountability report card is to inform the local school community about conditions and progress being made at each elementary and secondary public school. In principle, administrators, teachers, support staff, parents, secondary students, and other community representatives are to participate in "grading" their schools. The report cards are meant to complement other school reviews, and information is to be provided in ways that reflect progress on educational and employment equity.

Similarly, in September 1988 the California legislature established an "Advisory Task Force on At-Risk Schools." Its charge was to develop recommendations to identify, assist, and hold accountable at-risk public schools in the state. The task force strategy identifies at-risk schools using California Assessment Program test results and rates of actual attendance, completion of the University of California a-f requirements, and dropouts. A school is deemed to be at-risk on any indicator if it (a) falls within the bottom. 5 percent of all schools statewide on that indicator, or (b) falls within the bottom 25 percent of schools in its comparison band. The scheme is weighted toward use of CAP data.

Once identified, at-risk schools would move through three stages of aid and intervention, with increased assistance and external monitoring and control in each succeeding stage. In the final stage, a school trustee would be appointed by the state superintendent, effecting a "state takeover." The trustee would have broad powers to transfer personnel, cancel contracts, revise budget allocations, and stay or rescind actions of the local governing board. The trustee would remain in place until the school's performance passed acceptable levels, based on the original identification criteria. Advancement from identification of a school as at-risk to instituting a state trustee would take from four to six years. Subsequent legis-

Organization and Control. 51

lation is required to implement this strategy.

Recent changes in federal law also reinforce and extend California state educational accountability mechanisms. Namely, the reauthorization of the federal Chapter 1 compensatory education program,<sup>31</sup> requires the State Department of Education and State Board of Education to issue a state plan for program improvement. The state plan establishes standards that state and local agencies will use to identify low-performing schools and to hold them accountable for the academic performance of their compensatory education students. In addition, the state plan encompasses the measures, assessment techniques, time lines, and types of technical assistance that state and local agencies may use in implementing improvement strategies. The state plan for program improvement covers both federal Chapter 1 and state compensatory education programs.

Under the federal and state requirements, the State Department of Education annually will provide school districts with information regarding the performance of their compensatory education schools. Districts, in turn, annually will identify schools needing assistance. Both CAP and norm-referenced test data will be used in identifying low-performing schools.

Local districts are required to target schools that "do not show substantial progress toward meeting the desired outcomes described in the local educational agency's application . . . or shows no improvement or a decline in aggregate performance of children served." The State Department of Education will use the statewide targets set for each grade and subject area of the CAP as the standard for making "substantial progress toward meeting desired outcomes." Similarly, the norm referenced test standard will be positive pre-post changes in norm scores when summarized across grades and subjects tested. The expectation here will be based on an estimate of whether compensatory education students have achieved as much or more than they would have without special assistance.

Districts initially are responsible for developing improvement plans for low-performing schools and for providing them with resources needed to improve. The plans are submitted to local governing boards and then to SDE through the Consolidated Program Application, Part I. Low-performing schools still needing assistance a year later are required to participate in joint district and state planning and assistance. The federal law requires the State Department of Education to work with the district until the school site program is successful. Exit criteria include satisfactory progress on the measures and standards used initially in targeting the schools for aid.

This program improvement mechanism puts the state in a strong position to coordinate compensatory education programs with regular programs and to use accountability as a mechanism to bring compensatory education under the umbrella of curriculum reform that dominates California's school improvement efforts. It was developed with the participation of parents, teachers, principals, superintendents, support staff, college professors, and private school representatives.

In a related, though more extreme, move, Governor Deukmejian in October 1989 signed into law a bill requiring the superintendent of public instruction to appoint a state trustee to "monitor and review" the Oakland Unified School District's operations. Oakland's schools have operated recently under allegations of mismanagement, misappropriations of funds, even criminal charges. As of this writing, the school district is operating with both a state trustee and permanent superintendent. The proposal for state trusteeship of the district came from Assemblyman Elihu Harris, a Democrat from Oakland. The state trusteeship arising from his bill is the first instance of the state taking over the operation of a local district.

Clearly, accountability is an entrenched component of school reform in California. Beginning with Senate Bill 813 in 1983, accountability has been the quid pro quo of reform. Dollars, reforms, and accountability have been linked.

Conceptually, a balance appears to be evolving. New accountability mechanisms place initial responsibility for program improvement at the local level. Failing local efforts, however, merit increasing assistance, intervention, and control from third party experts and the state.

Moreover, the state's role in overseeing local educational programs and in standardizing curriculum has been strengthened by the federal government's clear desire, newly stated, for educationally disadvantaged children to succeed in regular programs, achieve grade level proficiency, and attain basic and advanced skills. State and federal goals are clearly allied.

Further, by chronicling school failures, accountability mechanisms bring public pressure to bear to improve. In this sense, accountability serves as a consumer protection mechanism, providing parents and other "school consumers" with information necessary to assess a school's standing. Ultimately, accountability shifts the responsibility and control of local schooling to the state, which operates within its constitutional duty to provide elementary and secondary education to its citizens.

#### Direct Control by California's Electorate

California voters have imposed significant resource restraints upon educational policy makers at state and local levels. In 1978, Proposition 13 established a mandatory one percent statewide property tax and prohibited local school boards from raising or lowering it. By removing local discretionary taxing authority, Proposition 13 dramatically altered the balance of state and local control of schools. In fact, as we asserted above, California effectively now has a state system of education, even if public opinion has not easily caught up with this fact.

In November 1979, Proposition 4, the so-called Gann limit, restricted increases in state and local spending to changes in population and inflation. By 1987, the Gann limit dominated state political deliberations, divided the school community, and hurt educational interests.<sup>32</sup>

In Conditions of Education in California 1988, PACE concluded that Proposition 13 and the Gann limit, in tandem with legislated solutions to Serrano v. Priest, the landmark school finance equalization case of the 1970s, severely restricted the ability of educational policy makers to address the dual challenges of rapidly rising enrollments and continuing school reform. Only an unusual degree of political consensus in Sacramento, PACE argued, or additional voter initiatives could relieve public education from the vice of state and local constitutional spending limits.

In 1988, California voters again used the initiative to shape educational policy. In June the electorate rejected Proposition 71, a proposal to modify the Gann limit. In November, however, Pro-position 98 narrowly won approval. Again relying on a constitutional amendment, California voters guaranteed public schools a base funding level equal to approximately 40 percent of the state's general fund or an amount sufficient to cover growth and inflation, whichever is higher. In addition, Proposition 98 enables schools to receive an additional amount from state funds in excess of the Gann limit, equal to four percent of its total budget, prior to the state issuing tax rebates. The reaction to Proposition 98 dominated the 1989 legislative session (see Chapter 2).

More is required of voters, however. Passage of Senate Constitutional Amendment 1, which will appear on the June 1990 primary ballot, is required to trigger the complicated series of legislative agreements struck in the closing days of the 1988–89 fiscal year. These agreements implement, but significantly alter, Proposition 98 and make changes to the Gann limit. If Senate Constitutional Amendment 1 fails, the provisions of Proposition 98 and the Gann limit return to their

original and existing forms, respectively.

In short, California's electorate restricted the ability of both state and local governments to tax and spend for education and decreed (if inadvertently) that state government should dominate decisions regarding school finance policy. After affirming its electorally imposed spending limits, voters then provided a base of funding to public schools and elevated education to a favored position in state budget politics vis-àvis health, welfare, prisons, transportation, and other state public services. However, the political bargains required to implement Proposition 98, and to pass the 1989–90 state budget, altered the provisions of both Proposition 98 and Proposition 4 (Gann). Implementation will not be complete without voter approval. The electorate, once again, must describe the boundaries of state educational policy.

#### Influence of the Courts

State and federal courts provide another powerful influence on local educational policy. In 1989, there were approximately 72 active suits against the State Department of Education and State Board of Education which involved almost all areas of local school operations, including curricular issues and the purported lack of state compliance with categorical program requirements. The courts are important actors in education and further complicate an understanding of who controls California schools.

## ENHANCING LOCAL FLEXIBILITY: POSSIBLE FUTURE DIRECTIONS

The most prominent feature of state and local relations during the past decade has been the growth in state control over education.<sup>33</sup> In California, this process is undisputed. Increasing state control over school funding, requiring a core curriculum for graduation, revising and aligning textbooks, tests, and curricula, and expanding accountability mechanisms are prominent examples.

Yet, Californians still support local control of public education, even if most educational policy of late is the product of the governor, legislature, state superintendent, and business community, and even if citizens are essentially unknowledgeable about the distinctions between current federal, state, local, and other roles in shaping school policies. A 1983 Field Poll, for example, reported that 79 percent of California respondents felt there should be more local control over educational expenditures.

The changing school governance mechanisms analyzed

Organization and Control 53

above, however, cannot be characterized simply as a contest between state and local decision makers. Though the balance of control has clearly shifted to the state, there still is no single central point where decisions are made or control exercised. Control of California's schools is better characterized as a "fragmented elevated oligopoly." From the local level this means higher authorities (federal, state, and courts), shifting coalitions of outside, professional, or lay interests (Educational Testing Service, NAACP, NEA, AFT, colleges and universities, ACSA, CSBA, and the like) local internal interests (vocational education coordinator), state and local interest groups, and other local agencies that influence education (police, health).

Moreover, the recent school reforms that have effected the shift in influence from local to state control have been based on local citizen desires; for example, Bill Honig's election on a clear reform platform and passage of statewide initiatives. Not all state initiatives create a loss in local control; some state policies enhance local discretion. Infact, the key issue is not centralization in policy influence, but progressive loss of local school board and administrative discretion. Still, four current policy mechanisms—discretionary funding, devolution of authority to school sites, restructuring, and choice—are expanding local discretion for governing boards and administrators.

#### **Discretionary Funding**

Proposition 98's impact on the 1989–90 Budget Act and related bills caused approximately \$1.3 billion more to become available to local school districts than was originally proposed in the governor's budget. These dollars are highly discretionary, enhancing local control over educational programs.

The primary sources of these discretionary funds include the following:

- Flat Grants—new general aid allocations of \$250 million in 1988–89 and \$90.5 million in 1989–90 on an unrestricted, one-time-only basis
- Staff Development—\$12 million in 1989-90 designed to further improvement goals according to a plan developed by teachers at a school (mostly secondary schools)
- Supplemental Grants—\$180 million to expand existing categorical program services in districts which are below an average determined by combining a district's revenue limit for the current fiscal year and state aid the district is eligible to receive for categori-

cal education programs for the current fiscal year, plus adjustments

Moreover, existing discretionary funding sources received augmentations, including:

- School Improvement Funds (SIP)—\$31 million for program expansion
- Economic Impact Aid—\$35 million beyond the base of \$197 million and a 4.64 percent cost of living adjustment
- Serrano Equalization (school finance)—\$73.5 million, unrestricted

The State Department of Education asserts that almost every school in the state will receive funds for local improvement activities from these new or augmented monies.

#### **Devolving Authority to Individual Schools**

If local authorities have been losing discretion to the state, sites also have been losing discretion to central offices.<sup>37</sup> A growing concern among reformers is to return some authority to school sites as a way both to locate policy and decision-making authority at the level of service delivery, and to regain the momentum in improvement efforts that has stalled over teacher professionalism issues.

Devolving authority to school sites involves a formal alteration of school governance arrangements. It is a form of decentralization. Within these arrangements, the site is viewed as the primary unit of improvement and relies on the redistribution of decision-making authority as the primary means through which improvements might be stimulated and sustained.<sup>38</sup>

Site-based management is conceived of as enabling site participants (teachers and parents, primarily) to exert substantial influence on school policy decisions, enhance employee morale and motivation, strengthen the quality of school-wide planning, stimulate instructional improvements, promote effective schools, and improve student achievement.<sup>39</sup>

The main arguments for moving decisions to school sites include: (1) district policies typically made in uniform fashion that ignore enormous variety of student needs and characteristics at various schools, (2) teachers and school-based educators may not accept responsibility for educational outcomes they did not establish, and (3) teaching talent at the school district level is underutilized because of centralized control that permits teachers to make too few decisions.<sup>40</sup>

Mechanisms for devolving control from district offices to school sites typically include providing unrestricted funds to sites, decentralizing personnel decisions, and vesting governing authority in some type of school council involving teachers, the principal, and community representatives. But as one analyst concluded, there is no "one best system. It is unclear what school site governance system is optimal; more experimentation is needed."

#### "Restructuring"—New Watchword of School Reform

If better instruction cannot happen without active school staff participation and district-level reorganization, "restructuring" is a way to give legitimacy to these changes. The California State Department of Education has described restructuring as "a tremendous tool to enhance and complete the job of educational reform. . . . \*\*\frac{n+3}{2}\$ It defines restructuring as governance issues, such as shared decision making between administrators and teachers regarding the hiring and firing of faculty, teacher and administrator evaluation, teacher assignments, and school site management; and as instructional issues, including the delivery of curriculum and teaching strategies. Restructuring represents a shift in emphasis from state regulation to technical assistance for school sites.

The State Department of Education argues that four preconditions must be met before restructuring efforts can succeed: (1) a strong definition of quality education, (2) a large staff development effort to ensure that staff can deliver the program, (3) agreement on accountability and measures of success, and (4) cooperative attitudes among site, district, and board levels. Substantial effort will be focused on building capacity at the site level. To promote restructuring innovations and to enhance capacity-building activities, the department sponsored a statewide teleconference on restructuring in November 1989.

A variety of restructuring experiments already are being proposed or are underway. For example, Senator Gary Hart, chair of the Senate Education Committee, introduced a bill in the 1989 legislative session designed to promote pilot projects in school restructuring. Called "Demonstrations in Restructuring in Public Education," this two-year bill is co-authored by a bipartisan coalition consisting of Senators Hart and Rebecca Morgan and Assembly members John Vasconcellos and Ross Johnson. The bill carries the endorsement of the California Business Roundtable.

The legislation would fund five-year regional demonstrations of educational restructuring in K-12 schools, built around revision of school governance and management procedures. Individual school districts or consortia of districts would be eligible to apply for planning and implementation grants to develop local restructuring programs which contain at least two of the following elements:

- a preschool program for low-income children
- internships or college courses for 11th and 12th grade students
- increased parental involvement in schools
- increased support for and assistance to beginning teachers
- · career ladders and differentiated staffing for teachers
- different instructional strategies, such as the use of cross-discipline teams

Participation of districts in the restructuring program would be voluntary. The legislation is designed to give greater professional decision-making authority to teachers and site administrators over curriculum and instruction, selection and assignment of staff, and school discretionary budgets. Funded districts would be selected by the State Board of Education from recommendations by the state superintendent.

The stated goal of the legislation is to improve instruction by promoting an educational accountability system based on performance rather than rules. Local schools would be held accountable for student and staff performance based on measurable outcomes (though they are undefined in the bill). Senator Hart's legislation will be taken up in the 1990 legislative session.

Similarly, Los Angeles Unified's contract negotiation and strike settlement produced two mechanisms that alter local school governance arrangements. First, "Shared Decision Making" alters the way that certain policy decisions are made at school sites. For example, school leadership councils at each site, comprised of 50 percent certificated employees and 50 percent other representatives (the principal, elected parent/ community participants, an elected classified employee, and, and the secondary level, an elected student) will determine school policy over:

- staff development programs
- student discipline guidelines and code of student conduct
- schedule of school activities and events
- guidelines for use of school equipment, including the copy machine
- the following budgetary matters: instructional material, lottery funds, school-determined needs, state textbook and related materials, year-round school incentive discretionary funds, student integration program discretionary funds, and instructional material—special education schools account

The leadership councils will be co-chaired by the principal and site union chapter chair. The school leadership councils will operate within the same set of powers and constraints as previously applied to principals. In this instance, decision-making discretion is removed from the principal and placed with a council.

Secondly, a 24-member district-wide central "school-based management" council is established to consider restructuring proposals from individual schools. Like school leadership councils, the school-based management council is composed of 50 percent teachers and 50 percent others. These councils review, evaluate, and approve school-based management proposals submitted by individual sites. They also are empowered to waive provisions of school board policy and the collective bargaining agreement. The councils must develop school-based management guidelines, recognizing the conflicting needs for autonomy, diversity, and self-determination, on the one hand, and accountability, standards, and coordination, on the other. But no specific accountability mechanism is included in the empowering language.

The San Diego Unified School District has similarly embarked on a long-range restructuring effort. Its "Innovation, Change, and Leadership Group," composed of administrators, teachers, parents, community members, and university representatives, is engaged in a strategic planning process to redesign the city's schools. One outcome of this effort is expected to include enhanced teacher involvement in planning instructional activities, including school schedules, curriculum content, and staffing patterns."

Twelve California school districts are experimenting with a new form of labor agreement called Educational Trust Agreements. Trust Agreements are designed to enable teachers and school management cooperatively to develop written agreements on issues outside the scope of traditional collective bargaining. Districts are crafting agreements in the areas of peer assistance and evaluation, staff development, and school-based management (see Chapter 4).

#### Choice

Allowing parents more choice in selecting their children's schools, regardless of their location, is a reform strategy of growing interest and support. President Bush recently announced his support for the idea, and the California media focused attention on the subject. State Superintendent Bill Honig has described choice as an excellent way to cement parental commitment to schools, encourage parent involvement, and relieve serious overcrowding in many districts. Some choice options already operate in California schools, for example, magnet schools, intra-district open enrollment,

specialized secondary schools, like Los Angeles's School for the Performing Arts, and AB 2071 (1986) which allows elementary school students to attend public schools in districts where their parents work.

Choice proposals in 1989, however, are much broader. Assembly Bill 2134, for example, sponsored by State Superintendent Honig and introduced by Assemblyman Charles Bader, requires each school district, first, to implement an intra-district open enrollment policy, allowing parents to enroll their children in any school within the district. These plans must ensure that racial and ethnic balances are not adversely affected, give priority to neighborhood children, and maximize use of facilities.

Second, the Bader bill allows parents to enroll their children in any school in the state, provided that several conditions are met. (1) The number of transfer slots available at each school must be determined, and applicants must be selected through a fair process, such as a lottery, to avoid "skimming" only the best academic students or athletes. (2) Transfers must not adversely affect racial balances in either sending or receiving districts. (3) Sending districts are protected against unreasonable financial hardship and loss of revenue by a maximum annual enrollment loss provision of between one and five percent, based on the size of the district.

This "controlled choice" plan is not a voucher system and does not provide public funds for private schools. Rather it extends parents' abilities to "vote with their feet." The bills' sponsors believe that choice will empower parents in terms of dealing with their children's schools on a more equal footing. 46 Still, this empowerment is limited by the parents' means to transport their children and the cap on annual transfers.

Controlled choice is just one of many choice models.<sup>47</sup> The California legislature deferred consideration of choice initiatives to interim study.

#### **Commission Reports**

Enhancing local flexibility has been the subject of several recent California blue-ribbon commissions. The governor's Commission on Educational Excellence, for example, was directed to cull an effective reform strategy from the practices of exemplary schools and by examining issues associated with categorical programs, financial accountability, performance incentives, school safety, and the complexity of school funding. The Association of California School Administrators (ASCA) charged its Commission on Public School Administration and Leadership to determine how emerging management trends in America's best run companies can benefit

California's schools. Finally, the California Business Roundtable, an organization of chief executive officers from more than 90 of California's largest corporations, produced a report, Restructuring California Education: A Design for Public Education in the Twenty-First Century, that proposes widespread changes in the way education is organized and instruction is delivered.

Each report proposes changes in the organization and control of California's schools. Ideas in the reports run from small adjustments to a complete reconstitution of the current system. 48 Each group, for example, advocates more parental choice. Each recommends some form of preschool. The governor's commission promotes greater district consolidation, with the state superintendent making recommendations regarding minimum and maximum district sizes and optimal grade configurations. The ASCA commission proposes reinstituting financial bonuses for district consolidation and breaking up the largest school districts into more manageable units. The Roundtable would completely reorganize the provision of educational services by establishing primary schooling for all 4-6 year olds, consolidate elementary and secondary education on core academics, then provide optional specialized educational programs for 17-18 year olds that is tailored to their initial career aspirations. Each group, as mentioned previously, would replace county offices of education with regional service centers.

The strongest theme to emerge from all three reports, however, is the need to decentralize schooling, that is, to return more operational authority to school sites and to distribute decision making at the site level among administrators, teachers, parents, and community representatives. In the Roundtable report, for example, discretionary funds would be provided directly to schools by the state (which would not be part of the district's general appropriation). This money could be spent for staff development, technology services, curriculum materials, counseling, hiring non-tenure track teachers, and other items related to the development and delivery of the instructional program. To approve these school-level expenditures, the Roundtable would create school-level governing boards. Control of these boards would extend to approving a school's educational program and establishing mini-schools, that is, autonomous schools-within-schools.

The ACSA commission proposed an experimental "hands off" model where provisions of the education code and local contract are waived in order to enhance educational innovations. Local voters would be able to increase local taxes to support local schools. The governor's commission signalled the return of authority to local governing boards as

one of three principles undergirding all its recommendations. In addition, the commissioners recommended that the functions of all school site advisory councils be consolidated into a single council, to better integrate a student's entire educational program. All three reports view the state's role as setting standards, monitoring progress, and stepping in when failures occur.<sup>49</sup>

The organization and control of California's public schools are indeed complex. They also are a dynamic component of the patchwork of public education. As electoral initiatives, changes in funding mechanisms, the augmentation of accountability programs, and proposals regarding restructuring and choice demonstrate, the organization and control of California's schools receive substantial, even if not central, policy attention and remain an important arena of school reform activity.

- <sup>1</sup> Constitution of California, Article IX, particularly sections 5, 6, and 14.
- <sup>2</sup> Frederick M. Wirt, and Michael W. Kirst, *Schools in Conflict*, 2nd Edition (Berkeley: McCutchan, 1989), 300.

  <sup>3</sup> Ibid., chapter 1.
- <sup>4</sup> Roald F. Campbell, Luvern L. Cunningham, Raphael O. Nystrand, and Michael D. Usdan, *The Organization and Control of American Schools*, 5th Edition (Columbus, OH: Charles E. Merrill Publishing Company, 1985), 60.
- <sup>5</sup> The other six constitutional officers are the governor, lieutenant governor, secretary of state, attorney general, treasurer, and controller.
- <sup>6</sup>James W. Guthrie and Rodney J. Reed, Educational Administration and Policy: Effective Leadership for American Education (Englewood Cliffs, NJ: Prentice Hall, 1986), 37. <sup>7</sup> Ibid., 63.
- <sup>8</sup> Commission on School Governance and Management, "Report and Recommendations of the California Commission on School Governance and Management," (Sacramento: May 1985), 7.
- <sup>9</sup> California Commission on Educational Quality, "Report to the Governor," (Sacramento: Governor's Office, June 1988), 73 and Guthrie and Reed, *Educational Administration and Policy*, 63.
- <sup>10</sup>Guthrie and Reed, Educational Administration and Policy, 63.
- <sup>11</sup>Commission on Public School Administration and Leadership, "Return to Greatness: Strategies for Powerful Improvements in Our Schools," (Sacramento: Association of California School Administrators, October 1988), 33.

57

- <sup>12</sup>Guthrie and Reed, Educational Administration and Policy, 64.
- <sup>13</sup> Campbell, et al., Organization and Control, 77-79.
- <sup>14</sup> The Association of California School Administrators has recommended that unification bonuses be reinstated. See Commission on Public School Administration and Leadership, "Return to Greatness."
- <sup>15</sup> Claire Quinlin, Cathy George, and Terry Emmett, Year-round Education, Year-round Opportunities: A Study of Year-round Education in California (Sacramento: State Department of Education, 1987).
- 16 Ibid.
- 17 Ibid.
- <sup>18</sup> Poll results were supplied to PACE by the California Teachers Association. Poll was representative for the state and conducted by an independent research firm..
- <sup>19</sup> The remainder are primarily special education classes.
- <sup>20</sup>Campbell, et al., Organization and Control, 168.
- <sup>21</sup> Ibid. Also, Guthrie and Reed, Educational Administration and Policy, 50-52.
- <sup>22</sup>The following descriptive information regarding California school boards, their members, and opinions is taken from California School Boards Association, 1988 Survey of School Board Members: Characteristics and Opinions (Sacramento: California School Board Members Association, July 1988).

  <sup>23</sup>One-third describe themselves as conservative; a fifth view themselves as liberal.
- <sup>24</sup> Two-thirds of California's school board members receive \$100 or less per meeting for their efforts.
- <sup>25</sup> Lila N. Carol, Luvern L. Cunningham, Jacqueline P. Danzberger, Michael W. Kirst, Barbara A. McCloud, and Michael D. Usdan, *School Boards: Strengthening Grassroots Leader-ship* (Washington, DC: Institute for Educational Leadership, 1987).
- <sup>26</sup>Commission on School Governance and Management.
- California State Department of Education, Performance Report for California Schools 1988 (Sacramento: SDE, 1988.
   Center for Policy Research in Education, "Local Accountability: California" (Rutgers University: CPRE, Undated Typescript.
- 29 Ibid.
- <sup>30</sup>California Legislature, Assembly Bill 9 (Hughes), Chapter 832, Statutes of 1988.
- <sup>31</sup> The Hawkins/Stafford Elementary and Secondary School Improvement Act of 1988,
- P.L. 100-297.
- <sup>32</sup> See "Capital Perspective," in James W. Guthrie, Michael W. Kirst, Gerald C. Hayward, Allan R. Odden, Jacob E.

- Adams, Jr., Helen H. Cagampang, Terry S. Emmett, John W. Evans, John Geranios, Julia E. Koppich, and Betty M. Merchant, *Conditions of Education in California 1988* (University of California, Berkeley: Policy Analysis for California Education).
- <sup>33</sup> Michael W. Kirst, "Who Should Control the Schools? Reassessing Current Policies." In Schooling for Tomorrow: Directing Reforms to Issues That Count, Thomas J. Sergiovanni and John H. Moore, eds. (Boston: Allyn and Bacon, 1989), 64.
- 34 Ibid., 69-70.
- 35 Ibid.
- <sup>36</sup>California State Department of Education, "Funds for Program Improvement," Memorandum from Bill Honig to county and district superintendents and others, August 3, 1989. See also, California State Department of Education, "1989–90 K–12 Education Apportionments," Fiscal Management Bulletin 89–05, Memorandum from Robert Agee to county and district superintendents and others, July 14, 1989.

  <sup>37</sup> Kirst, "Who Should Control the Schools?" 62.
- <sup>38</sup> Betty Malen, Rodney T. Ogawa, and Jennifer Franz, "An Analysis of Site Based Management as an Education Reform Strategy," (The University of Utah: Department of Educational Administration, June 1989), ii.
- 39 Ibid.
- <sup>40</sup>Henry M. Levin, "Finance and Governance Implications of School Based Decisions" (Stanford University: Typescript).
- 41 Kirst, "Who Should Control the Schools?" 86.
- <sup>42</sup> California State Department of Education, *The New California Schools*, September 1989.
- 43 Ibid.
- <sup>44</sup> Julia Koppich, "Education Reform and Changing Teacher Work Roles: The California Experience," (University of California, Berkeley: Policy Analysis for California Education, undated typescript).
- <sup>45</sup>California State Department of Education, "Parental Choice in Our Schools," Remarks by Bill Honig, State Superintendent of Public Instruction, News Release #89–10, February 8, 1989.
- 46 Ibid.

47

<sup>48</sup>EdSource, "The Three Commission Reports," EdSource vol 12, November 1988, 3. See also California Commission on Educational Quality, "Report to the Governor," (Sacramento: Governor's Office, June 1988); Commission on Public School Administration and Leadership, "Return to Greatness: Strategies for Powerful Improvements in Our Schools," (Sacramento: Association of California School Administrators, October 1988); and Berman, Weiler Associates, "Restructuring California Education: A Design for Public Education in the Twenty-First Century," Recommendations to the California Business Roundtable (San Francisco: California Business Roundtable, 1988).

<sup>49</sup>In Conditions of Education in California 1988, PACE analyzed the findings of the Commission on School Governance and Management, a 1985 state commission that also investigated the balance in state and local control of schools. Like the reports from the governor's commission, ACSA, and the California Roundtable, the COSGAM report recommended that more authority and fiscal discretion be delegated to local school sites. It also recommended that large regional centers assume responsibilities relating to compliance and monitoring, and providing business, professional, and other administrative services.

### Chapter 6

# **Curriculum and Special Programs**

Numerous California and national studies on curricular change have been undertaken in the last decade. All studies find large changes in curriculum in both the 1970s and 1980s. To date, there is no consensus on the primary causes of these changes. A 1985 national study of school board members asserted that school boards are responsible for curricular changes, but school board members reported that the major impetus for change came from the state, not the local, level.

Other studies have linked local curricular changes with nonschool-related phenomena. For example, California's Proposition 13 played a significant role in curricular retrenchment during the late 1970s and early 1980s. Still other studies point to legislative initiative as the precursor for local school curricular changes.

It is clear in recent California history that state-level forces, external to schools, have played the dominant role in curricular change in the state's public schools. There are significant external forces, including the University of California, California State University, State Board of Education, superintendent of public instruction, legislature, governor, and national associations of curricular experts that exert strong influences on high school curriculum. In combination, these forces are altering local curriculum in elementary, middle, and high schools. These actions by the legislature, State Department of Education, State Board of Education, and institutions of higher education will be examined in turn.

#### **State Legislative Action**

Infusions of state dollars, primarily due to the passage of Senate Bill 813, California's omnibus school reform bill, have enabled school districts to restore major curricular offerings that were eliminated during the immediate post-Proposition

#### HIGHLIGHTS

- An amalgam of state and national influences has generated substantial change in high school students' programs. Recent state legislature and State Board of Education high school graduation requirements have led to student enrollment increases in many subject areas, including science, mathematics, English composition, world history, and foreign language. In short, California high school students today are taking a much stronger set of academic courses than they did in 1983.
- California high school senior enrollments in mathematics and science, however, are at best equal to and most often below the median of comparison states.
- The State Board of Education's promulgation of model graduation requirements and adoption of new curriculum frameworks and guidelines has stimulated a more rigorous and academically concentrated high school curriculum. Large enrollment increases in world history and in the physical and life sciences are at least partially the result of these efforts.
- Recent University of California and California State
   University changes in admission requirements have
   reinforced these academic course enrollment in creases. California State University's requirement
   for one year of instruction in the visual and perform ing arts may at least partially account for increased
   enrollments in drama.
- Black and Hispanic students, although beginning to enroll in academically oriented secondary classes in larger numbers, continue to be underrepresented in courses required to gain college admission.

13 era. More specifically, districts were given incentives to expand the length of their school day. (Many schools were previously forced by financial exigencies to a five-period day.) Now the vast majority again are able to offer at least six periods.

Senate Bill 813 also increased high school graduation requirements to:

- 3 years of English
- 2 years of mathematics
- 2 years of science
- 3 years of social science
- 1 year of foreign language or fine arts
- 2 years of physical education (previously required)

State legislation (ACR 14, 1983) urged the State Board of Education to require each school district governing board to compare its existing graduation requirements and curricular standards to model curriculum standards that the legislature mandated the State Board of Education to develop. Senate Bill 1213 (1985) added a semester of economics to existing high school graduation requirements.

## State Board of Education and State Department of Education

The State Board of Education adopted model high school graduation standards which are somewhat tougher than existing legislative requirements; they include: four years of English; two years of science (a year each of physical and life science); three years of mathematics (including algebra and geometry); three years of social sciences, including one year of world civilizations, one year of U.S. history, one semester of government, and one semester of economics; two years of the same foreign language; one year of visual and performing arts; and one year of computer studies.

In addition, the State Department of Education launched an integrated series of actions designed to ensure that new courses—indeed, the entire K-12 curriculum—would be substantially upgraded in academic rigor. These curricular initiatives separate California from most other states which have not had similar curricular change strategies. As a result, new course offerings in California tend to be substantively rigorous.<sup>1</sup>

For several years, California has developed curriculum frameworks in all basic subjects. Curriculum frameworks are state-disseminated documents developed in concert with local teachers, district and county office curriculum coordinators, state and national curriculum content experts, and university professors. They are designed in part to identify which

- In virtually every subject-matter area, remedial courses have been reduced substantially as the high school curriculum becomes more rigorous and uniform.
- The long downward spiral in enrollments in vocational education has continued to the 1988–89 school year.
- In addition to the general revenue limit that provides unrestricted financing for schools, California has 70 separate categorical programs or funding sources.
- State categorical funding totaled \$3.9 billion in 1988-89.

content to cover, to provide an ordering of subject-matter content and sequence of topics, to identify themes with applicability across a range of issues and areas, and to suggest teaching strategies. The frameworks are not mandated for use by local districts, but since the onset of state education reform efforts in 1983, the frameworks have assumed greater importance and influence.

Science and mathematics were the first content areas addressed under a systematic effort to upgrade California's curriculum. The main focus in the new school mathematics framework was on development of underlying quantitative concepts and the ability to use them, teaching for understanding, and applying mathematics to everyday personal and professional life. The emphasis was on mathematical concepts and understandings that all students need such as:

- Problem solving, that is, using mathematics for reallife issues, rather than solely doing exercises. Problem solving involves not just word problems or one type of problem. Rather it involves applications in new contexts.
- Sense of numberness, quantity.
- Facility with various approaches to computations and knowledge of how to select the most efficient approach.
- Measurement and geometry; patterns and functions; statistics, probability, and logic.
- Classroom calculator use so that teachers can emphasize number sense, estimation, and appreciation for and understanding of quantities, rather than just arithmetic algorithms. Calculators are used to decrease the time devoted to computations and thus to increase the time spent on problem-solving activities.
- · Computer technologies.

- New pedagogical emphases include the need to:
- Teach problem solving by instructing students to formulate and analyze problems, including how to select strategies to solve problems, find solutions, and verify and interpret solutions. A major teacher role is to encourage and help students "attack problems" by thinking about possible strategies and solutions.
- Teach for understanding (including mental arithmetic and estimation) versus teach for memory.
  - emphasize understanding
  - teach a few generalizations rather than numerous rules
  - develop conceptual schemas of interrelated concepts
  - take more time to develop understanding
- Incorporate concrete, manipulative materials widely, especially in the early elementary grades, to develop underlying quantitative concepts. This especially fits the "concrete" cognitive development stage of young students.
- Use situational lessons, that is, lessons in which groups of students solve problems in which numerous quantitative concepts and arithmetical calculations are required.
- Use cooperative learning groups.
- Reinforce concepts and skills.
- Use questioning and responding techniques that emphasize critical-thinking skills.
  - The major emphasis for the new science framework is on scientific literacy for all individuals. Scientific literacy is seen as the marriage of content knowledge, scientific process skills, attitudes about science, and the ability to use that expertise to understand the relationship of science to issues and problems of everyday life. Again, the focus was on scientific literacy for all individuals and the use of science in practical, real-life situations. The framework includes the following:
- The goal of understanding the nature of science and technology, the nature of scientific inquiry, and the ability to read, comprehend, and judge science and scientific issues as presented in public media.
- Overall objectives of content knowledge, science process skills, problem-solving capabilities, selfconfidence in science, and ability to analyze ethical issues relating to science.
- Integration of biology (cells, plants, protists, ani-

- mals, human beings, ecosystems, genetics, and evolution), earth science (astronomy, geology and natural resources, meteorology, and oceanography), and physical science (matter, mechanics, and energy). Integrate these content domains by showing connections between them and how they exemplify the "big ideas" underlying science, such as energy, evolution, patterns of change, scale and structure, stability, and systems and interaction. Understand these issues in conceptual, historical, and thematic contexts, including the interrelationships among science, mathematics, and technology.
- Emphasis on interactions among science, technology, and the individual, including the processes and products of science; interrelationships among science, technology, and society; and careers in science and technology.
- Ethical issues related to science and its analysis, such as acid rain and using animals for research.
- Safety, including laboratory safety and manipulative laboratory skills.
- Scientific process skills, including:
  - observing, communicating, comparing, measuring, and organizing (grades K-3)
  - —relating items such as time and space, forming hypotheses, controlling and manipulating variables, and experimenting (grades 3-6)
  - —inferring, synthesizing, generalizing, recognizing patterns, and formulating explanatory models and theories (grades 6-9)
  - —applying and using knowledge to solve problems (grades 9-12)

New instructional emphases for science included the need to:

- Emphasize scientific problem engagement, handson activities, and laboratory approaches to teaching science.
- Increase time for science in elementary and middle grades.
- Use appropriate computer technologies, including science simulations.

In 1988, the new history-social science framework was produced. Its main focus was the study of continuity and change. This new curriculum was designed to have students: (1) study the interrelationships among domestic and international politics, economic changes, technological advances, demographic shifts, and the stress of social change, and to do this for the past, present, and future; and (2) to develop an understanding of the connections between ideas and behav-

iors, between the values and ideals people hold, and their consequences; and to understand that values and ideas have consequences, that history is not the passive ebb and flow of events but can be and has been shaped and changed by the ideas and actions of individuals and governments. The framework also included a new and more intense emphasis on history, including a history focus for 6 of the 12 years of schooling.

The primary goals of the new history-social science framework include:

- 1. Knowledge and cultural understandings such as:
  - historical literacy
  - · geographic literacy
  - sociopolitical literacy
  - · economic literacy
  - · cultural literacy
  - ethical literacy
- 2. Democratic understandings and civic values such as:
  - · national identity
  - · constitutional heritage
  - · civic values, rights, and responsibilities
- 3. Skills and social participation such as:
  - · basic study skills
  - · critical-thinking skills
  - participation skills

Key themes of the new history-social science framework were intended to:

- Focus on the chronological study of history placed in geographic settings. History and geography are disciplines that must be integrated. Events and changes occur at specific times in specific places.
- Integrate the teaching of history with other humanities and social science disciplines such as religion, culture, art, architecture, law, literature, science, diplomacy, politics, economics, and sociology.
   Also to enrich the study of history with literature of and about the period under investigation.
- Emphasize understanding major historical events and periods in depth rather than skimming broad ranges of events and times, that is, depth and understanding over breadth and simple coverage.
- Include an explicit multicultural perspective throughout the history-social science curriculum.
- Expand and enrich history-social science instruction in the elementary grades by including issues beyond local neighborhoods and communities.
- Include three years of world history and U.S. history, but cover different topics and time periods at each

grade level.

- Include a specific focus on values and ethical issues, such as:
  - encourage the development of civic and democratic values
  - study and discussion of the fundamental principles and rights embodied in the U.S.
     Constitution and Bill of Rights
  - discuss the importance of religion in human history
  - present controversial issues honestly and accurately within their historical or contemporary context
- Include critical-thinking skills at all grade levels.
- Incorporate a variety of content-appropriate teaching methods that engage students actively in the learning process, including cooperative learning, reading, discussing, writing, and the increased use of new technologies.

In 1988, the new language arts curriculum framework was published. The goal of the English-language arts program was to develop a literate, thinking society. The assumption here is that language is fundamental to human learning and understanding. Language should not be seen as the sum of particular parts, such as vocabulary, spelling, grammar, and the like, but rather as holistic. Indeed, current research shows that individuals use language in broad goal-oriented ways:

- Constructively, by creating new meanings through integrating new and old knowledge.
- Actively, by relating newly learned items to individual goals and purposes.
- Interactively, by communicating new learning to others.
- Strategically, by using language to perform tasks effectively.
- Fluently, by approaching new reading and writing tasks easily and confidently.
  - The critical elements of the new language arts program include the following:
- A theory that individuals learn to read and learn to learn by reading.
- Establish a books- or literature-based program. If the goal is a literate society, then meaningful student encounters with books and literature are needed.
  - Use core literary works to develop a common cultural background from which students can learn about humanity, values, and society
  - Read literature beyond the core that extends and

- captures individual interests
- Read recreational and motivating materials by encouraging reading in classrooms, libraries, and homes
- Integrate instruction in reading, listening, speaking, writing, and thinking. Also integrate decoding, spelling, grammar, reading comprehension, and writing mechanics.
- Develop composition, writing skills, and a K-12 writing focus. Students learn to write by writing, editing, and rewriting.
- Develop oral language proficiency.
   New pedagogical approaches include:
- · An emphasis on lots of reading
  - teachers reading aloud to students
  - students engaged in periods of sustained silent reading of self-selected materials
- Sustained, silent reading periods.
- Reading for problem solving and understanding.
   Common themes across all these new frameworks include the following:
- A problem-solving orientation, understanding past problem solving.
- Belief that basic skills, facts, and knowledge are learned best by engagement in problem solving rather than by direct instruction.
- Integration of content, skills, and disciplines.
- Multicultural emphasis.
- · Complex thinking skills.
- Specifically addressing ethical issues, controversial topics, and values, both past and present.
- Depth over breadth.
- More content and substance in elementary grades within mathematics, science, history, and language arts.
  - Common pedagogical emphases include:
- Engaging students in issues, problems, and dilemmas.
- Reading, listening, discussing, and writing across different content areas as ways to learn basic skills, facts, and knowledge as well as to solve problems.
- Reading, listening, discussing, and writing about great books within literature, history, and the like.
- Cooperative learning.
- Attention to cognitive development and new approaches to and understanding of how to enhance children's cognitive capabilities.
- Learning activities that "engage" students.

In 1989, the state once again began to revise the science framework and published a draft version late in the year. In short, these State Department of Education initiatives are designed to change and improve the curriculum in all of California's schools, from kindergarten through twelfth grade. The goal is quite ambitious and entails a long-term change process that will last a decade or two.

While the frameworks cover the K-12 curriculum, they are developed for the purpose of substantively influencing the textbook adoption process. Since California adopts texts only for K-8, emphasis has been given to the K-8 portion of the frameworks. Senate Bill 813, however, targeted grades 9-12 and required the Department of Education to develop more detailed model curriculum standards for those grades. Senate Bill 813 also mandated that each local district compare its 9-12 curriculum to the state model curriculum standards. Model curriculum standards, which cover science, mathematics, language arts, social science, including U.S. and world history, and foreign language and fine arts, were disseminated in 1985.

The curriculum framework development and textbook adoption endeavors are multiple-year processes and, at least theoretically, are arranged in a sequence so that one coincides with the next. Frameworks are released about one year before the textbooks proposed for adoption need to be approved by the State Board of Education.

A secondary purpose of the curriculum frameworks is to suggest to local districts the manner in which a subject-matter curriculum should be conceptualized and how it should be assessed. The close linkage between these frameworks, the textbook adoption process, and the state testing program garners added influence for the frameworks locally, even absent a state mandate for their use.

In addition, frameworks have generally been well received by school districts and utilized by local curriculum specialists, at least partially because they are judged to be thoughtfully designed.

The State Department of Education is also now finalizing model curriculum guides in science and mathematics for grades K-8. Guides contain more detail than frameworks, actually providing examples of classroom strategies for teaching in each content area. Since the mathematics curriculum especially, but also the science curriculum, varies substantially from standard school curricula and practice, the State Department of Education, responding to pressure from local districts, recently decided to produce these model curriculum guides.

The overall goal is to change drastically the entire concept of curriculum for grades K-8 and for the bottom 80 percent of students, from fragmented content areas to an integration of the content, processes, and meaning of each content area around topics and issues related to every day life. The objective is to teach students how to use and to apply content knowledge and process skills to problems and challenges commonly encountered, thus connecting academic or school curriculum to their experiences outside school.

The philosophy of curriculum at the state level is broad and not simply content bound. Curriculum includes (1) specific content, (2) lesson strategies, (3) learning activities, (4) instructional materials, (5) learning outcomes, and (6) assessment instruments. Curriculum content also is more than a skills continuum (for example, reasons for wars); it includes specific content (for example, reasons for the Vietnam War and World War II). Curriculum alignment involves matching all six pieces. The notion that a board decides curriculum and teachers implement it is not accepted. The state's philosophy, rather, is that curriculum is more integrated and cannot be so neatly separated.

The goal for students is knowledge, skills, problemsolving capabilities, self-confidence in a subject area, ability to deal with ethical issues related to a subject area, and citizenship and social skills. The state believes that classroom activities should address all these goals.

In order to raise standards and expectations for students, teachers, and schools, the State Department of Education also has established a three-phase accountability program for the state's public high schools. Phase one involved setting state goals for improvement on specified "quality indicators." Phase two involved preparing individual performance reports for each high school and district and comparing their performance with state goals. Phase three involved encouraging each local school and district to develop its own local accountability reports with appropriate goals.

Mandated school report cards add a further element to these reporting strategies. This mandate was part of Proposition 98 (1988) that altered California's state constitution by guaranteeing a minimum proportion of the state general fund budget to K-14 public education. The accountability report card was considered an important component of Proposition 98, to maintain public accountability for the additional funds the initiative would target to education. The report card must include an assessment in each of the following 13 areas: Inputs—

 Estimated expenditures per student, and types of services funded

- Teacher and staff training, and curriculum improvement programs
- 3. Availability of qualified substitute teachers
- Availability of qualified personnel to provide counseling and other student support services

#### Process-

- 5. Safety, cleanliness, and adequacy of school facilities
- 6. Classroom discipline and climate for learning
- 7. Progress toward reducing class sizes and teaching loads
- 8. Quality and currency of textbooks and other instructional materials
- Assignment of teachers outside their subject areas of competence
- Adequacy of teacher evaluations and opportunities for professional improvement
- 11. Quality of instruction and leadership

#### Outcomes—

- 12. Student achievement in and progress toward meeting reading, writing, arithmetic, and other academic goals
- 13. Progress toward reducing dropout rates

The categories of data required for this report card are close to the full complement of data variables that constitute the core variables for a full-fledged educational indicator system. The first school accountability report cards will be produced sometime during the 1989–90 academic year. Potentially, these reports could become penetrating analyses of the educational systems in all of California's schools and districts.

# **Textbook Adoption**

The overall goal of California's textbook adoption process is to align curriculum statewide, including texts, curriculum frameworks, and California Assessment Program (CAP) tests. Broadly conceived, curriculum includes content, teaching materials (texts), pedagogy, and testing and other assessment instruments.

Textbook adoption committees use the content of state curriculum frameworks to prepare criteria for textbook publishers. The final phase of the textbook adoption process includes recommendation by a state curriculum commission to the State Board of Education. During these final evaluation phases, the state superintendent cooperates closely with key staff serving on committees to evaluate the texts and to agree on a recommendation, which he ultimately makes to the board.

The specific purpose of the state textbook adoption cycle is to have districts use state-adopted texts and, now, to im-

prove overall curriculum by using better texts. Another purpose today is to induce publishers to produce better, sounder, more rigorous texts. In 1985, for example, State Superintendent Bill Honig and the State Board of Education rejected and returned to publishers for improvements both science and mathematics texts.

The state adoption model is "driven" by the content of the curriculum frameworks, so the state provides the content from which publishers develop texts and from which each district selects the resources they wish to use to implement these frameworks. The results of the entire process are then evaluated at the state level with California Assessment Program (CAP) tests.

# The California Assessment Program

The purpose of the California Assessment Program (CAP) is to "lead" and assess the curriculum at state and local levels by weaving common threads of content and higher-level thinking skills now embodied in state curriculum frameworks and texts. Since CAP is mandated for all students in grades 3, 6, 8, and 12, and scores are released to the press, local schools and districts pay close attention to their scores. Annual CAP reports include three years of data and are sent to schools in November or December of each year.

California's educational reform expanded CAP to include eighth grade. The content tested was also expanded from reading and mathematics to science, social science, and a direct writing assessment. Reading also stressed content by including passages of science and social science, and thus reinforced the subject-matter portions of CAP. The grade eight CAP is the first to cover the full range of content areas for CAP testing. History/social science was added in 1984–1985, and science was added in 1985–86. Beginning in spring 1987, the grade eight test included a direct assessment of students' writing.

A new twelfth grade CAP test was administered during the 1987–88 school year. First, the basic-skills focus of reading and mathematics was replaced by a more application-oriented and higher-level thinking skills focus. In subsequent years, science and social science will be added as new content areas. The twelfth grade CAP test also includes direct writing assessments.

Plans exit to implement a full battery of new CAP tests to provide California with one of the most comprehensive and advanced student testing programs in the country. These tests will be complemented by an expanded set of Golden State Examinations, which are academic tests for college prepara-

tory courses in high school. These tests are further complemented by state-mandated, but locally designed and administered tests of competency in minimum basic skills. Combined, these tests provide extensive information on student achievement in California, excluding primarily student performance tests for assessing higher-level cognitive processes, and the state is conducting development work in that area.

Annual CAP reports to schools and districts are used to compare academic achievement from one year to the next. The reports delineate each subject area's skills so that a school can easily determine areas of strength and weakness to be addressed the following year. Unlike many other standardized tests, which are composed of a small number of items and whose security is much more vulnerable, CAP is a "matrix sample" test in which each subject area is tested by a large number of items, only a small portion of which are taken by any single student. The selection of test questions, therefore, varies for individuals within the same classroom. While this system does not allow the development of individual pupil scores, it provides a highly reliable and robust measure of the subject matter in question.

The philosophy of the State Department of Education is that CAP is a model for what children should learn and an instrument for feedback to communities and legislators. CAP is a curriculum-oriented program of accountability to let schools know how well they are doing.

## **Higher Education**

Historically, high schools have been attentive to changes in admission requirements of the postsecondary institutions and other higher education-initiated curricular directions.

Academic Senates of the three segments of public higher education jointly adopted and have widely disseminated their Statement on Competencies in English and Mathematics Expected of Entering Freshmen,<sup>2</sup> intended to assist students in preparing for college, their parents and counselors in advising and course selection, and high school teachers and administrators in planning curriculum.

The University of California, California State University, and many prestigious private colleges and universities now award extra weight in computing grade point averages for admission for "Honors" and "Advanced Placement" classes in order to encourage students to take more difficult courses.

The University of California's entrance requirements have long been viewed as a primary determinant of high school curriculum. Because the required course sequence has six components, listed under the letters a-f, these high school

courses are commonly referred to as "a-f courses" The current University of California a-f requirements include:

- 4 years of English
- 3 years of mathematics
- 1 year of laboratory science
- 1 year of U.S. history or U.S. history and government
- 2 years of the same foreign language
- 4 years of approved electives

Because of the magnitude of the change and the importance of its impact, the new entrance requirements implemented in 1988 by the California State University are of special interest. From 1965 through 1983, the California State University admission criteria for first-time freshmen did not include specific high school course requirements.

Students were eligible for admission if they possessed a high school diploma and had a sufficiently high score on CSU's Eligibility Index, a weighted combination of high school grade point average (GPA) and either the total score on the Scholastic Aptitude Test (SAT) or the composite score on the American College Test (ACT). The Eligibility Index was monitored and adjusted periodically. Students with GPAs above a specified level were eligible for admission irrespective of their score on the standardized test.

The intent of these requirements was to create a pool of eligible students equal to the top one-third of the high school graduating class, consistent with the state's Higher Education Master Plan (1960) directive that CSU serve the top one-third of California public high school graduates.

In 1981, CSU trustees, concerned that many students were coming to their system's campuses ill-prepared for college, added specific course requirements in English (four years) and mathematics (two years). These revisions were first effective for students entering CSU in the fall of 1984. In addition, in November 1984 the trustees directed the chancel-lor to develop recommendations concerning additional courses that should be required for entrance.

In response to that directive, the chancellor submitted a report to the trustees which led to the adoption in November 1985 of a resolution requiring a comprehensive course pattern of college preparatory subjects to become effective for first-time freshmen applicants commencing in the fall of 1988. The trustees subsequently adopted the following comprehensive pattern of college preparatory subjects as an element of admission requirements. These additional requirements were to be effective in the fall of 1988 for all regular admittees:

- 4 years of English (presently required)
- 3 years of mathematics (2 years presently required)
- 1 year of U.S. history or U.S. history and government

- 1 year of laboratory science
- 2 years of foreign language (or competency)
- 1 year in the visual and performing arts
- 3 years of approved electives

As the California State University began to implement these new entrance requirements, it became clear that not all high schools were offering, nor were enough students taking, the required course pattern. Therefore, CSU modified its initial requirements by allowing conditional admission under the following schedule.

Those conditionally admitted will still be required to complete the requirements prior to graduation from college but can do so by taking university courses that serve the dual purpose of applicability to CSU's general education requirement as well as removing the deficiency:

Fall 1988 At least 10 of the required 15 units, among which are included at least 6 of the 7 units in English and mathematics.

Fall 1989 At least 12 of the required 15 units, among which are included at least 6 of the 7 units in English and mathematics.

Fall 1990 At least 14 of the required 15 units, among which are included at least 6 of the 7 units in English and mathematics.

Fall 1991 At least 14 of the required 15 units, among which are included at least 6 of the 7 units in English and mathematics.

Fall 1992 Full implementation.

The California State University system has thus moved to a set of entrance requirements that closely approximate entrance requirements for the University of California. Although concern has been expressed about the potential negative impact on minority students in higher education, CSU has been remarkably flexible in altering the timeline for full implementation.

In sum, a variety of forces external to high schools in California have combined, in an unprecedented manner, to create a cumulative pressure for change in school curriculum. Although proposed changes have been generated from an array of sources, the changes are remarkably consistent and send reasonably clear signals to schools. Change of such magnitude does not come easily, however, and will undoubtedly require long-term, sustained effort to implement. The following section examines California high school responses to these pressures for change.

#### **High School Curricular Changes**

The cumulative effect of external pressures for a more academically oriented curriculum has led high schools to adopt a more rigorous curriculum. Increases in enrollment in academic courses and concomitant declines in remedial courses and electives, along with declines in other areas of the curriculum not required for high school graduation or for entrance into the University of California or California State University, have occurred.

#### **Course-Taking Patterns**

Figure 6.1 displays changes in high school course enrollments for two time periods. The first displays a longer-range, seven-year view depicting enrollment changes by subject area from 1982–83 to 1988–89. This period begins just prior to California's curriculum improvement efforts and implementation of omnibus school reform legislation. The second displays data from the two most recent years, 1987–88 to 1988–89.

The information in Figure 6.1 reflects changes in subject area enrollment, corrected for changes in the overall student population. This is the manner in which PACE has reported course changes in prior years. It accounts for the total number of students in each course and the total number of students enrolled in high school. It enables one to assess whether raw number changes in course enrollments reflect simply the effects of overall enrollment changes or represent a shift in student course-taking patterns.

It is important to note that overall subject trends may mask course enrollment patterns occurring within subareas. For example, in the seven-year data, English enrollment is down by almost a third, but there are substantial variations within English. Advanced placement English enrollment is up by half and comprehensive English enrollment is up almost 14 percent, but reading enrollment has declined by four-fifths. Similarly, while enrollment in mathematics has declined overall by roughly 14 percent, general math is up 11 percent, and advanced math (including intermediate algebra, solid geometry, trigonometry, intermediate algebra/trigonometry, probability/statistics, modern abstract algebra, analytic geometry/pre-calculus, calculus) is up 30 percent.

The largest real enrollment gains between 1983 and 1989 were recorded by economics (348%), physical science (208%), computer education (100%), life science (52%), advanced placement English (50%), world history (41%), chemistry and physics (39%), and advanced math (30%). The

biggest losses were experienced by reading (-80%), music (-55%), vocational and business education (52%), English composition (-44%), and physical education (-30%).

Missing from this analysis, however, is an accounting of the total number of courses, of all types, taken by high school students. In California, this can be an important omission. As it happens, California high school enrollment is increasing, but the total number of courses taken by these students is

FIGURE 6.1
Percentage Changes in Subject Matter Enrollment,
1982–83 to 1988–89 and 1987–88 to 1988–89
(corrected for changes in total student enrollment)

Subject	% Change 1983 to 1989	% Change 1988 to 1989
ENGLISH	-31.51	-8.77
Comprehensive English	13.86	-2.46
AP English	50.02	2.90
Composition	-44.91	-17.04
Reading	<del>-79.94</del>	-26.44
FOREIGN LANGUAGE	13.39	-4.01
SOCIAL SCIENCE	-23.06	-5.84
Economics	347.98	14.35
World History	41.48	-1.60
MATHEMATICS	-14.38	<b>-4.90</b>
General Math	10.84	0.42
Beginning Algebra	-1.21	-6.64
Advanced Math	29.71	-2.39
COMPUTER EDUC.	99.96	-13.36
SCIENCE	15.68	-6.22
Life	52.13	-8.82
Physical	208.45	-7.93
Biology	1.79	-3.30
Chemistry	38.64	-3.86
Physics	38.65	-3.13
PHYSICAL EDUC.	-29.75	-4.95
ART	-11.72	-1.92
DRAMA	19.73	-2.29
MUSIC	-54.74	-5.05
VOC/BUSINESS EDUC	. –51.82	-14.32

Source: PACE analysis of California Basic Educational Data System (CBEDS) data. decreasing. Figure 6.2 illustrates this point. Cumulative student enrollment increased 7.31 percent between 1982–83 and 1988–89. During this period, however, the total number of courses taken by these students declined 17.82 percent. In other words, as the student body grew larger, the number of courses taken grew smaller. In 1988–89, the number of students attending high school increased by almost 38,000. At the same time, students took approximately 271,000 fewer courses than they did the previous year. Over the seven-year period, 92,000 more students are taking 1.7 million fewer courses.

Figure 6.3 presents a second method of analyzing course enrollment patterns that accounts for information regarding the number of total courses taken. It does this by viewing enrollment in subject areas as a percentage of the number of

FIGURE 6.2 Percentage Changes in Student Enrollment and Courses Taken, Grades 9–12, 1982–83 to 1988–89 and 1987–88 to 1988–89

Grades 9-12	1982–83	1987–88
	to 88-89	to 88-89
Student Enrollment	7.31	2.86
Courses Taken	-17.82	-3.3

Source: PACE analysis of California Basic Educational Data System (CBEDS) data.

courses taken by high school students, rather than as a percentage of the number of high school students alone. In other words, instead of simply comparing science enrollments year by year, which places science enrollment in the context of

FIGURE 6.3 Subject Enrollment as a Percentage of Total Course Enrollment, 1982-83 to 1988-89

Subject	1982-83	1988-89	% Change
ENGLISH	18.97	17.50	<i>–</i> 7.75
Comprehensive English	6.43	9.48	47.43
AP English	0.22	0.41	86.36
Composition	1.06	0.81	-23.58
Reading	3.12	1.04	-66.67
FOREIGN LANGUAGE	4.17	6.13	47.00
SOCIAL SCIENCE	13.14	13.45	2.36
Economics	0.22	1.22	454.55
World History	1.80	3.25	80.96
MATHEMATICS	11.09	12.54	13.07
General Math	1.76	2.54	44.32
Beginning Algebra	2.74	3.54	29.20
Advanced Math	1.57	2.62	66.88
COMPUTER EDUC.	0.40	1.02	155.00
SCIENCE	6.57	9.86	49.62
Life	0.69	1.33	92.75
Physical	0.53	2.05	286.79
Biology	1.92	2.55	32,81
Chemistry	0.69	1.23	78.26
Physics	0.29	0.52	79.31
PHYSICAL EDUC.	14.20	13.40	-5.63
ART	2.87	3.34	16.38
DRAMA	0.46	0.72	56.52
MUSIC	3.82	2.45	-35.86
VOC/BUSINESS EDUC.	15.94	10.76	-32.50
OTHER	8.33	8.55	2.64

Source: PACE analysis of California Basic Educational Data System (CBEDS) data.

overall student enrollment (as reflected in Figure 6.1), the analysis reflected in Figure 6.3 places science enrollment within the context of all course enrollments. This enables us to see how the character of the curriculum is changing regardless of the annual numerical changes in individual subject areas.

Figure 6.3 displays subject areas and selected subareas of the high school curriculum. It reports each area as a percentage of all courses taken. For example, we can see that science represented approximately 6.6 percent of all courses taken by high school students in 1982–83; whereas this percentage increased to approximately 9.9 in 1988–89, an increase of almost 50 percent. The pattern is similar with social science, mathematics, and foreign language. One conclusion from this information is that between 1983 and 1989 core, academic subjects came to play a larger role in California's high school curriculum. The magnitude of these changes can be ascertained by reading the percentage changes under column three, on the far right, in Figure 6.3.

Both perspectives—subject enrollments in the context of student enrollment, and subject enrollment in the context of other course enrollment-are important. If science enrollment is declining, for example, schools may need fewer science teachers and fewer labs. If at the same time science enrollment accounts for a larger percentage of the overall curriculum, then one can characterize the curriculum as more science oriented, which would coincide with goals espoused in recent national and professional reform reports. The important next step is to ascertain why high schools students are taking fewer courses. For the moment, however, the character of the California high school curriculum appears to emphasize more science; mathematics; foreign language; comprehensive English; and social science, like economics and world history, in keeping with California's core curriculum reforms instituted in 1983.

# **Class Size**

Figure 6.4 portrays average class sizes by subject area. Class sizes range from an average of 25.6 in vocational education courses to 38.7 in physical education. Academic course enrollments in science, mathematics, English, social studies, and foreign language, span a narrow range from 27 to 29. These numbers represent the number of students a typical teacher actually has in class, or the typical teacher load. These figures show that, in California, the typical high school teacher still sees between 135 and 145 students per day, a large number.

#### **Performance Reporting**

The State Department of Education disseminates statewide course enrollment information designed to monitor progress toward a more intense academic curriculum of history, government, science, mathematics, and literature. This information is included in the "Performance Report for California Schools," part of the state's accountability program (which includes the use of quality indicators, school performance reports, and a school recognition program, see Chapter 5). Beginning in 1983–84, each successive annual edition of the performance report compared current and historical data to reveal trends in the performance of California schools over time.

The 1988 report, however, establishes a new base year. Thus, comparisons with prior years cannot be made. Why was a new base year necessary? There are several reasons, according to the State Department of Education. First, a new twelfth grade CAP test was administered. The new test is substantively different in content and administration procedures, and scores are reported in a different manner. Second, significant changes were made to the student information section of the CAP test, yielding data that were not comparable to similar information collected previously. Finally, the department asserted that improvement on the quality indicators was so great between 1983 and 1987 that it was no longer possible to make normative judgements about school performance.<sup>3</sup> The information in the 1988 report has been renormed and thus direct comparisons with prior years are not

FIGURE 6.4 Average Class Size, Selected Subjects, 1988-89

Subject	Average Number of Students Enrolled in
	Each Class
Science	28.9
Mathematics	28.4
English	27.2
Social Science	28.7
Foreign Language	28.2
Vocational Education	25.6
Physical Education	38.7

Source: California Basic Educational Data System

(CBEDS) data, 1988-89

included. Thus, Figure 6.5 indicates course enrollment patterns from the performance report for 1987–88 only. As an indicator of past performance, Figure 6.6 includes changes from 1983–84 to 1986–87, a period of focused state and local school reform activity. However, the two figures are not directly comparable.

#### **National Trends**

During the 1980s, state-initiated educational reform activity has been widespread. Primary among these efforts were new state graduation requirements that included a core of academic subjects, much like those instituted in California by Senate Bill 813. In 1984–85, for example, the Educational Testing Service found that 41 states had raised standards for the number and types of courses required for high school graduation.<sup>4</sup> Driving these reforms was a nationwide consensus that a more rigorous education could enhance the United States' ability to compete economically worldwide. This concern regarding economic competition affected the nature of the school reforms by emphasizing mathematics, science, and technology in the curriculum.<sup>5</sup>

Figures 6.7 and 6.8 compare national course-taking patterns among high school graduates in 1982 and 1987. According to an Educational Testing Service (ETS) analysis, the numbers show strong gains in mathematics and science course taking, except in calculus and physics. Thus, the increases in California are part of a wider national phenomenon. In addition, with few exceptions, gains in course taking were registered by minority as well as majority students in all mathematics and science courses, but the black and Hispanic rates, as in California, are still below white and Asian rates.

Increases in academic course taking also are apparent among all student tracks—academic, vocational, and general. By 1987, for example, over two-thirds of vocational and general track students had taken Algebra I; 20 percent of vocational students and 30 percent of general track students had taken geometry. The ETS report asserts that vocational course enrollments have not been cut to accommodate increased academic requirements but allows that pressure on vocational courses may increase as new state requirements apply to more students through the remainder of the decade.<sup>6</sup>

Among college-bound seniors, ETS found increases in the percentage taking three years of mathematics and social studies, and two years of foreign language, as recommended by the National Commission for Excellence in Education in its often-cited report, A Nation at Risk. Seventy-five percent of college-bound seniors were taking three years of science in

FIGURE 6.5 Course Enrollments, Statewide Averages from the Performance Report for California Schools

Course Enrollments	Statewide Average 1987–88
Mathematics	
3 or more years	66.1%
Advanced mathematics	36.1
English	
4 or more years	69.6
Science	
3 or more years	36.4
Chemistry	36.9
Physics	15.4
Advanced science	48.2
History/Social Science	
4 or more years	25.8
Foreign Language	
3 or more years	22.3
Fine Arts	
1 year art/music/drama/dance	52.5
University of California Requirements	
Enrollments in a-f courses	44.6
Graduates completing a-f courses	28.2
Units required for graduation	22.5

Statewide averages are based on twelth grade statewide enrollments unless otherwise noted. The values for advanced mathematics and advanced science represent the statewide rate of enrollment per 100 juniors and seniors. The values for chemistry and physics are the statewide enrollment.

Source: State Department of Education, Performance

1988. Moreover, the increase in English course credits registered for all high school students from 1982 to 1987 (Figure 6.9) was concentrated among the noncollege bound.

#### California Compared to the Nation

California was among the first states to raise graduation requirements and to attempt to improve the quality of science, mathematics and other courses. Many states also have im-

FIGURE 6.6 Course Enrollment Trends, Statewide Averages from the Performance Report for California Schools

Statewide Averages				
Course Enrollments	1983–84	84–85	8586	86–87
Mathematics				
3 or more years	67%	74%	78%	82%
Advanced mathematics	28	32	33	36
English				
4 or more years	73	86	88	90
Science				
3 or more years	33	36	40	53
Chemistry	25	31	37	40
Physics '	10	12	14	16
Advanced science	· NA	NA	49	50
History/Social Science				
4 or more years	33	37	40	43
Foreign Language				
3 or more years	22	22	26	27
Fine Arts				
1 year art/music/				
drama/dance	65	67	70	75
University of California				
Requirements				
Enrollments in a-f courses	NA	38	44	43
Graduates completing				
a-f courses	NA	NA	28	26
Units required for graduation	NA	NA	17	22

Statewide averages are based on twelth grade statewide enrollments unless otherwise noted. The values for advanced mathematics and advanced science represent the statewide rate of enrollment per 100 juniors and seniors. The values for chemistry and physics are the statewide enrollment.

Source: State Department of Education, Performance Report for California Schools 1988.

proved assessment programs and information systems designed to assess the effects of state educational reforms.

The Council of Chief State School Officers, with support from the National Science Foundation, has undertaken the task of compiling state-by-state indicators of mathematics and science education. The project is designed to improve the quality of data on science and mathematics education available to policy makers, develop a national data base to assess the condition of science and mathematics education, and provide for state-by-state comparisons. Data are collected by

state departments of education using regular state-designed systems for collecting data. The reporting plan was designed by state representatives and CCSSO staff. A preliminary report, including data collected in 1988, was released in October 1989. Key figures are reproduced below which place California in a national context of school reform.

Figure 6.10 displays enrollment in science courses in grades 9-12 by level. These data answer the question, "What level of science courses are students taking to meet graduation requirements?" The four categories include earth, physical,

FIGURE 6.7 Percentage\* of High School Graduates Who Took Selected Mathematics Courses, by Race/Ethnicity, 1982 and 1987

	White	Black	Hispanic	Asian	All Groups
1982 Graduates					
Algebra I	68.1	57.5	55.1	66.2	65.1
Geometry	51.2	28.5	25.8	64.3	45.7
Algebra II	38.7	24.2	20.8	56.4	35.1
Trigonometry	13.6	6.0	6.4	28.2	12.0
Pre-calculus	6.7	2.2	3.0	13.7	5.8
Calculus	5.5	1.4	1.8	13.2	4.7
1987 Graduates					
Algebra I	78.2	70.7	76.6	66.2	77.2
Geometry	64.2	43.6	44.3	82.3	61.0
Algebra II	51.4	32.3	33.2	68.3	46.1
Trigonometry	21.7	12.3	11.5	47.0	20.4
Pre-calculus	13.0	5.0	8.0	41.3	12.4
Calculus	5.9	2.4	4.1	33.0	6.1

<sup>\*</sup>Percentages are weighted to yield population estimates.

Source: Adapted from Educational Testing Service, What Americans Study (Princeton, NJ: ETS, 1989) which cites "Nation at Risk Study as part of the 1987 High School Transcript Study," Tabulations, May 19, 1988, Westat Inc., for the U.S. Department of Education, National Center for Education Statistics, Tables 32 and 34

FIGURE 6.8 Percentage\* of High School Graduates Who Took Selected Science Courses, by Race/Ethnicity, 1982 and 1987

	White	Black	Hispanic	Asian	All Groups
1982 Graduates					
Biology	77.3	70.9	67.2	82.2	75.3
Chemistry	34.2	20.5	15.4	51.4	30.8
Physics	16.0	6.9	5.6	33.8	13.9
1987 Graduates					
Biology	91.0	84.7	85.9	93.3	89.6
Chemistry	48.0	30.3	31.8	72.3	45.4
Physics	21.1	10.6	11.2	50.0	20.1

<sup>\*</sup>Percentages are weighted to yield population estimates.

Source: Adapted from Educational Testing Service, What Americans Study (Princeton, NJ: ETS, 1989) which cites "Nation at Risk Study as part of the 1987 High School Transcript Study," Tabulations, May 19, 1988, Westat Inc., for the U.S. Department of Education, National Center for Education Statistics, Tables 40 and 42.

and general science; first-year biology; second-year biology and all chemistry and physics; and other. The far-right column gives the percentage of high school students taking a science course during 1988–89. Twenty-nine states are compared, including California, Texas, New York, Ohio, Pennsylvania, and Illinois. California's enrollments are below the median for this group in each category except "other." The numbers show that California science enrollments, while having increased since 1983, are still below the median of similar states.

Figure 6.11 displays information for mathematics enrollments in the same way as Figure 6.10 did for science. These data are aggregated into four categories. Column 1, review and informal math, includes basic, consumer, and applied math, and pre-algebra, basic geometry, and basic Algebra II. Column 2 includes Algebra I. Column 3 includes geometry, Algebra II, trigonometry, calculus, and advanced placement calculus. Column 4 includes all other math courses, and the far-right column indicates the percentage of all students taking a mathematics course during the 1988–89 school year. California's mathematics enrollments are below the comparison median in general math and advanced math (columns 1 and 3), equal the comparison median for Algebra I, and are above the mid-point in "other" math. Seventy-six percent of California high school students enrolled in a math class in

1988-89. The median enrollment in mathematics among comparison states was 82 percent.

These national comparisons suggest that California still has significant improvements to make in high school course taking behavior, and that the recent gains are insufficient. If California is to maintain its position as a leading, high technology economy state, its youth needs adequate preparation in mathematics and science and other areas that develop technical, thinking and problem solving skills. The numbers reported above show that there have been large system improvements during the past six years and that continued improvements are needed in the future.

# **Categorical Funding**

California has one of the most elaborate structures of categorical funding in the United States. There are 70 separate categorical funding sources. Categorical funds are revenues made available to local school districts by state and federal governments for specific purposes. Since Proposition 13 in 1978, California has virtually no local property tax leeway for current operating expenditures. Consequently, most of the categorical programs do not require local matching funds.

FIGURE 6.9 Average Number of Credits Earned by High School Graduates in Various Subjects, 1982 and 1987

	1982	1987	Percentage
Subject Area	Graduates	<u>Graduates</u>	Change*
English	3.80	4.05	6.58%
History	1.68	1.91	13.69
Social Studies	1.42	1.44	1.41
Mathematics	2.54	2.98	17.32
Computer Science	0.11	0.42	281.82
Science	2.19	2.63	20.09
Foreign Language	1.05	1.47	40.00
Non-Occup. Vocational Ed.	1.84	1.66	-9.78
Occup. Vocational Ed.	2.14	2.09	-2.34
Arts	1.39	1.41	1.44
Physical Education	1.93	2.00	3.63

<sup>\*</sup>Change is positive unless otherwise indicated.

Source: Adapted from Educational Testing Service, What Americans Study (Princeton, NJ: ETS, 1989) which cites "Nation at Risk Study as part of the 1987 High School Transcript Study," Tabulations, May 19, 1988, Westat Inc., for the U.S. Department of Education, National Center for Education Statistics, Table 8.

FIGURE 6.10 Enrollments in Science Courses in Grades 9-12 by Level

	Total	Earth Sci.,				Bio 2nd Year,				
_		Physical Sci.,	%	Biology	%	Chem, Phys.	%	Other	%	Total
State 	9–12	General Sci.	9–12	1st Year	9–12	Yrs. 1 & 2	9–12	Science	9–12	<b>%</b> 
Alabama	203,101	46,437	23	53,806	26	43,957	22	1,095	1	72
Arkansas	96,680		27	33,481	34	14,509	15	3,008	3	79
California	1,267,035	•	19	300,075	24	186,731	15	39,520	3	61
Delaware	27,792	•	27	6,565	24	5,134	18	116	.4	69
Hawaii	43858		29	1121	23	7413	17	1734	4	73
Idaho	58,359	•	23	13,224	23	8,560	15	2,492	4	65
Illinoist	500,680		20	120,534	24	97,499	19	2,466	.5	84
Indiana	285,387	•	22	70,556	25	64,213	23	2,928	1	70
Iowa	135,963		23	37,534	28	30,920	23	1,129	1	75
Kentucky	181,861	20,265	11	46,609	26	48,675	27	202	.1	64
Louisiana	201,564		31	49,438	25	40,046	20	18,295	9	84
Minnesota	215,671	•	22	48,195	22	49,626	26	4,226	2	69
Mississippi	130,119	•	10	39,759	31	44,796	34	263	.2	75
Missouri	236,860	•	29	50,966	22	61,348	26	5,688	2	79
Montana	42,104	10,514	25	7,578	18	13,830	33	771	2	78
Nebraskat	78,132	22,636	29	26,219	34	21,848	28	4,389	6	96
Nevada	49,032	9,437	19	9,229	19	10,854	22	2,728	6	66
New Mexico	76,688	24,612	32	25,289	33	. 12,291	16	772	1	82
New York	743,290	198,799**	27	243,630	33	167,919	23	37,612	5	87
N. Carolina	322,087	86,259	27	81,678	25	48,723	15	3,667	1	68
N. Dakota	33,627	•	27	9,102	27	9,826	29	613	2	85
Ohio	549,160		24	130,806	24	105,723	19	20,383	4	71
Oklahoma	164,630		18	39,286	24	34,797	21	15,325	9	72
Pennsylvani			19	134,953	27	123,877	25	0	0	71
S. Carolina	177,948	3 47,984	27	44,331	25	31,165	18	2,426	1	71
Texas	891,628	-	26	232,628	26	122,756	14	14,913	2	67
Virginia	283,213	•	4	70,683	25	76,526	27	1,310	5	57
Wisconson	236,20	-	24	56,566	24	46,907	20	5,676	2	71
Wyoming	27,28	5 4,751	17	4,460	16	3,711	14	1,285	5	52
Median			24		25		19		2	71

<sup>\*</sup> State does not collect or cannot report data for category.

Source: Council of Chief State School Officers, Washington, D.C.

<sup>\*\*</sup> Estimated from totals for 7-9.

<sup>†</sup> Illinois data collected 1986-87 school year; Nebraska data includes first and second semester enrollments.

FIGURE 6.11 Enrollments in Math Courses in Grades 9-12 by Level

	Total		~	Formal		Formal	~	Other		
State	Students 9-12	Review & Informal	% 9–12	Level 1 (Algebra 1)	% 9–12	Levels 2–5	% 9–12	Math 9-12	% 9–12	Total %
Alabama	203,101	57,491	28	33,334	16	54,543	27	*	*	72
Arkansas	99,680	*	*	29,769	30	36,309	36	*	*	66
California 1	,289,986	275,793	21	270,851	21	363,961	28	70,903	5	76
Delaware	27,792	9,314	34	4,084	15	7,864	28	21	.1	<b>7</b> 7
Hawaii	43,858	27,122	62	5,559	. 13	9,857	22	*	*	97
Idaho	58,359	11,264	19	13,630	23	17,912	31	1,271	2	76
Illinoist	500,680	95,873	19	103,371	21	192,617	38	*	*	78
Indiana	285,387	88,766	31	43,641	15	90,883	32	*	•	78
Iowa	135,963	22,790	17	30,177	22	58,747	43	11,521	8	91
Kentucky	181,861	644,76	35	32,785	18	61,751	34	*	*	87
Louisiana	201,564	27,528	14	59,941	30	90,472	45	*	*	88
Minnesota	215,671	24,670	11	44,338	21	86,841	40	*	*	72
Mississippi	130,119	31,510	24	27,246	21	48,455	37	*	*	82
Missouri	236,860	50,018	21	52,161	22	86,249	36	6,373	3	82
Montana	42,104	8,144	19	12,558	30	12,080	29	*	*	78
Nebraskat	78,132	16,597	21	21,010	27	38,066	49	6,498	8	105
Nevada	49,032	13,502	28	10,976	22	12,255	25	*	*	75
New Mexico	76,688	30,594	40	29,188	38	16,128	21	*	*	99
New York	743,290	169,863	23	138,868	19	250,620	34	46,046	6	81
N. Carolina	322,087	100,312	31	568,49	18	1149,94	36	*	*	84
N. Dakota	33,627	5,078	15	7,630	23	13,892	41	281	1	80
Ohio	549,160	155,282	28	100,813	18	198,491	36	3,415	ĩ	83
Oklahoma	164,630		22	37,469	23	54,310	33	2,895	2	79
Pennsylvani			14	104,895	21	237,591	47	*	*	82
S. Carolina	177,948	81,251	46	28,676	16	57,077	32	3,757	2	96
Texas	891,628	300,872	34	194,137	22	307,406	34	47	0	90
Virginia	283,213	-	30	59,356	21	110,170	39	1,081	0	90
Wisconson	236,207	•	34	50,164	21	67,922	29	1,001	*	84
Wyoming	27,285	•	25	1,779	7	5,084	19	264	1	51
Median	•	•	25	•	21	•	34		2	82

<sup>\*</sup> State does not collect or cannot report data for category.

Source: Council of Chief State School Officers, Washington, D.C.

<sup>†</sup> Illinois data collected 1986–87 school year; Nebraska data includes first and second semester enrollments.

FIGURE 6.12 Selected Categoricals, 1988–89 School Year

Program	Amount (thousands
Special Education	1,103,149
State Teachers Retirement System	507,385
Desegregation-Court Ordered	315,551
Desegregation-Voluntary	47,233
Child Care	315,447
Transportation (including Special Ed.)	289,970
Adult Education	239,488
School Improvement Program	229,752
ROC/Ps	212,059
Economic Impact Aid	196,952
Instructional Materials	97,499
Urban Impact/Meade Aid	86,600
Child Nutrition	55,993
Mentor Teachers	49,750
Gifted and Talented Education	22,510
Driver Training	20,136
Small District Transportation	20,090
Miller-Unruh Reading	19,869
Year Round Incentives	15,000
Educational Technology	13,055
Dropouts/High Risk Youth	12,500
10th Grade Counseling	7,603
Vocational Education	5,200
Demo Programs Reading & Math	4,367
Small District Bus Replacement	3,151
Ag. Voc. Ed. Incentive	3,000
Specialized Secondary Schools	2,101
Staff Development	1,509
Indian Education Centers & Programs	
Foster Youth Services	821
Bus Driver Instr. Training	811
Environmental Education	604
Voc. Ed. Student Organizations	500
CA International Studies	480
Drug/Alcohol Abuse/Prevention	440
School Business Pers. Staff Devel.	250
Intergenerational Education	165
School/Law Enforcement Partnership	150
Classroom Teacher Instructional	
Improvement Grants	50

TOTAL

\$3.9 billion (rounded)

Source: Legislative Analyst.

There are several operational definitions for categorical programs. The one PACE uses excludes district revenue limits, teachers' retirement, instructional time incentives, necessary small schools, summer school, revenue limit equalization, and county office revenue. These are funding formulas and not essentially programs.

In Conditions of Education in California 1988, PACE undertake a lengthy description and analysis of California's categorical programs. Readers are referred back to that publication for a discussion of recent legislative action affecting categoricals, rethinking California's strategy, implications of recent federal research, and alternatives for improving California categoricals.

Figure 6.12 is illustrative of the variety and size of selected categorical programs. Several issues related to California's current categorical aid structure, including the need to rethink and restructure categorical programs, are discussed in Chapter 8. There are too many categorical programs, many of the numbers used to allocate funds are out-of-date, and the system needs an overhaul.

<sup>&</sup>lt;sup>1</sup>Allan Odden and David Marsh, *How State Education Reform Can Improve Secondary Schools* (Berkeley, CA: University of California, Berkeley, Policy Analysis for California Education, December 1987).

<sup>&</sup>lt;sup>2</sup> Academic Senates, 1984.

<sup>&</sup>lt;sup>3</sup> State of California, Department of Education, *Performance Report for California Schools 1988* (Sacramento, CA: State Department of Education, 1988), 3.

<sup>&</sup>lt;sup>4</sup> Educational Testing Service, What Americans Study (Princeton, NJ: ETS, 1989), 2.

<sup>5</sup> Ibid.

<sup>&</sup>lt;sup>6</sup> Ibid.

<sup>&</sup>lt;sup>7</sup> Rolf Blank, "State-by-State Indicators of Science and Mathematics Education: Preliminary Report" (Washington, DC: Council of Chief State School Officers, State Education Assessment Center, October 1989), 1.

<sup>8</sup> Ibid.

# Chapter 7

# **Student Performance**

California, like the nation, has seen a major decline in the intellectual performance of its students. This nationwide decline has been difficult to document precisely because of the absence of a standard metric in the K-12 grades. States test different grades and use different tests, which are comparable only through imperfect equating techniques.

Nevertheless, the collective evidence, including widely used and commonly applied college aptitude and achievement tests, is indisputable: a significant drop in student performance occurred. This decline initially was evident in the 1970s. It appears to have bottomed out in the early eighties.

This chapter focusses largely on two questions: (1) what is the California trend in educational achievement? (Are test scores of the state's students improving or not? How do California students compare with those throughout the nation?), and (2) are California's minority students closing the achievement gap, and how do they compare with minority students throughout the nation?

#### **Elementary and Secondary Test Scores**

During the past 10 years, California third, sixth, eighth, and twelfth graders improved their scores on the statewide California Assessment Program (CAP) test in reading, writing, and mathematics (Figure 7.1). While the general pattern is one of steady improvement, it does not hold uniformly for all grades and years.

Third Grade: For the past two years, third grade scores in reading, writing, and math have declined slightly (Figure 7.2). In spite of these recent declines, (five points in reading, nine points in writing, and seven points in math) the decade-long trend is clearly favorable. Improvement over the 10-year period totals 27 points in reading and 28 points in writing and math.

Sixth Grade: Sixth grade scores also demonstrate considerable improvement over the 10-year period (up 12 points in

#### **HIGHLIGHTS**

- During the past 10 years, California students have improved their scores on the statewide California Assessment Program (CAP) test of reading, writing, and mathematics. While the general pattern is one of steady improvement, it does not hold uniformly for all grades and years.
- At most grade levels and in most tested subjects,
   California students rank near the national average.
- With an increased emphasis on widening access to postsecondary education, a greater proportion of the California student population has been taking the SAT.
- California verbal SAT scores have improved slightly since 1983 despite a small dip in 1988–89.
- California math SAT scores have remained at a level higher than the National Average since 1978-79.
- Scores from the College Board Achievement Tests reveal California students to be substantially below their counterparts nationwide.
- The percentage of California students scoring higher than 500 on SAT and College Achievement tests has increased over the last five years. These increases have occurred across all major subjects.
- Over the past five years, the number of California high school seniors taking Advanced Placement exams has more than doubled, as has the number of students passing the exams.
- The proportion of California students who excel at SAT, Achievement Tests, and Advanced Placement exams has increased steadily for several years.
- The achievement gap continues to be substantial for blacks and Hispanics. For the college bound portion of the minority student population, however, significant progress has been made in closing the achievement gap with white students.

FIGURE 7.1 Average CAP Scores by Grade Level and Content Area, and Difference in Scores by Year, 1979-80 Through 1988-89

		Avera	ige test :	score, b	y year							Year (	_
												83–84	
Grade level and			01.00					01.00			to	to	to
content area	79–80	80–81	81–82	82–83	83-84	84-85	85–86	86–87	87–88	88–89	88–89	88–89	88–89
Grade 3						_							
Reading	250	254	258	263	268	274	280	282	282	277	+27	+9	-5
Written Language	250	255	260	266	272	279	285	287	284	278	+28	+6	-6
Mathematics	250	254	261	267	274	278	283	285	281	278	+28	+4	-3
Grade 6													
Reading	250	252	254	253	249	253	260	260	265	262	+12	+13	-3
Written Language	250	253	257	259	260	265	271	271	273	269	+19	+9	-4
Mathematics	250	253	258	260	261	264	268	268	270	267	+17	+6	-3
Grade 8													
Reading	_	_	_		250	240	243	247	252	256	_	+6	+4
Written Language	_	_	_	-	250	246	248	254	263		_	_	_
Mathematics	_	_	_		250	251	253	259	264	269		+19	+5
History/Social Science	<b>-</b>	_	_	_	_	250	243	247	253	259	_	+9	+6
Science	_	_			_	_	250	256	263	267	_	+17	+4
Grade 12													
Reading	63.1	63.4	63.2	63.1	62.2	62.9	62.7	63.6	250	248	_	+12*	-2
Written Language	62.4	63.1	63.2	63.0	62.6	63.2	63.4	64.1	_	250	_	_	_
Spelling	68.8	69.0	69.5	69.5	69.4	69.7	70.1	70.6	_	_	_	_	_
Mathematics	66.8	68.0	67.7	67.7	67.4	68.3	68.7	70.0	250	256	_	+22*	+6

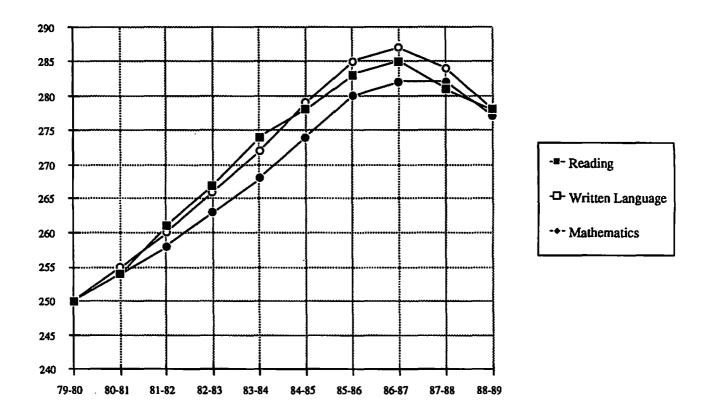
Note: The scores for grades three, six and eight are reported in scaled score units. These scores range from approximately 100 to 400, with a statewide average of 250. The base year for grades three and six was 1980. The grade eight test was first administered in 1983-84 and history-social science was added in 1984-85. The scores for grade twelve until the 1987-88 school year represented the percentage of questions answered correctly.

SOURCE: California State Department of Education.

<sup>\*</sup> Changes calculated by State Department of Education.

STUDENT PERFORMANCE 79

FIGURE 7.2 Reading, Writing, and Math CAP Scores for Grade 3, 1979-80 Through 1988-89



SOURCE: California State Department of Education

reading, 19 points in written language, and 17 points in mathematics). Also like third grade scores, those of sixth graders declined slightly in 1988–89 (Figure 7.3).

Eighth Grade: Eighth grade scores in the basic subjects have risen steadily since 1983–84, when the eighth grade test was inaugurated (as part of California's educational reform activities). Score increases total six points in reading, 13 in written language, and 19 in mathematics. In addition, history/social science and science are tested at the eighth grade level. Scores in these areas also have increased, rising 9 points in history/social science and 17 points in science (Figure 7.4).

Twelfth Grade: Grade 12 scores have not shown the same overall pattern of improvement found in the lower grades. In all four of the subjects tested (reading, writing, spelling, and mathematics) twelfth graders' scores were essentially level from 1979–80 through 1986–87.

In 1987-88, the test was changed, and the scoring system was changed from percentage correct to scaled scores, making the scores before and after 1987-88 difficult to compare

(Figure 7.5). Twelfth graders lost two points on their reading scores between 1987-88 and 1988-89 and gained six points in mathematics. A State Department of Education analysis, equating scores before and after the change, estimates that over the last five years, twelfth grade CAP reading scores have increased by approximately 12 points, while math scores increased 22 points.

In past years, the California State Department of Education has conducted studies in which CAP scores have been equated with other standardized tests used throughout the United States. In recent years, these studies have indicated that, at most grade levels and in most of the tested subjects, California students ranked near the national average. Such a condition probably prevails in 1989, however, these equating studies were not carried out during the past two years, so we do not have current comparative data from this source.

A new basis for comparing California's elementary and secondary students with those throughout the nation will soon be available from the National Assessment of Educational Progress (NAEP) data. For now, comparing California with

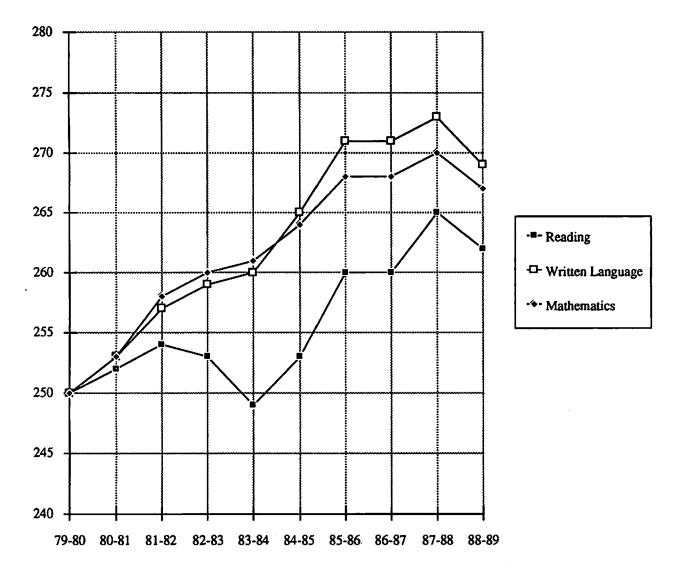


FIGURE 7.3 Reading, Writing, and Math CAP Scores for Grade 6, 1979-80 Through 1988-89

SOURCE: California State Department of Education

the rest of the nation will be limited to college admission, advanced placement, and achievement tests, and to the subpopulation of college-bound students who take these tests.

# College Admission and Achievement Tests

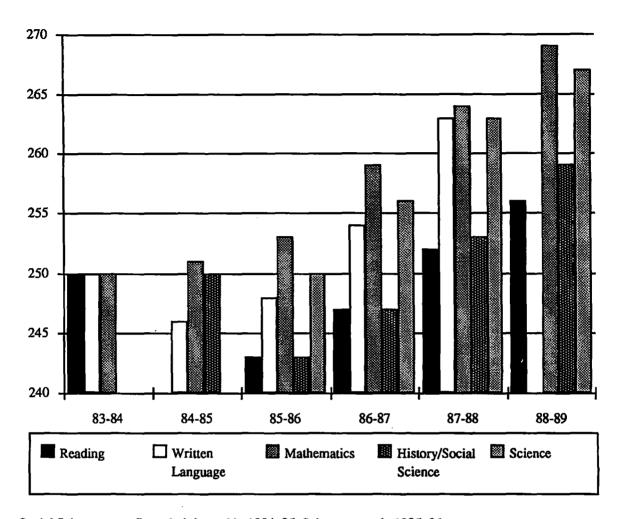
The long period of decline in academic performance is reflected dramatically in the past pattern of decreasing Scholastic Aptitude Test (SAT) scores. From 1962 to 1980, national SAT verbal and math scores declined 54 and 36 points, respectively. From 1971 (the first year for which state data are available) to 1982, California SAT verbal scores dropped from 464, which was higher than the national average, to 424, one point below the national average.

This widespread decline appears to have reached its low point in the early eighties. Since then, SAT math scores have risen appreciably, both in California and the nation, but SAT verbal scores have remained close to their 1982–83 lows (Figures 7.6, 7.7, and 7.8).

During this period, with an increased emphasis on widening access to postsecondary education, a greater proportion of the population has been taking the SAT. Whenever the pool of test takers expands, scores have a tendency to drop.

In seeking to use SAT scores for comparison purposes, it is important to remember that different states' tested populations include different proportions of their total student populations and different proportions of lower-achieving students. These differences make state-to-state comparisons difficult if

FIGURE 7.4 CAP Scores for Grade 8, 1983-84 Through 1988-89



Note: Social Science exam first administered in 1984-85; Science exam in 1985-86.

SOURCE: California State Department of Education

not inappropriate.

In state and national averages, lower scores due to more students taking the test could offset and mask general improvements that may be occurring throughout the overall student population.

One way of avoiding inappropriate conclusions is to compare proportions of total students who score within a given range. While this will not provide information about the performance of non-college-bound students, it will provide a comparable figure assessing the quality of preparation for the top students between states or between years.

Over the last five years, the percentage of all high school seniors (national results) who have taken and scored over 600 on the SAT has increased from 2.5 percent to 3.4 percent for

the verbal test, and from 6.5 percent to 9.2 percent for the math test (Figure 7.9).

The SAT is designed to measure scholastic aptitude and to predict college performance in the freshman year. While it is correlated with academic knowledge, a more direct measure of subject matter knowledge (for the college-bound population) is the College Board Achievement Tests.

Unlike the equating studies for CAP and SAT scores, both of which show California close to the national average, the scores from the College Board Achievement Tests reveal California students taking this test to be substantially below their counterparts nationwide.

This is the case for 11 of the 14 achievement tests. Only on the Spanish, Latin, and Hebrew tests do California students

FIGURE 7.5 CAP Reading, Writing, Spelling, and Math Scores for Grade 12, 1979-80 Through 1988-89

Grade level and content area				Average	est score,	by year				
	79–80	80–81	81–82	82-83	83–84	84-85	85–86	86–87	87–88	88–89
Grade 12										
Reading	63.1	63.4	63.2	63.1	62.2	62.9	62.7	63.6	250	248
Written Language	62.4	63.1	63.2	63.0	62.6	63.2	63.4	64.1	_	250
Withen Language					CO 4	<b>607</b>	70.1	70.6		
Spelling	68.8	69.0	69.5	69.5	69.4	69.7	70.1	70.0	_	_

Note: Scoring system was changed for 1987-88 administration.

SOURCE: California State Department of Education.

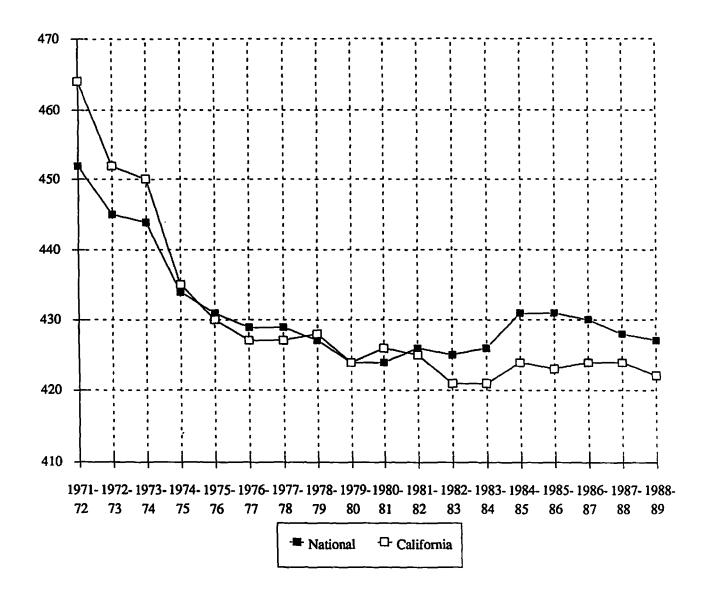
FIGURE 7.6 Scholastic Aptitude Test (SAT) Scores for California and the Nation, 1971-72 Through 1988-89

	Natio	onal	Calif	ornia
Year	Verbal	Math	Verbal	Math
1971-72	453	484	464	493
1972-73	445	481	452	485
1973-74	444	480	450	484
1974-75	434	472	435	473
1975-76	431	472	430	470
1976-77	429	468	427	470
1977-78	429	468	427	466
1978-79	427	467	428	473
1979-80	424	466	424	472
1980-81	424	466	426	475
1981-82	426	467	425	474
1982-83	425	468	421	474
1983-84	426	471	421.	476
1984-85	431	475	424	480
1985-86	431	475	423	481
1986-87	430	476	424	482
1987-88	428	476	424	484
1988-89	427	476	422	484

SOURCE: College Board.

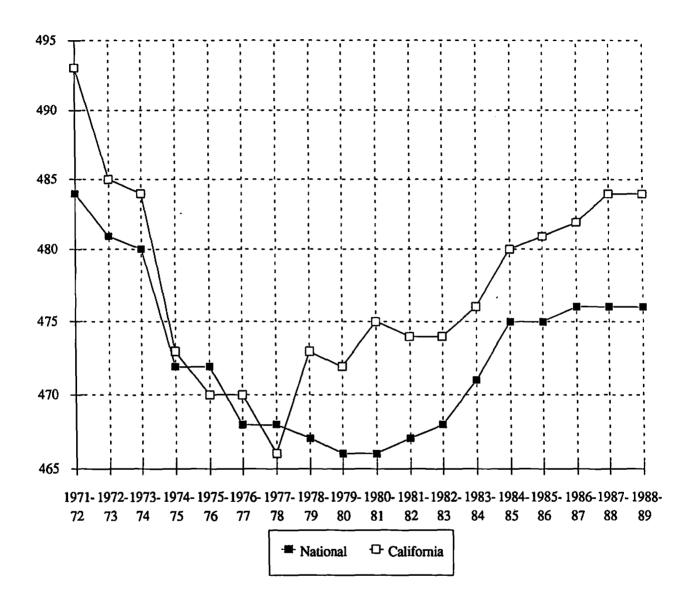
STUDENT PERFORMANCE 83

FIGURE 7.7 Scholastic Aptitude Verbal Test Scores for California and the Nation, 1971-72 Through 1988-89



SOURCE: College Board

FIGURE 7.8 Scholastic Aptitude Math Test Scores for California and the Nation, 1971-72 Through 1988-89



SOURCE: College Board

STUDENT PERFORMANCE 85

FIGURE 7.9 SAT Scores by Number and Percent of Seniors Scoring over 450 and 600 Verbal and 500 and 600 Math, California and the Nation, 1984 to 1989

Year of Test	1983–84	1984–85	1985–86	1986–87	1987–88	198889
California Verbal				•		
# seniors	266,889	254,211	243,398	251,281	266,028	242,144
# scoring ≥ 450	41,425	43,676	44,031	48,048	50,108	48,075
% seniors ≥ 450	15.5	17.2	18.1	19.1	18.8	19.9
# scoring ≥ 600	6,639	7,348	7,696	8,787	8,700	8,509
% seniors ≥ 600	2.5	2.9	3.2	3.5	3.3	3.4
Mathematics						
# scoring ≥ 500	44,074	46,950	47,581	52,052	54,384	52,730
% seniors ≥ 500	16.5	18.5	19.6	20.7	20.4	21.8
# scoring ≥ 600	17,393	18,144	20,226	22,329	22,901	22,291
% seniors ≥ 600	6.5	7.1	8.3	8.9	8.6	9.2
Nation Verbal				·		
# seniors	2,678,000	2,599,000	2,599,000	2,601,000	2,674,000	2,661,844
# scoring ≥ 450	408,171	422,556	431,984	464,805	480,788	458,958
% seniors ≥ 450	15.2	16.3	16.6	17.9	18.0	17.2
# scoring ≥ 600	70,479	76,977	48,742	88,000	83,035	84,431
% seniors ≥ 600	2.6	3.0	3.1	3.4	3.1	3.2
Mathematics						
# scoring ≥ 500	398,010	423,766	423,484	457,729	488,095	465,858
% seniors ≥ 500	14.9	16.3	16.3	17.6	18.3	17.5
# scoring ≥ 600	160,634	166,939	179,586	197,971	199,688	196,002
% seniors ≥ 600	6.0	6.4	6.9	7.6	7.5	7.4

Source: State Department of Education

FIGURE 7.10 Average College Board Achievement Scores for California and the Nation, 1988 and 1989

	Mean C	alifornia	Mean N	Vational	Diffe	гепсе
	Sc	ore	Sc	ore	(US -	Calif)
Subject Area	1988	1989	1988	1989	1988	1989
English Comp.	490	491	521	523	-31	-32
Mathematics I	530	525	549	548	-19	-23
American History	509	513	529	534	-20	-21
Mathematics II	651	652	664	666	-13	-14
Spanish	549	555	536	546	13	+9
Biology	517	527	553	561	-36	-34
Literature	501	496	528	528	-27	-32
Chemistry	557	553	577	576	-20	-23
French	522	528	538	549	-16	-19
Physics	574	574	599	596	-25	-22
German	553	567	565	572	-12	-5
European History	529	534	549	547	-20	-13
Latin	561	576	557	562	+4	+14
Hebrew	646	654	637	637	+9	+17

SOURCE: College Board

score higher than the national average (Figure 7.10).

Moreover, this disadvantage has increased in recent years. Since 1981, in the core areas of English, Math II, Biology, Chemistry, and Physics, the gap between California and the national average has widened (Figures 7.10, and 7.11).

In these subject tests, as with the SAT, the percentage of California students scoring higher than 500 has increased over the last five years (Figure 7.12). These increases have occurred across all the major subjects: American History, biology, chemistry, English, literature, and math level 2. These scores are consistent with SAT results, indicating an increase in the proportion of students achieving at the very highest levels.

Comparing California to the national average is useful, but for several reasons it may be somewhat misleading. First, because of its size, California composes a substantial portion (about 10%) of the national average. Thus, comparing California to the national average is, to an extent, comparing it to itself. (It would, of course, be possible to remove California from the national average, but that would create an odd and

unfamiliar figure.)

Second, the SAT is not the primary college admission test used in approximately half the states. This means that in those states where it is not the principal test, the much smaller number taking it are likely to be more able students applying to more selective, out-of-state schools.

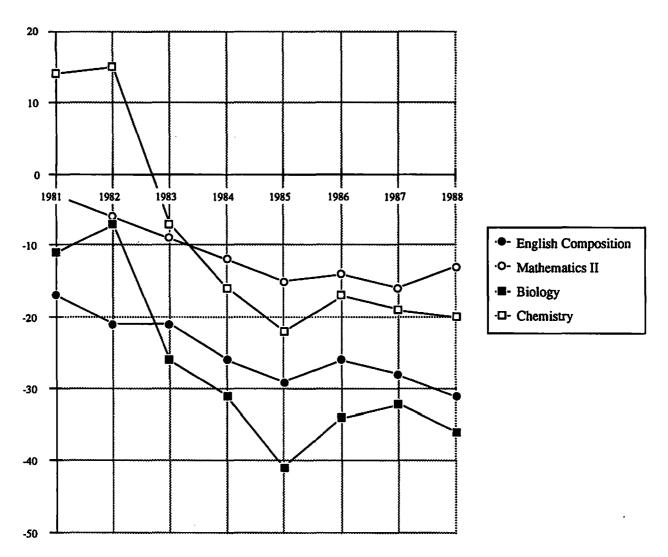
Third, many states in the nation are not comparable to California on such educationally important factors as the number of students attending inner city schools, the proportion of disadvantaged and minority students, and the number of students whose native language is not English.

To provide a better basis of comparison, Figures 7.13, 7.14, and 7.15 present both SAT and Achievement Test scores for California and five urban states which predominantly use the SAT (Florida, Massachusetts, New York, Pennsylvania, and Texas).

When compared to the five large urban states which predominantly use the SAT, California performs better than when compared to the national average. It performs better than all of them on the verbal portion of the SAT (except for

Student Performance 87

FIGURE 7.11 Differences Between National and California College Board Achievement Scores, 1981-1988



SOURCE: College Board

a slight advantage for Massachusetts and Pennsylvania) and scores much better than all of them on the math portion of the SAT (Figures 7.13 and 7.14).

However, when the same comparison is made on the Achievement Tests, California's disadvantage relative to the national average is the same or greater.

Figure 7.15 demonstrates again that California's SAT scores are slightly higher than both the national average and the average of five comparable urban states (except, as noted earlier, the national SAT verbal average). But on the composite score for the 14 Achievement Tests, and on five of the seven selected individual tests, California scores further below the comparison states than the national average.

The conclusion appears to be that while the larger number of California students taking the more general SAT aptitude test score nearly as well as or better than both the national average and the average of five similar urban states, students taking the more content-oriented Achievement Tests do not do as well as similar students throughout the nation, and even less well than their counterparts in comparable urban states.

#### **Advanced Placement Exams**

Another measure of achievement for college-bound students is the so-called Advanced Placement examinations. Students take any of the more than 20 nationally developed subject-area

FIGURE 7.12 College Board Achievement Tests

Achievement Test	1983–84	1988-89	% Increase
	Percent of C	California Seniors Scoring ≥ 50	0
American History	2.6	3.7	42
Biology	1.3	1.8	38
Chemistry	1.0	1.4	40
English	6.3	8.8	40
Literature	0.8	1.6	100
Math Level 2	3.9	4.7	21
	Percent of	National Seniors Scoring ≥ 500	)
American History	0.9	1.3	33
Biology	1.1	1.2	9
Chemistry	1.1	1.0	-9
English	3.9	4.4	13
Literature	0.4	0.6	50
Math Level 2	1.5	1.2	-20

Source: College Board

tests as high school students. A score of three or better is accepted by most colleges and universities as equivalent to having completed a college-level course in the subject.

As with the Achievement Tests, Advanced Placement test results reveal a pattern of steadily increasing numbers of students demonstrating high achievement over a five-year period.

Over the past five years, the number of California high school seniors taking AP exams has more than doubled, as has the number of students passing the exams. The proportion of all seniors who have taken and passed AP exams has also doubled, from 9.5 students per hundred seniors to 21.5 per hundred (Figure 7.16).

California students compare well with the nation in this area. The percentage of seniors who take exams in California is 12.9 percent, compared to 7.4 percent nationally. California's figure of 21.5 seniors per hundred passing with a

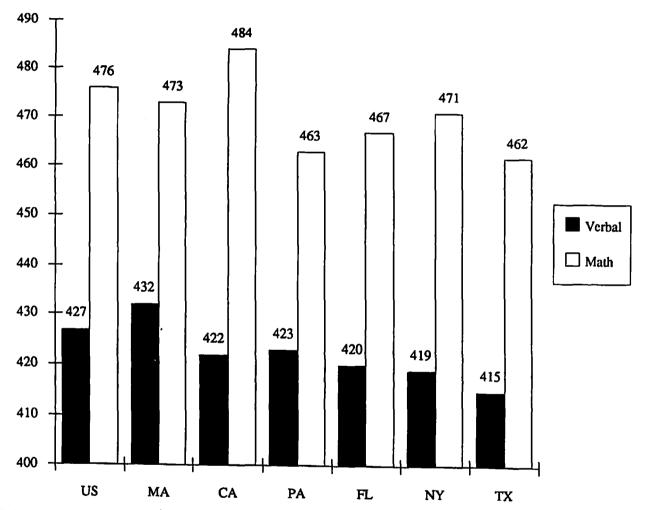
score of three or more is almost twice the national figure of 11.2 per hundred (Figure 7.16).

Here again, a pattern of increasing achievement over time among the college-bound population is evident. In addition, the results of these tests indicate that California's collegebound population compares well with the nation.

What are the trends in student achievement in California? There are clear and consistent indications that the state's highest-performing students are achieving at a high level. The proportion of California students who excel at the Scholastic Aptitude Test, College Board Achievement Tests, and at the Advanced Placement exams has increased steadily for several years.

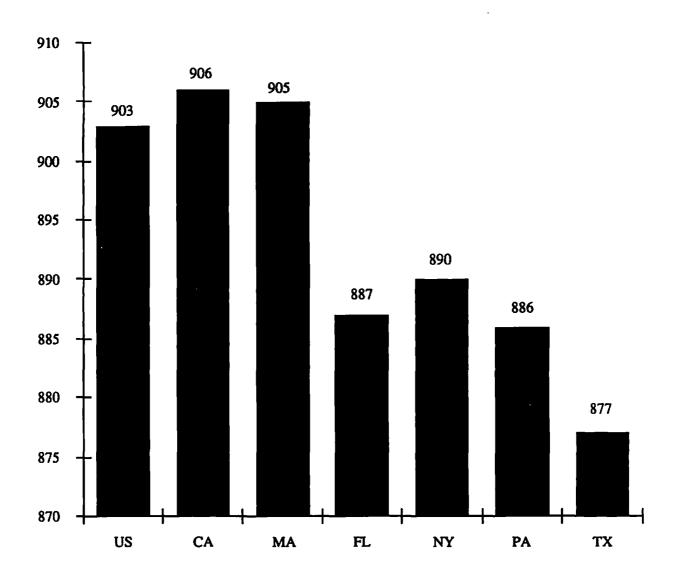
The picture is less clear, however, when examining the scores of the entire student population. There, the results are mixed, combining a general upward trend over time with uneven performance at selected grades in selected years.

FIGURE 7.13 SAT and Verbal and Math Scores for California, the Nation and Five Urban States Which dominantly Use the SAT, 1988



SOURCE: College Board

FIGURE 7.14 Total SAT Scores for California and Five Urban States Which Predominantly Use the SAT, 1988



SOURCE: State Department of Education

STUDENT PERFORMANCE 91

FIGURE 7.15 SAT and Selected College Board Achievement Test Scores for California, Five Urban States, and the Nation as a Whole, 1988

	California	Average of Five Urban States (FL, MA, NY, PA, TX)	National Average
Selected Achievement	<b>t</b> .		
Tests:			
Composition	490	530	521
Math I	530	558	549
Am. History	509	537	529
Math II	651	666	664
Biology	517	557	553
Chemistry	557	575	577
Physics	574	591	599
Average Score for			
All 14 Tests	521	546	543
SAT Verbal	424	423	428
SAT Math	484	467	476
SAT Total	908	890	904

SOURCE: California State Department of Education

FIGURE 7.16 California and National Advanced Placement Comparisons

# California Counts and Percents

Test Results	1983–84	1984–85	1985–86	1986–87	1987–88	1988–89	1983–89
Total Exams	35,684	42,948	50,163	59,489	70,106	78,174	
(% Increase)		20.4	16.8	18.6	17.8	11.5	119
Total Persons	27,564	32,654	37,378	42,435	47,939	52,226	
(% Increase)		18.4	14.5	13.5	12.9	8.9	89
Total Passing	25,337	29,728	35,513	41,179	48,410	52,122	
(% Increase)		17.3	19.5	16.0	17.6	7.7	106
Number Passing Per 100 Seniors*	9.5	11.7	14.6	16.4	18.2	21.5	126

### National Counts and Percents

Test Results	1983–84	1984–85	1985–86	1986–87	1987–88	1988–89	1983–89
Total Exams	239,666	280,972	319,224	369,056	419,101	455,996	90
(% Increase)	13.5	17.2	13.6	15.6	13.6	8.8	
Total Persons	177,406	205,650	231,378	262,081	288,372	309,751	75
(% Increase)	12.3	15.9	12.5	13.3	10	7.4	
Total Passing	167,914	186,240	215,809	249,862	281,566	297,813	77
(% Increase)		10.9	15.9	15.8	12.6	5.8	
Number Passing per 100 Seniors*	6.3	7.2	8.3	9.6	10.5	11.2	78

<sup>\*</sup> This number represents the number of seniors passing as compared to the total number of seniors in the class, including those not taking an AP exam.

Source: State Department of Education

FIGURE 7.17 CAP Scores by Ethnic Group, 1986-87 Through 1988-89

			Reading	,	V	Vriting/La	nguage			Math		
		87	88	89	87	88	89	) 	87	88	89	
Grade 3												
All Students		282	282	277	287	284	278	}	285	281	278	•
Limited English		217	214	217	224	217	220	)	242	236	239	
Amer. Ind./Alaskan		272	269	263	277	269	263	}	276	272	261	
Asian		288	292	285	288	288	281		310	307	303	
Pacific Islander		268	267	268	279	270	271		275	266	270	
Filipino		298	299	294	306	303	298		304	298	296	
Hispanic		245	244	239	252	248	243		255	251	247	
Black		237	238	234	249	245	240		239	231	227	
White		308	307	302	311	307	302	2	306	301	299	
Grade 6												
All Students		260	265	262	271	273	269	)	268	270	267	
Limited English		181	187	187	199	200	200	)	210	212	210	
Amer. Ind./Alaskan		248	259	254	256	262	257	7	251	257	254	
Asian		272	279	275	279	283	279	)	307	309	308	
Pacific Islander		245	250	246	262	259	260	)	259	256	255	
Filipino		277	278	274	286	284	283	3	387	285	287	
Hispanic		222	229	225	238	240	23:		234	236	232	
Black		223	228	225	241	242	23		224	226	221	
White		288	293	289	296		29		291	293	291	
Grade 12												
Amer. Ind./Alaskan		_	217	218	_	_	22	3	_	217	224	
Asian		_	235	230	_	_	25	3	_	296	304	
Pacific Islander			211	208	_	_	22	4	_	213	227	
Filipino			248	247		_	26	б	_	246	252	
Hispanic		-	201	200	_	_	21	2	_	197	203	
Black		_	199	196	_	_	20	9	_	183	189	
White		_	285	286	_	_	27	8	-	277	284	
Grade 8		Reading		_	Math			огу/Soc			Science	
All Students	247	252	256	259	264	269	247	253	259	256	263	
Limited English	145	148	158	190	189	203	150	152	172	165	168	
Amer. Ind./Alaskan	211	217	223	222	230	240	212	220	232	233	241	
Asian	266	275	282	314	322	323	270	282	288	269	280	
Pacific Islander	223	229	233	241	246	251	225	226	243	235	244	
Filipino	264	266	267	279	282	287	261	263	271	268	271	
Hispanic	202	205	206	212	217	223	199	205	212	213	218	
Black	200	205	208	200	204	214	195	201	209	206	212	
White	279	285	294	288	294	300	281	288	294	289	297	

<sup>\*</sup> Ethnic Breakdowns grades 3 and 6 not available prior to 1986-87. Grade 12 not administered prior to 1988. Grade 12 writting / language scoring changed for 1987-88.

Source: State Department of Education

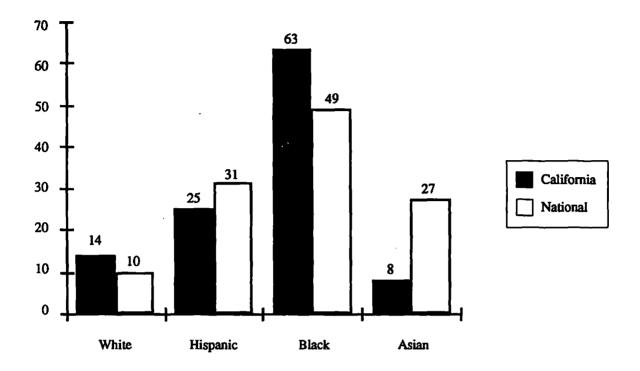
FIGURE 7.18 Ethnic Group SAT Scores for California and the Nation, 1978-1987\*

			N	ATION	<b>AL</b>			CA	LIFORNI	Α	
Year		Total	White	Asian	Hisp.	Black	Total	White	Asian	Hisp.	Black
1978	Verbal	429	446	401	370	332	427	453	400	367	336
	Math	468	485	510	402	354	466	488	501	396	350
	Total	897	931	911	772	686	894	941	901	763	680
1979	Verbal	427	444	<b>396</b>	<b>37</b> 0	330	428	453	394	369	334
	Math	467	483	511	410	358	473	492	502	408	36
	Total	894	927	907	780	688	900	945	896	777	69
980	Verbal	424	442	396	372	330	424	450	392	371	33
	Math	466	482	509	413	360	472	491	498	408	36
	Total	890	924	905	785	690	896	941	890	779	69
981	Verbal	424	442	397	373	332	426	452	391	372	34
	Math	466	483	513	415	362	475	493	503	412	36
	Total	890	925	910	788	694	901	945	894	784	70
982	Verbal	426	444	398	377	341	425	452	388	375	34
	Math	467	483	513	416	366	474	492	502	413	37
	Total	893	927	911	793	707	899	943	890	788	72
983	Verbal	425	443	395	375	339	421	449	382	374	34
	Math	468	484	514	417	369	474	492	500	414	37
	Total	893	927	909	792	708	895	941	882	788	72
984	Verbal	426	445	398	376	342	421	450	382	373	34
	Math	471	487	519	420	373	476	493	506	419	38
	Total	897	932	917	796	715	897	943	888	792	73
985	Verbal	431	449	404	382	346	424	454	385	379	35
	Math	475	490	518	426	376	480	497	505	421	38
	Total	906	939	922	808	722	904	951	890	800	74
987	Verbal	430	447	405	379	351	424	453	387	374	35
	Math	476	489	521	424	377	482	499	508	419	38
	Total	906	936	926	803	728	906	952	895	793	74
.988	Verbal	428	445	408	382	353	424	453	390	377	36
.700	Math	476	490	522	428	384	484	501	509	424	39
	Total	904	935	930	810	737	908	954	899	801	75
000	Manha 1	405	110	400	201	251	400	ASS	202	274	3(
1989	Verbal Math	427 476	446 491	409 525	381 430	351 386	422 484	455 504	392 512	376 426	39
	Total	903	937	934	811	737	906	959	904	802	76
m 12	** • •										
Ten Year Differnece	Verbal Total	+9	+10	+27	+31	+49	+6	+14	+8	+25	+(
PHICHICLE	ıvıaı	TŽ	710	741	431	TTZ	TU	T. 7.4	TO	T4J	71

SOURCE: California State Department of Education.

STUDENT PERFORMANCE 95

FIGURE 7.19 Ten-Year Increase in SAT Scores for Ethnic Minorities, 1979-89



Source: College Board

FIGURE 7.20 Number of Graduates by Ethnic Group and Percentage of Graduates Completing University of California a-f Requirements

Ethnic	Class of	f '85	Class of	F '86	Class of	f '87	Class of	? <b>'88</b>	Increase in
Group	Grads	%	Grads	%	Grads	%	Grads	%	a-f proportion
Amer. Ind./									
Alaskan	1,833	12.3	1,658	16.5	1,729	15.6	1,872	20.9	70%
Asian	16,693	42.3	17,882	45.5	19,543	48.6	21,622	50.8	20%
Black	19,011	17.2	17,387	45.5	18,809	20.6	19,444	22.4	30%
Filipino	4,483	30.5	4,976	33.0	5,199	35.0	5,957	38.5	26%
Hispanic	41,958	15.4	43,556	15.9	45,872	15.9	48,040	19.5	27%
Pac. Isl.	1,205	18.8	1,153	22.5	1,097	21.1	1,207	23.4	24%
White	140,263	27.5	141,414	27.7	145,165	30.1	150,376	31.8	16%
Total	225,448	25.4	229,026	26.1	237,414	28.1	249,518	30.3	19%

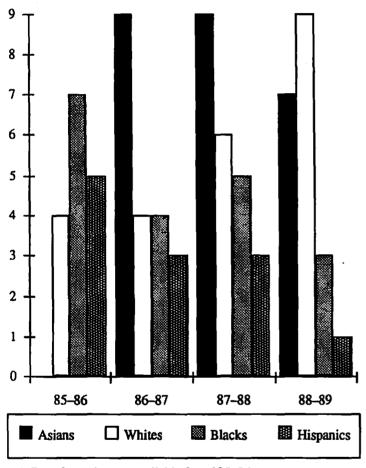
Source: State Department of Education

FIGURE 7.21 1989 California SAT Scores: Distribution by Gender

	Verbal								Math			
Male Number	%	Female Number	%	Total Number	%	Score	Male Number	%	Female Number	%	Total Number	%
53	0	54	0	107	0	750–800	1,147	2	292	0	1,439	1
490	1	367	1	857	1	700-740	2,914	5	1,128	2	4,042	3
1,361	2	1,122	2	2,483	2	650-690	4,627	8	2,503	4	7,130	6
2,729	5	2,333	4	5,062	4	600-640	5,753	10	3,927	7	9,680	8
4,320	8	4,088	7	8,408	7	550-590	7,519	14	6,197	10	13,716	12
6,797	12	6,572	11	13,369	12	500-540	8,101	15	8,622	14	16,723	14
8,610	16	9,179	15	17,789	15	450-490	7,720	14	9,489	16	17,209	15
9,053	16	9,928	16	18,981	16	400-440	6,639	12	9,570	16	16,209	14
8,169	15	9,624	16	17,793	15	350-390	5,361	10	8,396	14	13,757	12
6,547	12	7,997	13	14,544	13	300-340	3,403	6	6,257	10	9,660	8
4,171	8	5,192	9	9,363	8	250-290	1,799	3	3,250	5	5,049	4
3,012	5	3,784	6	6,796	6	200–240	329	1	609	1	938	1
55,312		60,240		115,552		Number	55	,312	60,240		115,552	
429		416		422		Mean		510	461		484	
115			112		113		viation	123		113		121

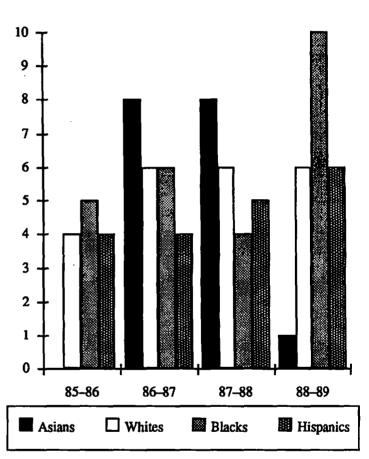
Source: College Board

FIGURE 7.22 Changes From Previous Year in Grade 8 CAP Reading Scores\*



\* Data for Asians unavailable for 1985–86. Source: State Department of Education

FIGURE 7.23 Changes From Previous Year in Grade 8 CAP Math Scores\*



\* Data for Asians unavailable for 1985–86. Source: State Department of Education

FIGURE 7.24 CAP Scores of Limited English Proficient (LEP) Students, Grades 3, 6, 8, and 12, and Index of LEP Progress,\* 1979-80 Through 1987-88

Language Fluency	79–80	80–81	81–82	82-83	83–84	8485	85–86	86–87	87–88
				Reading					
Grade 3			-				_		
English only	264	268	272	277	281	286	291	292	290
LEP	166	169	176	186	197	206	215	217	214
Index of LEP Progress*	62.9	63.1	64.7	67.1	70.1	72.0	73.9	74.3	73.8
Grade 6							•		
English Only	_	_	264	265	262	267	273	274	278
LEP	_	_	156	159	161	170	182	181	187
Index of LEP Progress*	_	_	59.1	60.0	61.5	63.7	66.7	66.0	67.3
Grade 8									
English Only	_	_		_	262	_	256	261	264
LEP	_			_	124	_	136	145	148
Index of LEP Progress*	_	_	_	_	47.3	_	53.1	55.6	56.1
Grade 12									
English Only	_	_	_	_		64.6	64.6	65.4	262
LEP	_	_	_	_	_	43.2	42.9	44.5	131
ndex of LEP Progress*	-	_	<u>·</u>	_	_	66.9	66.4	68.0	50.0
				Writing					
	<u> </u>								
Grade 3	264	260	274	280	284	201	296	297	292
English Only		268	274			291			
LEP	168	172	181	191	203	213	221	224	217
Index of LEP Progress*	65.6	65.2	66.1	68.2	71.5	73.2	7437	7534	74.3
Grade 6									
English Only	_	_	262	269	271	276	282	283	284
LEP	_	_	171	179	181	190	200	199	200
Index of LEP Progress*	-	_	65.3	66.5	66.8	68.8	70.9	70.3	70.4
Grade 8									
English Only	_	_	_		261	_	259	266	272
LEP	-	_	_	_	138		153	166	171
Index of LEP Progress*	_	_	<del></del>	_	52.9	_	59.1	62.4	62.9
Grade 12									
Constint Only	_	_		. —	_	64.7	65.1	65.8	_
English Only				-		4	440		
English Only LEP Index of LEP Progress*		_	_	_	<del>-</del>	45.5 70.3	44.9 69.0	46.8 71.1	

(Continued on Following Page)

STUDENT PERFORMANCE 99

FIGURE 7.24 CAP Scores of Limited English Proficient (LEP) Students, Grades 3, 6, 8, and 12, and Index of LEP Progress,\* 1979-80 Through 1987-88

Language Fluency	79–80	80–81	81–82	82–83	83-84	84-85	85–86	86–87	87–88
				Math					
Grade 3									
English only	260	264	269	274	281	285	290	291	286
LEP	191	199	211	219	229	237	242	242	236
Index of LEP Progress*	73.5	75.4	78.4	80.0	81.5	83.2	83.4	83.2	82.5
Grade 6									
English Only	_	_	264	268	270	273	277	278	279
LEP		_	143	199	201	207	212	210	212
Index of LEP Progress*	_	-	73.1	74.3	74.4	75.8	76.5	76.5	76.0
Grade 8									
English Only	_		_	· <b>—</b>	259	_	262	269	272
LEP	_		_	_	166	_	179	190	189
Index of LEP Progress*	-	_	_	_	64.1	-	68.3	70.6	79.5
Grade 12									
English Only	_	_		_	_	69.3	69.7	71.0	257
LEP	_	<del></del>	_	_	_	56.4	56.7	58.7	175
Index of LEP Progress*	_	_ '	_		_	81.4	81.3	82.7	68.1

Source: California Department of Education

## ARE CALIFORNIA'S MINORITY STUDENTS CLOSING THE GAP?

The extent to which society at large and the schools in particular are helping minority students to catch up to the educational achievement levels of white students continues to be a major policy concern and a focus of the educational reform movements in California and elsewhere.

The answer to the question of whether California's minority students are closing the achievement gap is mixed and ambiguous, in part because CAP scores for ethnic groups only recently have become available.

The data available from both CAP and the SAT indicate that:

- The achievement gap continues to be substantial for blacks and Hispanics. In recent tests, their scores are typically 15 to 30 percent below white scores on various parts of CAP and the SAT (Figures 7.17 and 7.18).
- Asian students are much closer to whites on the reading, writing, and verbal parts of both CAP and SAT tests—typically scoring on the order of five percent below whites—and they score higher than whites on the math portions of both tests.

• For the college bound portion of the student population, some significant progress has been made in closing the gap. Since 1979, white students in California have improved their total SAT scores by only 14 points, while Hispanic and black students have increased their average scores by 25 and 63 points, respectively. The pattern is similar nationwide. Asian students in California have increased their combined SAT scores by eight points during that same period (Figures 7.18 and 7.19).

From 1985 to 1988, minority students were also increasing the rate at which they complete the rigorous "a-f" course of study required for admission to the University of California (Figure 7.20). Increases in terms of both numbers and percentages of students completing "a-f" courses were recorded for all ethnic groups. Asians have consistently provided the greatest proportion of graduates meeting the requirements (more than half of all Asian graduates have done so in 1988). Following were Filipinos with 38.5 percent, whites with 31.8 percent, and Pacific Islanders with 23.4 percent.

In terms of growth, however, white students have made the smallest gains of any group during this period. Making the largest gains on white students are Native American students with a 70 percent increase; blacks, with a 30 percent increase; and Hispanics, with a 27 percent increase.

In California and the nation, scores of males were higher than those of females on both math and verbal tests. This is true in terms of mean scores and also in terms of the numbers and percentage of students scoring at the highest levels, with two exceptions. The percentages of men and women scoring above 700 on the verbal test are identical in California and the nation. In addition, women are more strongly represented than men in every score bracket above the mean on the written language subtest (Figure 7.21).

Overall, during the last three years black and Hispanic students have registered year-to-year gains in reading that are the somewhat less than those of white students; however, gains in math scores for the same period are higher for white, black, and Hispanic eighth graders than for Asians. White students have made the largest gains in reading (Figures 7.22 and 7.23).

CAP data on limited-English-proficient (LEP) students appear to give an encouraging picture. In the last 10 years, the percentage of LEP students has nearly doubled in the elementary grades. Their CAP reading and math scores have improved at a greater rate than those of native English speaking students.

Between the 1984–85 and 1987–88 years, elementary LEP students' combined reading, writing, and math scores have increased from 10 to 83 percent more rapidly than the scores of English-only students (Figure 7.24). Over the past three years, eighth grade LEP students' scores in reading and math have increased 58 percent faster than have all students' scores (Figure 7.17).

However, the two largest groups in the LEP population are Hispanics and Asians. These groups have, as noted above, quite different average scores and rates of improvement. Therefore, the average scores of the LEP group are probably the net result of the diverging patterns of Asian and Hispanic students.

In all, these scores indicate that some gains are being made in closing the minority gap, especially for college-bound high school students and students who are not proficient in English. However, the gap continues to be substantial, and overall performance, especially at the elementary level, indicates that there is still substantial room for improvement.

#### WHAT DO THE FINDINGS MEAN?

The following list of conditions illustrates the breadth of issues that have an influence on the academic performance of students:

- By the year 2000, California will have 1.6 million more K-12 students, requiring 46,000 more teachers and 2,100 more schools just to keep educational services at their present level.
- More than one in every five California children is reared in poverty, with concomitant educational deprivations; and that number is increasing.
- California is the most ethnically diverse state in the nation. Minority student enrollment already comprises a "majority" of total school enrollment, and this trend will continue.

Given these conditions, what conclusions can be drawn from the preceeding performance measures of California's public school students?

Overall, the academic performance of California's students is close to the national average, neither dramatically below nor reassuringly above it.

As measured by CAP tests, the performance of elementary and secondary school students has shown a generally upward trend over the past decade. However, the pattern is a halting and uneven one across grades, subjects, and years.

Over the last few years, California college-bound seniors have improved their SAT scores in math and surpassed the national average in verbal; nonetheless, neither California nor U.S. students have regained the ground lost over the last 20 years.

A larger absolute number and a greater proportion of the student body is scoring at the highest levels of achievement on SAT, College Board Achievement, and Advanced Placement exams.

The proportion of minority students who graduate from high school who meet the University of California's high school course requirements is increasing faster than for white graduates.

Asian students are scoring well, improving rapidly in reading, and continue to score excellently in math. Black and Hispanic students are gaining little ground in reading, but continue to close the achievement gap in mathematics.

At the same time, limited-English-proficient students, although their scores are low, are generally progressing very rapidly, more rapidly than English-proficient students, in both reading and math.

#### **Chapter 8**

## **Fiscal Resources**

California's public school system is the largest in the nation and requires the largest fiscal base. Total school funding for 1989-90 is estimated to be \$23.4 billion (Figure 8.1). More than five million students (counted in units of average daily attendance or ADA¹) receive educational services at an average cost of \$4,677 per student.² However viewed, this represents an awesome commitment. Few states expend this amount for all state and local governmental functions combined. In other words, financing California public schools is one of the largest fiscal undertakings in the United States. Its sheer magnitude, however, makes explaining school funding to the public a difficult task.

California school funding also has increased substantially during the 1980s (Figure 8.1). Nevertheless, after adjusting for enrollment growth and inflation, school funding during this decade displays an uneven course. Between 1981 and 1990, total funds for California public schools increased by \$11.1 billion, or 90.8 percent. Since just 1983, when California enacted its comprehensive educational reform, Senate Bill 813, funding has increased by \$10.7 billion, a sizeable seven-year increase, by any standard.

However large these overall totals may be, they must be adjusted by enrollment changes and inflation (both of which increased during the 1980s) to determine whether real resources per child, measured in terms of purchasing power, have increased. Results are sobering when these adjustments are made. First, student enrollment (ADA) increased substantially during this decade, rising by more than 788,000 between 1981 and 1990, an increase larger than the total student population of the Los Angeles Unified School District. Thus, a large portion of new money for schools simply provides educational services to an increasing number of students. At the same time, a larger portion of new school allocations raised overall funding per pupil. Specifically, funding per pupil increased from \$2,909 in 1981 to \$4,677 in 1990, an

#### HIGHLIGHTS

- For the 1989-90 school year, total funding is estimated to be \$23.4 billion.
- For 1989-90, per-pupil funding is estimated to be \$4,677 (including General Fund, special funds, and capital outlay).
- Between 1981 and 1990, total funds for public schools increased by \$11.1 billion, or 90.8 percent.
   Since just 1983, when California enacted Senate Bill 813, funding has risen \$10.7 billion.
- When these figures are adjusted for enrollment growth and inflation, the real increase is quite small, rising from \$2,909 per pupil in 1981 to \$3,039 in 1990, a jump of \$130 or 4.5 percent.
- Of the approximately \$2 million spent annually on each California school, classroom expenditures including teachers, instructional aides, and books—compose 63 percent; other site expenditures—including operation, maintenance, and administration—compose 31 percent; district and county administration compose 5.5 percent; and the State Department of Education composes 0.5 percent.
- Revenues are highly equalized in California; 95.9
  percent of all students attend districts with a perpupil revenue limit within an inflation-adjusted
  \$100 band (now \$260 of the statewide average for each district type, elementary, high school, and unified).
- For 1989-90, the state provides 64.1 percent of California public school revenues; local and other sources, 24.9 percent; the federal government, 7.5 percent; and the lottery, about 3.5 percent (\$161 per pupil).

#### continued

- California's 1988-89 estimated expenditures per pupil for K-12 public education, \$4,075, was below the national average of \$4,509 (National Education Association figures excluding capital outlay and adjusted for national comparability.) California spends approximately \$3,263 per pupil less than New York, or \$98,000 less per classroom of 30 students.
- California's expenditures on public schools as a percentage of total state and local governmental ex-

- penditures for all current functions was 21 percent in 1986-87, compared to the national average of 24 percent.
- California's public schools will need an additional \$2 billion for 1990-91 to cover an increase in average daily attendance (ADA) of 120,000 students and a 4.37 percent inflation rate.
- Just to cover enrollment growth and inflation over the next 10 years, school funding will need to increase by \$26 billion, or more than double.

FIGURE 8.1 Total K-12 Education Revenues, Nominal and Real, 1980-81 to 1989-90

		Total Funding (a)		1980–8	1 Dollars (b)	
	Total			Percent		Percent
Year	Funding	ADA	Per ADA	Change	Per ADA	Change
1980–81	\$12,262.9 m.	4,215,399	\$2,909	11.4 %	\$2,909	1.6 %
1981–82	12,528.0 m.	4,202,000	2,981	2.5	2,744	(4.6)
1982–83	12,635.5 m.	4,231,431	2,986	0.2	2,619	(5.6)
1983–84	13,348.4 m.	4,260,873	3,133	4.9	2,628	0.3
1984–85	14,995.4 m.	4,352,597	3,445	10.0	2,758	4.9
1985–86	16,776.3 m.	4,469,821	3,753	8.9	2,894	4.9
1986–87	18,240.5 m.	4,611,637	3,955	5.4	2,959	2.2
1987–88	19,702.8 m.	4,722,792	4,172	5.5	2,985	0.9
1988–89	21,759.6 m.	4,859,162	4,478	7.3	3,055	2.3
1989–90	23,399.1 m.	5,003,461	4,677	4.4	3,039	(0.5)
Cumulative	Change					
Amount	\$11,136.3	788,062	\$1,768		\$130	
Percent	90.8%	18.7%	60.8 %		4.5%	

<sup>(</sup>a) Includes local debt, excess property taxes, and state property tax subventions. Includes all General Fund and special fund monies in Item 6110, contributions to the State Teachers' Retirement Fund (STRF), and state capital outlay. Also includes payments on general obligation bonds and PMIA loans. Includes funds from the Petroleum Violation Escrow Account for the replacement of school buses for 1988–89 and 1989–90. Also includes State Legalization Impact Aid Grants for 1987–88 through 1989–90. Excludes revenues from bond sales and funding for State Library programs.

SOURCE: Legislative Analyst, July 19, 1989, Revised Figures.

<sup>(</sup>b) Adjusted by the GNP deflator for state and local government purchases.

FIGURE 8.2 Education and General Fund Budget Changes 1988-89 to 1989-90

	Total Revenues (millions)		Percent Change
	1988–89	1989–90	
K-14 Education	\$14,714	\$16,000	8.7
Higher Education			
Excluding Community Colleges	\$ 3,988	\$ 4,309	8.0
Health and Welfare	\$11,425	\$12,343	8.0
Youth and Adult Correction	\$ 2,098	\$ 2,488	18.6
Other	\$ 4,127	\$4,610	11.7
Total General Fund	\$36,352	\$39,750	9.3

SOURCE: Governor's Office, July 1989

increase of 60.8 percent, which is less than the total increase of 90.8 percent. Thus, about one-third of new funds covered enrollment increases, while the rest increased overall funding per child.

But when the per-pupil figures are adjusted for inflation,<sup>3</sup> the purchasing power increase is small, rising from \$2,909 in 1981 to \$3,039 in 1990, a jump of \$130 or just 4.5 percent (Figure 8.1). Thus, inflation-adjusted figures suggest that even though an additional \$11.1 billion have been allocated to public schools since 1981, real resources in California have increased by less than five percent.

Another fact shown in Figure 8.1 is that inflation-adjusted per-pupil funding changes have taken a "roller-coaster" ride during the 1980s. Funding increased some years, dropped for a few years, then stayed about the same, increased again, then dropped again. This inconsistent fiscal pattern impedes effective management of local educational systems.

In short, while California public school funding has increased by over \$11 billion since 1981, it has risen only 4.5 percent in inflation-adjusted per-pupil terms, and the pattern of growth has been inconsistent from year to year.

Perhaps the most startling item in Figure 8.1 is that even with the \$1.6 billion increase from 1989 to 1990, helped in part by the unexpected state revenue surplus of spring 1989, funding per pupil actually declined in real terms. Such numbers underscore the magnitude of California's public school system and the effects of rapid enrollment growth, which is estimated to be 144,299 additional students in 1989-90.

Comparing fiscal changes between 1988-89 and 1989-90, however, is somewhat misleading because about \$400 million extra dollars were allocated to schools in June 1989; these funds will be counted in the 1988-89 fiscal year but spent in the 1989-90 fiscal year which began July 1, 1989. Thus, it is more accurate to compare funding changes over a two-year period, from 1987-88 (the year before Proposition 98 and the 1989 state fiscal surplus) to 1989-90. Figure 8.1 shows that over this two-year period real funding per pupil, including both years of Proposition 98 funds, still increased only a small amount: 1.8 percent. Thus, even when large amounts of new revenues are allocated to public schools in this state, its large size (five million students), rapid enrollment growth (about 150,000 new students per year), and modest inflation (below 5%) require these funds simply to maintain the status quo.

The numbers in Figure 8.2 show that education, compared with other state functions, did not receive either an inordinately or disproportionately large funding hike for 1990. While the overall general fund rose 9.3 percent between 1988-89 and 1989-90, K-14 funding—the educational sector directly affected by Proposition 98—is budgeted to rise by only 8.7 percent, less than increases in Youth and Adult Corrections and "Other" functions, both of which have budgeted increases higher than the general fund increase. While the budgeted increases for higher education (excluding community colleges) and health and welfare are less than that for K-14 education (8% compared to 8.7%), the increases are not that much less and are substantial on their own. The bottom

FIGURE 8.3 Sources of K-12 Education Funding, 1980-81 to 1989-90 (In Millions)

Year	Local Property Tax Levies	Other State Aid	Federal Aid	Local Lottery	Total Income	Funding
1980–81	\$ 2,409.7	\$ 7,800.4	\$ 1,151.4		\$ 901.4	\$ 12,262.9
198182	2,933.6	7,762.3	998.4		833.7	12,528.0
1982-83	2,941.8	7,884.8	963.2		845.7	12,635.5
1983-84	2,975.5	8,478.8	1,063.1		831.0	13,348.4
1984-85	3,298.4	9,674.6	1,135.0		887.4	14,995.4
1985-86	3,595.5	10,508.9	1,197.2	\$506.2	968.6	16,776.3
1986-87	3,804.2	11,857.3	1,229.3	410.9	938.6	18,240.5
1987–88	4,099.1	12,633.5	1,312.5	650.9	1,006.8	19,702.8
1988–89	4,405.3	13,941.1	1,570.4	763.1	1,079.7	21,759.6
1989-90	4,680.8	15,003.0	1,749.4	808.3	1,157.9	23,399.1

SOURCE: Legislative Analyst, July 19, 1979, Revised Figures.

line is that while Proposition 98 undoubtedly provided education more revenues for 1989–90 than would have been provided without it, the additional amount is small, and K-14 education simply received an average funding increase compared to other functions.

#### SOURCES OF PUBLIC SCHOOL REVENUES

California public school revenues are derived from local, state, and federal sources (Figure 8.3). The state provides the largest share. Local funds equal approximately one-third of state funds, while federal and other sources amount to even smaller proportions. Figure 8.3 also shows that state funds increased by an average of \$1 billion each year from 1983 to 1990, a sizeable but not inordinate annual increase. While local property tax revenues were stagnant from 1982 to 1984, they have been rising since then, increasing by almost \$2 billion since 1982. Federal revenues have stayed about the same during the 1980s, floating down slightly each year between 1980 and 1983, then rising about 10 percent every year since 1983. When federal revenues are adjusted for inflation, the 1990 figure is less than the 1981 figure.

Lottery revenues rose above expectations in the first year, dropped the second year, then rose substantially the third year. They are estimated to be \$808 million in 1990. Lottery funds have risen from \$113 per pupil in 1986 to \$161 in 1990, still a small amount. This contrasts with the public's perception that the lottery provides a large proportion of funding. Ac-

cording to one recent poll, 22 percent of the California public thinks the lottery is the single largest provider of school funds.

In percentage terms, the state is the major fiscal agent for California public schools (Figure 8.4). In 1990, state appropriations will compose 64.1 per-cent of total school funding, compared to a national average of about 50 percent. Thus, the state role in funding California schools is much larger than it is nationwide. The reason is Proposition 13, which limits local property tax rates to one percent of assessed value and limits assessed values to only minute increases except when property is sold. According to the poll mentioned above, 34 percent of the public thinks property taxes are the major source of school funding.

The public is relatively uninformed about the nature of school funding in California. Few tax-payers know that the state provides most school funds. The public also is unaware that school funding per child, after adjusting for inflation, is now only marginally larger than it was in 1981. Most believe that both the lottery and Proposition 98 injected large sums of funds into the public schools; not many know that both of these events produced surprisingly, yet predictably, small revenue increases.

Even at the state level, there is disagreement over K-12 funding as it relates to the general fund. But as Figure 8.5 demonstrates, educational funding as a percentage of state general fund expenditures has remained relatively constant since 1984, for both K-12 and higher education. While K-12

FISCAL RESOURCES 105

FIGURE 8.4 Percent Revenues for K-12 Education by Source, 1980-81 to 1989-90

Year	Local	State	Federal	Other	Lottery
1980–81	19.7	63.6	9.4	7.3	n.a.
1981-82	23.4	62.0	· 7.9	6.7	n.a.
1982-83	23.3	62.4	7.6	6.7	n.a.
1983-84	22.3	63.5	8.0	6.2	n.a.
1984-85	22.0	64.5	7.6	5.9	n.a.
1985–86	21.4	62.6	7.2	5.8	3.0
1986-87	20.9	65.0	6.7	5.1	2.3
1987-88 (est.)	20.8	64.1	6.7	5.1	3.3
1988-89 (est.)	20.2	64.1	7.2	5.0	3.5
1989-90 (budg.)	20.0	64.1	7.5	4.9	3.5

SOURCE: Legislative Analyst, July 19, 1989, Revised Figures.

funding relative to general fund expenditures dipped in the recession period of the early 1980s, it bounced back to 39.1 percent when educational reform funding increases began. From 1987 to 1988 it dropped 0.5 percentage points to 38.3 percent. The 1988 figure, however, approximates the 1986 figure. Further, a one percent drop represents only \$328 million in 1988, a not insignificant amount but less than the amount of the lottery. Figure 8.5 shows that each year since California's 1983 educational reform, K-12 expenditures as a percentage of general fund expenditures have been about the same; it also shows that K-12 funding would constitute a declining share of the general fund budget only if the drop

between 1987 and 1988 had been maintained into 1989 and beyond.

#### NATIONAL COMPARISONS

Another way to gauge California's fiscal support for public schools is to compare it to national and other state averages. On most national fiscal comparisons, California ranks below average.

First, California educational spending as a percentage of its personal income is one half of a percentage point below the national average (Figure 8.6). For 1988–89, it is estimated

FIGURE 8.5 Education and California General Fund Expenditures

Year	Total General Fund Expend	K-12 Expend	K-12 Expend as % of Total	Higher Ed. Expend.	Higher Ed. as % of Total
1980	\$18,519.7	\$ 6,989.9	37.7%	\$2,949.7	15.9%
1981	20,995.4	7,456.9	35.5	3,385.6	16.1
1982	21,606.3	7,638.5	35.4	3,431.5	15.9
1983	21,661.7	7,742.7	35.7	3,430.4	15.8
1984	22,834.8	8,924.6	39.1	3,525.8	15.4
1985	25,721.6	9,991.5	38.8	4,124.1	16.0
1986	28,841.3	11,072.4	38.4	4,517.9	15.7
1987	31,487.6	12,210.9	38.8	4,826.2	15.3
1988	33,020.8	12,638.3	38.3	5,111.8	15.5
1989					
1990					

SOURCE: Department of Finance

FIGURE 8.6 California Revenue for K-12 Education as a Percent of Personal Income

California National

Revised Revised

		Revised			Revised	
Year	Personal Income*	Revenue Estimates**	Percent of Income	Personal Income*	Revenue Estimates**	Percent of Income
 1980–81	\$276,110	\$ 9,260	3.4	\$2,254,076	\$102,777	4.6
1981–82	308,730	9,478	3.1	2,514,231	110,274	4.4
1982–83	328,033	12,050	3.7	2,663,432	120,433	4.5
1983-84	352,438	13,300	3.8	2,834,385	128,331	4.5
1984–85	389,183	14,982	3.8	3,101,163	139,635	4.5
1985–86	422,142	16,745	4.0	3,317,239	151,333	4.6
1986–87	453,404	18,692	4.1	3,521,393	162,433	4.6
1987–88	492,989	19,871	4.0	3,768,125	174,219	4.6
1988–89***	534,893	22,000	4.1	4,039,053	185,122	4.6

<sup>\*</sup>in millions

SOURCE: U.S. Department of Commerce, Survey of Current Business, August 1988 and revised revenue estimates from National Education Association, Estimates of School Statistics, Washington, DC: NEA, selected years.

that California will spend 4.1 percent of its citizen's personal income on education compared to the national average of 4.6 percent. The numbers also show that K-12 spending in California relative to personal income dropped more from 1980 to 1982, years of deep recession, than they did nationwide. California figures also show that between 1982 and 1986, years in which Senate Bill 813 was implemented, K-12 spending as a percentage of personal income rose substantially and began to approach the national average. It is difficult to predict the future magnitudes of these figures either for the state or the nation. Nevertheless, the clear conclusion is that California devotes a lower percentage of personal income to public elementary and secondary schools than does the nation. (It should be noted that this statistic is not only a function of state taxing and spending efforts, it also is related to the relative number of school-age citizens to the total population.)

Second, California spends somewhat below the national average per pupil and below several states that have similarly large enrollments and economic systems and are as technologically sophisticated as California. As shown in Figure 8.7,4 California's expenditures per ADA estimated by the National

Education Association (NEA) for 1988–89 are \$4,075, nearly \$500 below the national average of \$4,509. Even though NEA attempts to adjust all state figures to ensure comparability, differences in state school funding structures make this a difficult objective to achieve. Because of adjustment difficulties, it is probably best to claim that California today spends somewhat below the national average expenditure per pupil.

The numbers in Figure 8.7 also reveal that on a per-pupil basis, California spends below New York, Illinois, Pennsylvania, and Michigan. Of the six states with the largest enrollments, California's per-pupil expenditures are above only Texas, a state with historically low educational spending. California spends approximately \$3,263 less per pupil than does New York. Assuming a class size of 30, this translates into \$98,000 less per classroom. California spends \$1,500 less per pupil than does Pennsylvania. Indeed, when compared to several states in the midwest and northeast, California spends considerably less per pupil.

Anecdotal evidence suggests that these funding differences produce differences in programs and services. Most elementary schools in the higher-spending midwest and northeast would have, in addition to one teacher for every 20

<sup>\*\*</sup>increased by about \$500 million to reflect late June 1989 appropriation adjustments

<sup>\*\*\*</sup>estimate based on previous six year average

FISCAL RESOURCES

FIGURE 8.7 Comparison of Selected School Finance Variables California Versus Five Other Large States

	Estimated Expenditures Per Pupil In ADA, 1988–89	1986–87 State/Local Expenditures For Public Schools Per \$1000 of Personal Income	1986–87 Per Capita State/Local Elementary Secondary Expenditures As a Percent of Total State/Local Expenditures	Estimated Average Classroom Teacher Salary 1988–89 1988–89	Student Enrollment Per Classroom Teacher
California (4.6 million)	\$ 4,075	\$ 38.98	21,0%	\$ 35,285	22.7
Texas (3.0 million)	3,842	49.70	28.6%	26,513	17.1
New York (2.3 million)	7,338	50.46	22.1%	36,500	14.6
Illinois (1.6 million)	4,513	37.65	23.2%	31,195	17.4
Pennsylvania (1.5 million)	5,621	44.63	27.0%	30,720	16.2
Michigan (1.5 million)	4,576	49.96	25.3%	34,419	21.3
National Avera	ge 4,509	44.42	24.0%	29,567	17.5

SOURCE: National Education Association, Estimates of School Statistics, 1988-89; U.S. Bureau of the Census, Governmental Finances, 1986-87.

to 25 students and personnel supported by categorical grants, a music and art teacher, perhaps a science teacher, a physical education teacher, maybe a reading specialist, a librarian (if not a two to three staff library and media resource operation), and day care and preschool in many places. Most California elementary schools have a teacher for every 30 students and, at most, an extra specialist. At the middle school level, schools in the midwest and northeast would have seven- and eight- rather than six-period days and a comprehensive set of electives, including advanced foreign languages. California middle schools usually have six periods and a minimum array of electives. In short, California's lower spending produces fewer program offerings.

Moreover, California spends less on public schools as a percentage of personal income than do most of the other five large-enrollment states. In 1986–87 California spent \$38.98 per \$1,000 of personal income, compared to \$50.46 in New York, \$49.96 in Michigan, and \$49.70 in Texas; the national

average was \$44.42, above California and below these other states.

Further, California expenditures on public schools as a percentage of total state and local governmental expenditures for all functions was less than in any of these other five states, with the California figure at 21 percent and the Texas figure just under 30 percent, compared to a national average of 24 percent. In short, on a comparative basis, California's public schools receive less priority for state and local resources than do public schools in the next five largest public-schoolenrollment states.

The data in Figure 8.7 also show that California's teachers earn, on average, near the top of the scale on a comparative state basis, but California teachers also experience among the largest class sizes. While lower teacher salaries could provide revenues to hire more teachers, California teacher salaries are high in large part because of the high cost of housing and living in the state.<sup>6</sup>

Overall, the data in Figure 8.7 suggest that California places a lower priority on public school funding than do several other large-enrollment states, spends below the national average, has above-average teacher salaries, and places more students in each classroom.

#### **CURRENT EXPENDITURES**

District general fund expenditures in 1986–87, the most recent year for complete data, totaled approximately \$14.8 billion (Figure 8.8). Of that amount, \$6.6 billion (44.6%) was expended for teacher salaries, \$495 million (3.3%) for administrator salaries, \$828 million (5.6%) for other certified salaries such as music and art specialists, \$490 million (3.3%) for instructional aides, \$2 billion (13.5%) for other support personnel such as guidance counselors, \$2.2 billion (15.1%) for employee benefits, \$656 million (4.4%) for books and instructional supplies, \$1.1 billion (7.2%) for services and operating and maintenance expenses, and \$427 million (3.2%) for capital outlay.

FIGURE 8.8 School District General Fund Expenditures, 1986–87

Category	Amount (Millions)
Total	\$14,836.3
Teachers Salaries	6,613.2 (44.6)
Administrator Salaries	495.1 ( 3.3)
Other Certified Salaries	827.9 ( 5.6)
Instructional Aides	490.4 ( 3.3)
Other Support Personnel	2,003.6 (13.5)
Employee Benefits	2,247.6 (15.1)
Books and Supplies	656.0 ( 4.4)
Services and Operating Expenses	1,075.3 ( 7.2)
Capital Outlay	427.2 ( 3.2)

SOURCE: State Department of Education

These figures, however, say little about expenditures on a program basis, like the regular instructional program or compensatory and special education. Further, these figures provide little insight into how the approximately \$2 million per school site is spent. If teachers at an average school, so an argument goes, collectively earn about \$914,000 in salaries and benefits, what happens to the rest of the money?

In order to answer this question, expenditures by object (such as those provided in Figure 8.9) are needed for each program in a school, so that expenditures by object and

program can be analyzed simultaneously and in relationship to each other. While California currently is phasing in an accounting system that will produce such data, the system is still a few years away from full implementation.

However, using 1985–86 data from selected school districts that accounted for expenditures by object and program, the State Department of Education recently conducted a study and produced statewide average expenditures per school. The results are intriguing (Figure 8.9).

Expenditures per school averaged \$2.046 million. These can be divided into classroom expenditures, site-level expenditures, district and county administration, and State Department of Education. Classroom expenditures compose 63 percent of total school operating expenditures. Within that category, classroom teachers constitute 45 percent of total school expenditures; specialized teachers such as special education, music, and art constitute 5 percent; pupil support personnel including counselors, psychologists, nurses, and librarians constitute another 4 percent; and books, materials, and supplies constitute the last 4 percent of classroom expenditures.

Site expenditures other than classroom expenditures compose 31 percent of total school operating expenditures. Operations, maintenance, transportation, and food constitute 19 percent of this total figure; instructional support, including curriculum specialists and supervisors and media technicians, constitutes another 5 percent; and school site leadership (administration) constitutes the last 7 percent.

District and county administration composes 5.5 percent of total school expenditures, and the State Department of Education composes the remaining 0.5 percent. If site leadership is added to these administrative expenses, administration totals just 13 percent for each school on average; operations, maintenance, transportation, and food, 19 percent; and classroom expenditures, including pupil support personnel, 68 percent.

#### SCHOOL FINANCE EQUALIZATION

The predominant California school finance issue in the 1970s was the Serrano v. Priest court decision and its mandate to reduce wealth-related expenditure disparities to a \$100 band above and below a statewide average expenditure per pupil. Indeed, most states across the nation still grapple with strengthening school finance equalization formulas designed to reduce both disparities in per-pupil spending and any relationship between expenditures per pupil and local property wealth per pupil. California is less concerned with this

FIGURE 8.9 Expenditures Per School, 1985-1986

	Expenditure	Percent
Category	per School	of Total
A. Classroom Expenditures	\$ 1,286,000	63%
22 Classroom Teachers	914,000	45%
2.5 Specialized Instructors	102,000	5%
7.0 Instructional Aides	94,000	5%
2.0 Pupil Personnel Support	84,000	4%
Books, Supplies, Equipment	92,000	4%
B. Other Site Expenditures Operation, Maintenance,	629,000	31%
Transportation	395,000	19%
Instructional Support	95,000	5%
School Site Leadership	139,000	7%
C. District/County Administration	120,000	5.5%
D. State Department of Education	11,000	0.5%
Total Operating Expenditures	\$ 2,046,000	100%
School Facilities/Capital	\$ 133,000	

SOURCE: State Department of Education

issue largely because the state has statutorily established a perpupil expenditure level for all districts (since Senate Bill 90 in 1973 and Proposition 13 in 1978). Analytically, California has a full state funding school finance structure, called a revenue limit formula, under which the state determines a perpupil revenue limit, mandates that limit (albeit with adjustments discussed below) for all districts, and finances it with a state-controlled combination of state and local funds.

Since per-pupil expenditure disparities existed prior to Serrano, and since the state has not yet brought every district to the same spending level, a question arises regarding how "equalized" is the California school finance system. Figure 8.10 presents data to help answer this question. The data are presented by district type since the revenue limit is different for elementary, high school, and unified districts. Pursuant to a 1984 Serrano appeal court decision that allowed the \$100 expenditure band to be adjusted by inflation, the data show the percentage of students in districts with a base revenue limit that is within the inflation-adjusted \$100 band above and below the statewide average revenue limit.

The data in Figure 8.10 indicate that in 1989–90, 95.9 percent of all students fall within this equalization standard and that the percentage of students within the band has been increasing steadily but slowly for each district type since 1983. While similar data are not available from many other states, few states would be able to match this degree of expenditure equalization. In California, 95.9 percent of all students in the state attend school districts that have a revenue limit within \$238 of the statewide average revenue limit. During the 1989 budget deliberations, the Serrano equalization adjustment was fully funded; this adjustment is designed to bring all district revenue limits to the statewide average. Thus, revenue per pupil equalization should increase even further from its already high degree of equalization.

Whatever its equalization progress, California's school finance system is unusually complicated. The base revenue limit alone does not determine the base revenues per pupil available to each student. The base revenue limit is subject literally to hundreds of adjustments, including adjustments for district type, school size, enrollment declines, small dis-

trict transportation, meals for needy students, equalization adjustments, longer school day and year incentives, minimum beginning teacher salary incentives, tenth grade counseling incentives, caps on revenues for enrollment growth, and the like. Further, a one-time per-pupil grant of \$54 for all districts, regardless of district type, was enacted for 1988-89 and another one of \$20 for 1989-90. In short, the base revenue per pupil is the revenue limit plus a multitude of adjustments.

Tens of pages of figures are needed to determine a district's final total revenue limit, despite the seemingly simple formula structure. Few people in the state fully understand the manner in which the formula functions, and the adjustments—all with historically developed reasons—give the current system the appearance of the former federal tax code: complex and perhaps unfair. The governor's Commission on Educational Excellence was charged with making recommendations to simplify this complex formula. Few recommendations were implemented, and the budget deliberations of 1989 actually made the formula even more complex.

In addition to its complex revenue limit formula, California has nearly 70 additional categorical programs, each with a different funding mechanism. In fact, categorical funds total about 20 percent of overall school funding for 1989–90. Most of the funding formulas for the major categorical programs also are complex. For example, before this year, funding for several programs was determined by what a district received in 1978–79 (the year of the Proposition 13 bailout), with several types of inflation and, sometimes, pupil growth adjustments from then until now. The result was a byzantine categorical funding system. Further, the inflation or cost-of-living adjustments were almost always different from those used for the base revenue limit formula, varied across different categorical programs, and often were zero for the largest categorical programs.

Categorical funding was further complicated during the 1989 budget deliberations. First, a group of legislators noted that the pupil counts for many categorical programs had not been updated since 1979; thus, districts that had experienced increases in potentially eligible students were not receiving increased categorical dollars. Second, a new concept of categorical funding was proposed, namely, equalization. A group of legislators claimed, erroneously in PACE's opinion, that *Serrano* required equalization of categorical as well as base funds. While this argument was not totally supported, the lack of adequate pupil updates for categorical funding gave the equalization argument some surface validity. As a result, the state has a major new funding program called Supplemen-

tal Grants that is based on the degree of both base funding and categorical funding equality. Districts below the statewide average in base revenues as well as below the statewide average in categorical revenues receive the largest supplemental grants.

It is time for the state to take a hard look at both its revenue limit and categorical funding formulas. Both are unnecessarily complicated, outdated, and, in many cases, unfair. The supplemental grants render categorical funding particularly in need of redesign. While the 1989 legislature updated pupil counts for the state's compensatory education program (Economic Impact Aid), changes of a more far reaching nature are needed.

One simple reform, borrowing on mechanisms most states use, is to base categorical funding on the current or immediate past year number of students eligible for a categorical program service. An additional option is to have the state pay the excess costs of providing extra services for special-needs students. Another reform (analyzed fully in Conditions of Education in California 1988) is to move to a pupil weighting system under which all students eligible for a categorical program service are given an extra weight indicating the amount of extra service needed; the revenue limit formula would then be used to determine funding on a total weighted pupil basis. The important issue is that California's multitude of categorical programs require scrutiny, perhaps to streamline and consolidate them, but certainly to redesign their outmoded and unfair funding formula structures.

#### **FUTURE REVENUE NEEDS**

What are the future revenue needs of California public schools? Figure 8.11 begins to outline dimensions of an answer to this straightforward question. Simply stated, the revenue needs are enormous. Using the Commission on State Finance's enrollment (ADA) growth and inflation figures, California public schools will need an additional \$2.1 billion next year (1990–91) simply to cover an additional 171,200 students and inflation of 5.4 percent. This large increase would only keep the system even fiscally; it would provide for no additional reforms, no class size reductions, no new programs. It would be a "stay even" fiscal increase.

For the subsequent year, 1991–92, the stay-even increase rises to \$2.44 billion. For 1991, the stay-even increase reaches \$2.54 billion. In fact, just to cover enrollment growth and inflation over the next 10 years, school funding will need to increase by \$26 billion, or more than double. These sobering figures suggest that maintaining an even fiscal keel will be a

FISCAL RESOURCES 111

FIGURE 8.10 Percent of Students Within Inflation Adjusted \$100 Band\* of Base Revenue Limit by District Type

District Type	1983–84	1984–85	1985–86	1986–87	1987–88	1988–89	198990
Elementary More than 100 ADA	84.5%	92.2%	93.0%	94.0%	94.3%	91.8%	92.4%
High School More than 300 ADA	80.3	86.8	87.1	89.1	89.4	89.1	90.2
Unified More than 1,500 ADA	94.5	97.0	97.0	97.1	97.2	96.9	98.0
All Districts	90.6	94.7	94.9	95.4	95.6	94.9	95.9

<sup>\*</sup> Inflation adjusted band: 1983–84=\$202; 1984–85=\$212; 1985–86=\$221; 1986–87=\$227; 1987–88=\$238; 1988–89=\$248; 1989–90=\$260

SOURCE: State Department of Education

FIGURE 8.11 Projections of K-12 Education Revenue Requirements, 1989-90 Through 1998-1999 (In Millions)

Year	Increase Student (ADA) Increase	Increase For Student Growth	Total Increase For Inflation	Increase Over From Previous Year	Percent 1989–90 Budget of \$23.4 Billion	Increase Over 1989–90 Budget
89–90	132,500					
90–91	171,200	\$ 844.0	\$ 1,263.6	\$ 2,107.6	\$ 2,107.6	9.0 %
91–92	186,300	971.4	1,469.2	2,440.6	4,548.2	19.4 %
92–93	191,500	1,651.7	1,489.6	2,541.3	7.089.5	30.3 %
93-94	163,900	951.4	1,737.9	2,689.3	9,778.8	41.8 %
94–95	120,800	742.4	1,950.9	2,693.3	12,472.1	53.3 %
95–96	115,900	756.0	2,195.3	2,951.0	15,423.4	65.9 %
96–97	128,300	889.9	2,461.3	3,351.2	18,774.6	80.2 %
97–98	119,600	882.9	2,711.8	3,594.7	22,369.3	95.6 %
98-99	110,000	860.7	2,746.1	3,606.8	25,976.1	111.0 %

SOURCE: PACE analysis from Legislative Analyst and Commission on State Finance Data.

stiff challenge for California. These large sums will be difficult to garner in either political or lay arenas.

These stay-even figures ignore the fiscal consideration of suggested educational system improvements. For example, California has the second largest class sizes in the nation (next to Utah). But reducing class size is expensive; it costs approximately \$250 million to reduce class size statewide by one student per teacher. So it would cost about \$1.25 billion to reduce class size by five students per teacher, excluding building costs. Even if such reductions were provided only to students and grade levels where they would most likely make a difference, an extra \$1 billion for system improvements will be hard to find.

Enacting proposals to transform teaching into a full profession, either as proposed by the Commons Commission<sup>7</sup> or the Carnegie Forum<sup>8</sup> also will take additional funds. In Rochester, New York, the Board of Education adopted most of these proposals, raising beginning salaries to \$25,000 and top salaries for lead teachers on a 12-month contract to \$70,000. If California were to move along these lines, an additional \$1 billion to \$2 billion would be needed.

Finally, Chapter 3 shows that student enrollment increases in California will be comprised of increasing numbers of poor, limited-English-proficient, learning disabled, emotionally handicapped, latch key, and other children—all of whom require more than a usual level of educational services. It is difficult to predict the level of extra money needed for such services, but it easily could reach the \$500 million to \$1 billion level.

Thus, given current structural arrangements, enrollment growth, inflation, and an increasing number and percentage of students needing extra educational services, system improvements pose an enormous revenue challenge to California public schools. It will be difficult to generate such revenues. Similarly, it will be difficult to capture revenues of this magnitude through cost-cutting and efficiency strategies.

#### **Construction of School Facilities**

Building classrooms and schools represents another fiscal requirement for educational funding, in addition to operating revenues. To meet California's huge student enrollment increases, the legislative analyst estimates that 2,100 additional schools will need to be built at a cost of \$11 billion. There are a variety of options available to school districts for financing school facilities, although the most common is the State School Building Lease-Purchase program. In July 1989, however, there were between \$4.3 billion and \$4.7 billion in

local school district applications for these funds and no money left to finance those requests, and this despite voter approval of \$1.6 billion in bond measures in two 1988 elections. Even if there were funds to meet current requests, money would still need to be found for the \$1.3 billion to \$1.4 billion per year in anticipated future requests. As a result, other funding options need to be considered.

Other options for financing school facilities include local general obligation bonds, the Mello-Roos Community Facility Act of 1982, and imposition of developer fees on new residential and commercial or industrial construction. Not all districts experiencing growth in student enrollments are able to take advantage of these programs. As a result, growing districts throughout the state rely heavily on the use of portable classrooms to meet facility needs. In fact, the manufacture of portable classrooms for California school districts is estimated to be at least a \$200 million a year business. Another approach for dealing with the growing shortage of classroom space is to use a year-round school calendar (as discussed in Chapter 5). By using school facilities 12 months a year rather than the traditional 9 months, many districts have been able to increase the capacity of their schools by 20 to 33 percent. Because of the tremendous resource needs for providing adequate facilities for California's school children. each of these financing options is discussed below.

#### The State School Building Lease-Purchase Program

Since the inception of public education in California, financing and constructing public schools have been local responsibilities. However, after World War II many school districts were unable to generate the resources necessary to build facilities to house the rapid student growth they were experiencing. The State School Building Aid Laws of 1949 and 1952 used state general obligation bonds to establish a loangrant program for school construction. Today, most school construction in California is funded through the Leroy F. Greene Lease-Purchase Law of 1976.10 Administered by the State Allocation Board, this program has distributed, or approved for expenditure, approximately \$4.3 billion for school construction funds since 1983-84. Funds are distributed to school districts by the State Allocation Board which determines standards for eligibility as well as establishes cost and construction standards for school facilities. The board also has the power to fix rates, rents, and other charges associated with facilities constructed under the program, provided they do not exceed the annual sum of (a) a dollar, (b) interest earned on funds in the county school Lease-Purchase fund for the

district, (c) unencumbered bond funds of the district, and (d) net proceeds from the sale or lease of any school buildings or land no longer needed for school purposes.

Since 1982, revenues for this program have come from two major sources. The principal source has been \$3.35 billion in general obligation bonds approved by voters in five elections. Figure 8.12 displays the date and value of bonds approved at each of these elections. Figure 8.13 displays the distribution of these bond revenues by year. As Figure 8.13 shows, the annual allocation of Lease-Purchase bond funds has increased dramatically in recent years. As a result, no funds are currently available for the 1989–90 fiscal year.

FIGURE 8.12 State School Building Lease-Purchase Program Bond Measures Approved by Voters: 1980–1988

Date	Amount (\$)	
November 1982	500 Million	
November 1984	450 Million	
November 1986	800 Million	
June 1988	800 Million	
November 1988	800 Million	
Total	3.35 Billion	

SOURCE: Governor's Budget, Various Years

FIGURE 8.13 Annual Distribution of State School Building Lease Purchase Program: General Obligation Bond Proceeds

Year	Distribution (\$)	
1982–83	125 Million	
1983-84	185 Million	
1984-85	190 Million	
1985-86	250 Million	
1986-87	400 Million	
198788	600 Million	
1988–89	1,600 Million	
Total	3.35 Billion	

SOURCE: Governor's Budget, Various Years

The second source of revenue for the Lease-Purchase Program has been appropriations from Tidelands Oil Revenues. The legislature appropriated \$100 million in offshore oil revenues in 1980–81, and another \$200 million in 1981–82. Although funding was approved for 1982–83 and 1983–84, state budget shortfalls resulted in no funds being appropriated from this source to the Lease-Purchase program.

Since 1984–85, the legislature has approved the allocation of up to \$150 million a year from the Tideland Oil Revenues to the State School Building Lease-Purchase program. However, the actual appropriation has varied depending on the Tideland Oil Fund revenues. Figure 8.14 displays the appropriations from the Tideland Oil Fund to the School Building Lease-Purchase Fund from 1980–81 through 1989–90. The authorization for transfer of \$150 million annually expires after 1990–91 unless extended by the legislature.

FIGURE 8.14
Annual Appropriation of Tideland Oil Funds to the
State School Building Lease-Purchase Fund: 1984–85
through 1988–89

Fiscal Year	Appropriation (\$)	
1980–81	100,000,000	
1981-82	200,000,000	
1982-83	0	
1984-84	0	
1984-85	150,000,000	
1985–86	150,000,000	
1986–87	231,359,000	
1987–88	98,652,000	
1988-89	0	
1989-90	0	
Total	930,011,000	

SOURCE: Governor's Budget, Various Years

Lease-Purchase funds are distributed to districts on the basis of "unhoused ADA." Unhoused ADA is determined by taking 97 percent of a district's projected enrollment and "loading" that figure into existing classrooms. The projected enrollment that cannot be "loaded" into existing facilities constitutes the unhoused ADA and is the primary determinant for eligibility for new construction funds. The application process includes three phases. In Phase I, districts submit documentation regarding eligibility for construction funds. Districts must submit enrollment projections, a five-year "mini-plan" for district growth, a district map, and a set of applications. Preliminary site approval from the State Department of Education also occurs during this phase.

During Phase II, a district acquires the school site and completes its planning. Architects' drawings must be approved by the State Department of Education and by the office of the state architect. The role of the Department of Education is limited to issues of student safety and the educational

appropriateness of school facilities, 12 while the state architect is responsible for reviewing the architectural plans for the facility. Environmental Impact Reports are completed, and other site-related issues are resolved during Phase II. Full construction funding is approved in Phase III once final approved plans and cost estimates are submitted and all sites have been acquired.

Once Phase III approval is granted, a district is given authorization to bid the project. When the bids have been received, the lowest bid is submitted to the State Allocation Board. Construction can begin once the bids have been approved by the board. Fifty-four steps are required to gain final approval to construct a school site. Because of the array of forms that must be submitted and the labyrinth of agencies that oversee the project, it is not uncommon for approval to take three to five years from the time a district submits its initial application until the school is completed and ready for occupancy.

Because of limited funding and the length of time required to construct a school using Lease-Purchase funds, many districts look to alternative sources of money to finance some or all of their school facility needs. Below, alternatives to the State School Building Lease-Purchase program are described.

#### **Local General Obligation Bonds**

Prior to 1978, local school districts could finance facility construction by issuing general obligation bonds, which were paid for by imposing a district-wide property tax. In June 1978, Proposition 13's passage prohibited local governments from levying ad valorem property taxes in excess of Proposition 13's one percent limitation.<sup>13</sup> This prohibition was relaxed in June 1986 when California voters approved Proposition 46, amending the state constitution and authorizing local governments to impose ad valorem property taxes to amortize bonded indebtedness for capital projects. Since that time, 70 bond elections have been held by local school districts. Voters in 39 (55.7%) of those districts provided the necessary two-thirds majority required for approval. These 39 elections represent over \$680 million in bonds for construction or rehabilitation of school facilities.<sup>14</sup>

Many school officials contend that if districts could pass general obligation bonds with a simple majority vote, as many as 90 percent of these elections would be successful, reducing the strain on the State Lease-Purchase program. As of July 1989, there were two proposed constitutional amendments regarding this issue before the legislature. Senate Constitutional Amendment 2 (1989, Leonard, R-Upland) would reduce the vote requirements for general obligation bonds to a simple majority if the tax to amortize the bond payments is less than five cents per hundred dollars of assessed valuation, and for a period of 10 years or less. Assembly Constitutional Amendment 2 (1989, O'Connell, D-Santa Barbara) would also reduce the vote requirements for general obligation bonds to a simple majority. Assembly Constitutional Amendment 2 does not have rate and time limitations; instead it would abolish developer fees. Both bills are currently in committee. If either bill is passed by the legislature, it will appear on the June 1990 ballot.

#### The Mello-Roos Community Facility Act of 1982

The Mello-Roos Community Facility Act of 1982 authorizes school districts to establish community facility districts, within which bonded indebtedness may be incurred and a property tax levied. These funds may be used for building new schools or to modernize existing school facilities.<sup>15</sup> The principal advantage of a Mello-Roos district is that it does not have to encompass the entire school district. Since a community facility district can be formed to include only the area that would benefit from the planned facility, there would seem to be a greater likelihood of garnering the two-thirds majority needed for approving the bond measure.

Since 1983, 30 school districts have held Mello-Roos elections. Nineteen (63.3%) of those were successful, accounting for over \$1 billion in school construction funds for the 17 districts involved. Just over \$370 million in Mello-Roos bond measures were rejected in 11 other district elections during the same period.<sup>16</sup>

#### **Developer Fees**

In 1978, Senate Bill 201 (Government Code 65970) authorized the levying of fees on developers of new homes for school projects. This measure was part of the response to Proposition 13's ban on ad valorem property taxes. In the early 1980s, the incidence of these fees, levied by counties and cities as well as school districts, increased, prompting protests from developers. In 1986, the legislature passed Assembly Bill 2926 which allowed school districts to directly levy fees on new homes as well as on commercial and industrial projects. In exchange, school districts were prohibited from levying most other kinds of fees. The fees were capped at a single statewide rate which

today amounts to \$1.56 per square foot for residential projects and \$0.26 per square foot for commercial and industrial projects.<sup>17</sup> In addition, these developer fees must be used for school construction or modernization projects; they cannot be used for school operations.

An important element of developer fees is the "match" requirement for districts receiving building funds from the State School Building Lease-Purchase Fund. The match requires districts to contribute the amount they could receive through developer fees as their share of the school construction costs for approved projects. The procedure for determining when a district is in "the match" is complex. Generally, once a district's application has received Phase I approval, a district is "in the match" and must rebate to the state an amount equal to the amount that could have been collected if the maximum allowable developer fees had been imposed on all projects in the district. This match condition lasts until the district receives its certificate of occupancy for the school facility.

There are some exceptions to the match requirement. For example, with approval from the office of local assistance, a district can deduct from the match requirement certain costs of interim portable classroom facilities while they are waiting for approval and construction of a school. The match also may be temporarily suspended if the district has fully qualified to move to the next phase but the state runs out of bond funds and cannot meet its obligations. Districts that do not collect developer fees, or that impose fees lower than the maximum allowed by law must still provide the full match from local funds.

Districts that do not participate in the State School Facility Lease-Purchase program may use all the developer funds they receive for their own construction needs. A number of large districts have opted to construct schools solely with local resources and, as a result, keep all their developer fees for local construction. A number of other districts use a variety of methods to fund school construction, financing some projects through the State School Building Lease-Purchase Program and others through local sources. Unfortunately, there is no accurate data on the number of schools that are built in California without state assistance, although officials estimate that there are roughly 200 districts currently planning or constructing school facilities which are not part of the state School Building Lease-Purchase Program. The Office of Local Assistance is in the process of conducting a statewide accounting of all public school facilities, but that study is still as much as a year from completion.

#### **Year-Round Schools**

The legislative analyst has proposed year-round schools as a way to partially offset the gap between school construction needs and available funding. By operating a school facility 12 months a year rather than the traditional 9 months, school districts are able to increase the number of students enrolled at that facility by 20 to 33 percent. The legislative analyst suggests that if one assumes a minimum capacity increase of 20 percent, \$800 million in school construction funds would finance the equivalent of \$935 million in new facilities. The analyst thus recommends that the legislature enact laws requiring that the State School Building Lease-Purchase Program funds be allocated to school districts as if the facility would operate on a year-round basis.18 This would not require year-round schools, it would simply provide funding on that basis and require a district to finance the additional construction requirements of a traditional nine month calendar.

#### Conclusion

California is facing a crisis in school construction. The demand for new facilities is growing by \$1.3 billion to \$1.4 billion a year. It is estimated that local school districts will be able to finance between \$300 million and \$400 million a year through their own sources but will have to rely on the state for as much as \$1 billion a year during the foreseeable future. The state already faces \$4.3 billion to \$4.7 billion in unmet school site construction needs. Two possibilities exist for relieving this crisis: change the voter approval requirement for local general obligation bonds from a two-thirds majority to a simple majority, and continue to sell additional state general obligation bonds for school construction purposes. While state bond measures require only a simple majority for passage, the rapid increase in state bond issues for all purposes limits this as a tool for completely solving the school construction crisis. Even if voters do approve a constitutional amendment to allow passage of local bond measures with a simple majority vote, that is no guarantee that districts will be able to gain approval from their voters for such bonds. Since these funding alternatives are unlikely to fully resolve the crisis, districts will most likely continue to rely on portable classrooms or consider year-round schools as an alternative to new construction.

#### CALIFORNIA SCHOOL FINANCE AND THE PROPERTY TAX

As the preceeding analysis demonstrates, the state's public elementary and secondary educational system requires large revenue increases to build and refurbish schools and to maintain current service levels. Given present state and local fiscal structures, however, providing these revenues will be difficult. Proposition 13 limits revenue raising locally while Proposition 9, the Gann limit, restricts spending at the state level. This fiscal straitjacket severely constrains the abilities of local governments and the state to provide needed funds for education and other important public services.

However, if approved by voters in June 1990, Senate Constitutional Amendment (SCA) 1 would alleviate some spending restrictions of the Gann limit. Also, as indicated in Chapters 1 and 2, modifications to Gann and Proposition 13 are needed to restore some local fiscal decision making. More importantly, SCA 1 represents a tangible realization by state policy makers that order needs to be restored to California's state and local taxing and spending structures.

But the need to change Proposition 13 arises as much from a need to raise additional funds as it does from a growing understanding that Proposition 13 transformed the California property tax into one of the most inequitable taxes in the nation. Enacted by initiative in June 1978, Proposition 13 rolled back assessed valuations to the market values of 1975–76 then limited increases to two percent a year or to market value when property was sold. It fixed the tax rate at one percent of assessed valuation. The "spirit of Proposition 13" was to limit property taxes to one percent of market value.

Analytically, Proposition 13 shifted California's property tax away from a market-value-based system to an acquisition-based assessment system, because property is assessed at market value at different times, namely, when it changes ownership. Drawing on data over a 10-year period, Phillips<sup>19</sup> recently analyzed the effects of this approach.

In the first year after Proposition 13's enactment, assessments dropped to market value (as of 1975–76) and the tax rate stood at one percent. Further, residential and nonresidential property was assessed at the same level, producing a high degree of horizontal equity, that is, all property on the tax rolls was assessed at the same ratio to market value. But within a few years, horizontal equity had deteriorated. By 1981, Phillips shows that the tax base (assessed value) relative to market value dropped by nearly 50 percent. Median assessment to market-value ratios ranged between .38 and .77 in most metropolitan areas and did not exceed .75 in any non-

metropolitan area. In short, between one-quarter and one-half of the tax base appeared to escape property taxation.

These overall drops, which differed across as well as within local governmental lines, were paralleled by growing differences across and within categories of property. First, single-family homes tended to have higher assessment to market values than nonresidential property, in part indicating a higher turnover rate among homes than businesses. Second, using data for San Francisco as an example, Phillips showed that within residential property, homes were underassessed relative to rental apartments and condominiums. Finally, using San Francisco data again, Phillips showed that the average difference between the assessed value of a home and the average assessment was 60 percent, suggesting large intraclass assessment differences.

The differences for homes was essentially caused by the year of acquisition, that is, identical properties had dramatically different assessed values depending solely on the year in which they were acquired. These assessed valuation differences translated directly into tax impact differences, with recent buyers burdened with substantially larger tax payments than long-term owners. By 1986, the effective tax for a long-term owner was just 0.31 percent of market value, while a recent buyer faced a burden more than three times higher at 1.0 percent.

Such differential assessments and effective overall tax impacts had peculiar benefit patterns. First, elderly homeowners—rich and poor alike—benefitted. According to Phillips, their property tax burden fell from eight to three percent of income. Young families with children, on the other hand, who tend to buy new homes, did not benefit. In fact, their effective property tax rate increased from 1978 to 1986, and their property taxes as a percentage of income ranged between three and four percent, compared to two percent for long-term owners.

Further, assessment to market values were inversely related to property value, meaning that individuals with homes of higher value had lower relative assessed valuations. So the rich benefitted more than those with middle or lower incomes. Finally, Phillips showed that big business benefitted more than small business.

The major factors behind these differential impacts were year of acquisition (the primary culprit), differential rates of market value increase, and the rate of new building. But data showed that the "winners" from Proposition 13 were high-income individuals, senior citizens rather than young families, long-time homeowners rather than new home buyers, and big rather than small business. In nearly all cases, the

difference related mainly to turnover rates, a variable with no economic value but which now is the key factor determining property tax burden in California.

In summary, Proposition 13 (as an acquisition-based system of property tax assessment) significantly lowered the property base over time and violated horizontal equity in directions that make the tax more regressive overall.

Proposition 13 also reduced overall yield from the property tax. When first enacted, Proposition 13 reduced property tax yield by approximately \$7 billion. But the state had about that same level of surplus funds and was able to "bail out" local governments in Proposition 13's immediate aftermath. Over time, though, property tax yield has fallen relative to market value. Up to 50 percent of the yield has been lost. While the result has been to further reduce the impact of the property tax in California, the reduction has been at the cost of substantial inequity—many still pay one percent of market values, others now pay as little as 0.25 percent of market value. Nevertheless, when comparing statewide figures, the ratio of property taxes paid by residential versus nonresidential property has stayed about the same, increasing a small amount for small nonresidential property. It seems that business expansion and lots of new construction have kept the relative ratios of property taxes paid between the two sectors at about the same level.

#### **Correcting Tax Inequities**

California faces tough choices in correcting inequities created by Proposition 13. If the state reassessed all property at market value and kept the tax rate at one percent, all inequities would be remedied. Tax burdens, however, would shift dramatically from young families to senior citizens, from poor to rich individuals, from small to big business, and probably from residential to nonresidential property. Further, all property owners would have to pay more taxes, although more recent property owners would pay less of an increase than long-term owners. Under this strategy, those experiencing increased burdens would be numerous, making such a shift in policy politically difficult.

Changing assessments and keeping the tax rate at one percent also would produce a windfall of new revenues. If assessments were made current and revenues held constant, the tax rate could be rolled back from 1.0 percent to about 0.67 percent. This would reduce the level of increased burden for most recent property owners, but many taxpayers would experience increases.

Nevertheless, this approach has two advantages. First, it restores property tax equity and economic rationality to the

tax. Second, and as important, it would restore some local fiscal decision making. Proposition 13 limited the local property tax to one percent of assessed value and effectively eliminated local fiscal decision making because the rate stayed at one percent. The overall effective rate now is somewhere between 0.5 percent and 0.6 percent. Thus, if assessed valuations were raised to market value, opportunity would be created for local governments to raise local rates if approved by local voters.

To avoid a tax increase and still produce tax equity, assessments could be rolled back to 1975–76 levels, as they were immediately following Proposition 13's enactment. That, however, would entail a loss of approximately \$4.7 billion in 1985–86 local governmental revenues, roughly a 50 percent loss. While achieving equity gains, the revenue loss simply is not realistic. California services already have fallen in quality across almost all functional categories.

Over the long run, political barriers to change become more formidable. Thus, California's most realistic option—still a difficult choice—is to restore assessments to market value gradually over time and to couple this move with a tax rate roll-back provision. For example, assessed values could be increased to market value over a five-year period; each hike, moreover, would be accompanied by a rate roll-back (in order to keep revenues at a constant level), save for an inflation adjustment as well as new properties on the tax rolls. Importantly, this option also would restore local fiscal control and decision making in the state, an added benefit which while not outweighing the short-term trauma of shifting property tax burden among property owners, might be worth the effort in the long run.

#### CONCLUSION

Funding California's schools in the next decade will be a challenge. About \$2 billion per year over the next few years are required to maintain current service levels. During this same period, another \$1 billion per year are needed to refurbish or build schools that will house new students entering the system. In addition, the state's mechanisms for raising and spending dollars need an overhaul.

Gann restrictions on state spending need loosening; SCA 1, which effectively will allow the state to spend all revenues that the current tax structure produces, is an important step in this process. At some point, Gann ought to be eliminated altogether. Finally, both for reasons of equity and local fiscal decision making, Proposition 13 needs to be changed. In short, refurbishing California's overall state and local fiscal

structure is the first needed step in addressing California's school finance challenges. Because this requires constitutional alterations, change is in the hands of the electorate. Once those changes are made, focused attention on the school finance formulas themselves—the overly complicated revenue limit formula and the antiquated and inequitable categorical aid formulas—is called for. These formulas need streamlining, updating, and simplifying. Technically, California's school finance problems can be remedied. Finding the requisite political leadership and public will is more difficult.

- <sup>1</sup>In this instance, ADA is higher than total enrollment because it includes summer school, adult education, ROC/P, and county offices not included in the fall enrollment count.
- <sup>2</sup>Includes all general fund, special funds, and capital outlay.
- <sup>3</sup> The GNP deflator for state and local governmental purchases.
- <sup>5</sup> Figure 8.8 uses the most recent data for each category of information.
- <sup>5</sup> The National Education Association and California definitions of average daily attendance (ADA) are different. California's ADA, which *includes* excused student absences, is more like NEA's average daily membership (ADM).
- <sup>6</sup> Helen Cagampang, Walter Garms, Todd Greenspan, and James Guthrie, Teacher Supply and Demand in California: Is the Reserve Pool a Realistic Source of Supply, (Berkeley, CA: University of California at Berkeley, Policy Analysis for California Education, PACE, 1986).
- <sup>7</sup> California Commission on the Teaching Profession, Who will Teach Our Children? (Sacramento, CA: Commission, 1986).

- <sup>8</sup> Carnegie Forum on Education and the Economy, A Nation Prepared: Teachers for the 21st Century (New York, NY: Carnegie Forum's Task Force on Teaching as a Profession, 1986).
- <sup>9</sup> Legislative Analyst, The 1989–90 Budget: Perspectives and Issues, 1989, 170.
- <sup>10</sup> Education Code, Chapter 22, Part 10.
- <sup>11</sup> School Services of California, *California School Finance Provisions: 1989–90*, Sacramento, CA.: School Service of California, 1989.
- <sup>12</sup> Joint Committee on School Facilities, Summary Report of the Committee Hearing: The State School Construction Process, Sacramento, CA.: California Legislature, April 7, 1989.
- <sup>13</sup>The only exception to this was for existing bonded indebtedness.
- <sup>14</sup> School Services of California, California School Finance Provisions: 1989–90.
- <sup>15</sup> Legislative Analyst, The 1989-90 Budget: Perspectives and Issues.
- <sup>16</sup> School Services of California, California School Finance Provisions: 1989–90.
- <sup>17</sup>California Association of School Business Officials, Budgeting for Developers' Fees: A Guide for School District Business and Fiscal Staff. CASBO, 1989.
- <sup>18</sup>The savings is less than 20 percent because some fixed costs do not vary with increases in the number of students. Legislative Analyst, 1989: 182–3.
- <sup>19</sup>Robyn Phillips, "Restoring Property Tax Equity," in *California Policy Choices* vol 4, John Kirlin and Donald Winkler, eds., (Los Angeles: University of Southern California, School of Public Administration, 1988), 143–169.

#### Chapter 9

# Special Feature: The Conditions of Children in California

After reviewing findings from the first four editions of PACE's Conditions of Education in California, it was apparent that environmental factors outside the classroom are changing the nature of schooling, with major implications for state educational policy making. Increasingly, California schools must meet the needs of children from backgrounds and experiences they were not set up to serve and historically have not served well. For example, the 1984-88 editions of Conditions of Education in California documented a major increase of children living in poverty and pupils who did not speak English as their primary language. Among the related set of elements that shape children's experiences are level of family income, parent employment, language proficiency, health care, drug abuse, and family support systems such as child care and mental health services.

The analysis in *Conditions* implied that the momentum and success of school reform relied increasingly on understanding and connecting educational policies with other policies for children. This requires a broader public policy perspective regarding the interaction of education and children's policies and closer linkages between schools and other children's services agencies.

Yet public response often focuses on individual pathologies. Newspaper headlines highlight dramatic developments; task forces investigate problems and suggest solutions; social advocacy groups focus attention on teenage suicide, latch key children, substance abuse, and other disturbing conditions. Though important, these efforts typically have failed to link particular problems to the overall experience of childhood; nor have they triggered comprehensive planning to address

serious problems threatening children in California. Essentially, they have failed to ask a simple, provocative question: What is it like to be a child in California?

Consequently, PACE conceived a report that would help create a broader conception of children's policy as well as bridge educational policy to other children's policies. For example, the school could be a location of more services such as health and child care. But our main task was to provide a comprehensive overview of children's conditions rather than the condition of the service system and institutions that help children. We brought together 26 authors from all areas of children's policy, and they analyzed social indicators as well as critical data gaps. We assembled indicators that reflect children's values, attitudes, and lifestyles, as well as the more typical policy indicators of family structure or substance abuse. The resulting report is entitled *Conditions of Children in California*.

Several themes emerge from this unique analysis. These are provided in the chapter highlights that follow. We uncovered both positive and negative trends, but most startling is the speed and degree of change. A majority of California's children are healthier, wealthier, and better educated than at any time in history. But some trends that bode least well for children have accelerated the most rapidly.

The conditions of services currently delivered to children are plagued by three broad problems: underservice, lack of prevention, and service fragmentation. These problems warrant a reassessment of the entire system (public and private) that provides children's services and a reconsideration of the appropriate role of the school.

#### Chapter 1: Introduction Michael S. Wald

- This report is an attempt to assemble a set of social indicators that suggest an overall portrait of the quality of life of California's children. It synthesizes material not readily available to policy-makers, points out gaps in available data, and where appropriate, offers limited policy recommendations.
- Data are included on physical and mental health, physical safety, sexual behavior, and academic achievement. Because children are largely dependent upon settings and services controlled by adults, the report also attempts to evaluate the conditions of the settings in which children develop—families, day care facilities, schools, and neighborhoods— and addresses the systems that serve children, such as health and welfare services, justice systems, and private organizations.
- Recent polls indicate that three out of four American adults feel that problems facing children are worse today than in decades past. Most think that parents and the schools are not doing a satisfactory job of child-rearing. Moreover, the chief executives of 225 American corporations have expressed concern about the likelihood of "an expanding educational underclass."
- In spite of these perceptions, it is clear that most children in the nation and in California are healthier, wealthier, and better schooled than were their earlier counterparts. Is there really cause for concern? Is the condition of children better or worse? Or both?
- The size, composition, and trends of California's changing population are emphasized throughout the report. In the next ten years California will add one and a half million to the present population of seven million children, an increase of 20 percent. Children from ethnic or racial "minority" groups will constitute an increasing majority of California children.
- There is a growing disparity, largely along racial/ethnic lines, between advantaged and disadvantaged children. Though the economic well-being of most California children increased considerably in the decade before 1970, the gap in income between the poorest families with children and other families with children has grown in the past ten years.
- Inconsistency in the quality of publicly financed, institutional child care is another theme in this volume. In addition to a lack of qualitative uniformity, it appears that public systems that serve poor children are in worse condition than those that serve middle class or wealthy children.
- A final theme that emerges is that California lacks any systematic means of gathering data about children's well-

being and of establishing, coordinating, and evaluating programs designed to meet children's needs. We know particularly little about the almost uncharted private sector of children's services, or about the lives of children between ages one and four.

- Except for schooling, child care, and some preventive health programs, most state policy is directed at children with manifest and severe problems. While there are good reasons to target programs at those most immediately in need, such programs commonly provide too little, too late really to improve the condition of children. Despite widespread recognition that a number of preventive programs are both cost efficient and best for children, such programs remain scarce.
- California appears to be in a period of retrenchment in its commitment to children. From the 1940s until the 1970s, this state exerted national leadership in developing attitudes toward children's needs, developing novel responses to the challenges of children's health care, day care, delinquency, abuse, and neglect. While California retains leadership in some areas, that leadership has faded over the past ten years. Despite the changing contexts in which children live, few new initiatives have been mounted on behalf of California's children.
- The new problems confronting California's children reflect the changing family structure, the impact of immigration, and the emergence of a small group of very disadvantaged parents whose children are at great risk of inadequate physical, emotional, academic, and social development. These new problems will require new policy initiatives, and perhaps new structures for the development of public policy. This report is intended to help guide policy-makers who would venture in these directions.

#### Chapter 2: A Sociodemographic Portrait John W. Evans, Michael S. Wald, Claire Smrekar, Marc J. Ventresca, with Laura Walkush

- The well-being of California's huge child population is of increasing importance to the nation. At present, one in every nine American children is a Californian. Ten years from now, one in every eight children will live in this state.
- The child population in Los Angeles county alone totals more than two and one-quarter million persons—more than the child populations of over forty states and more than the total populations of twenty states. Los Angeles county is home to more than a third of the children in California.
- California's share of the nation's minority children is particularly large. One in every three Hispanic American

children lives in California, and two in five Asian children live here. In ten years, half the children in the state will be Hispanic or Asian, with non-Hispanic whites comprising a shrinking proportion of the child population.

- The California children of the late 1970s, together with immigrant children, comprise a larger young cohort that will dramatically shift the numbers of children in particular age groups. In ten years, the youngest age groups may begin to decrease in size, even as the number of teenagers continues to increase for some time.
- Despite their burgeoning numbers, California's children comprise only one fourth of the state population, whereas they were one third of the population twenty years ago. Moreover, the percentage of households containing children is declining, due to some decline in the percentage who ever marry, some increase in the percentage of childless couples, and a change in the total age distribution.
- California's child population is so different from the nation's in size and ethnic diversity that federal social welfare policies are not optimally suited to this state.
- The well-being of children in this state depends increasingly upon the willingness of those without children to commit public and private resources to children. Failing this, the resources available to each child will decline.

# Chapter 3: Family Life Michael S. Wald, John W. Evans, Claire Smrekar, and Marc J. Ventresca

- Today's children live in more diverse family settings. Increases in divorce, in single mothers, and in alternative parenting arrangements have altered the traditional family lifestyle. There is evidence that divorce increases the risk that a child will experience problems in academic, emotional, and social development.
- Family conditions have a major impact on children's emotional well-being, and on their scholastic and social success. While the impact upon children of various family influences are complex, two salient factors emerge from the data as significant influences on a child's well-being: family structure and teenage parenthood.
- The average number of children in a household has declined. Seventy-seven percent of all families with children under 18 have one or two children; only 23 percent have three or more. Black, Hispanic, and Southeast Asian families tend to have more children than others.
- Although 75 percent of children live with two parents (including stepparents), 50 percent will live in a single-parent

household sometime before the age of 18. The estimated average length of stay in a single-parent home will be six years.

- Major causes of changes in family structure are an increase in divorce and a rise in the numbers of births of children to single mothers.
- Divorce rates have doubled since 1960. One third of the children in California will experience parental divorce before age sixteen. Divorce is often attended by economic and psychological pressures that diminish the parent's supervision of children, and may thus contribute to school failure, drug and alcohol abuse, and early sexual activity.
- One in four California children is born to an unmarried mother. More than half of black children are born to single mothers.
- The income of single mothers is substantially lower than that of married parents. Almost half of all single mothers live at or below the poverty level.
- Despite widespread concern about the conditions of children born to teenage mothers, there is little research on the progress of these children. However, available evidence indicates that teenage parenthood is often detrimental to the parents and to their children.

## Chapter 4: Economic Status Michael S. Wald, John W. Evans, and Marc J. Ventresca

- The economic status of children depends on several factors: 1) family income, 2) number of children in the family, 3) proportion of family income spent by parents for their children, 4) amount society invests in children, and 5) amount of money children can earn from work.
- Between 1959 and 1969, the economic well-being of most children increased considerably. Since 1969, and especially since 1979, economic well-being of children has deteriorated.
- More than one in every five California children—1.78 million children—lives in a family whose income is below the federal poverty level. Many more children live just slightly above the poverty line. The number of children living in poverty doubled between 1969 and 1987.
- In 1981, the proportion of children in poverty was lower in California than in the nation as a whole. By 1986, California's percentage of poor children was higher than the nation's. As a group children are worse off than adults—since 1969 there has been a greater percentage of children than adults living in poverty.
- The future number of children in poverty is likely to

increase in California, largely as a result of increases in divorce, single parents, inadequate educational preparation, and low paying jobs for people reaching their child-bearing years.

- The income disparity between those children living in the poorest families and children living in other families has widened in the past 10 years.
- Poor families are disproportionately female-headed.
   Families headed by single mothers are four times more likely to be poor than are two-parent families. Three-fifths of female-headed families with children under six are living in poverty. But poverty rates for children in California would have increased between 1969 and 1984 even without an increase in single-parent families.
- Working single mothers, most of whom do not receive child support from the father, earn wages lower than those of other women. Their wages generally are not high enough to raise them above the poverty level.
- Most California children (52%) in poverty live in twoparent families in which at least one parent works.
- For a family of four or more, in 1988, if both parents worked full-time at the minimum wage, their combined income still fell below the poverty line. Families with younger family heads, those under 30, and especially those under 25, are much more likely to be poor.
- Largely as a result of immigration, the face of California poverty differs from that of the nation as a whole. That face is far less black and far more Hispanic. And the family conditions of California's poor children are especially varied. Typically, the poor among California's Hispanic and Asian children live with two parents, poor white children live with a divorced mother, and poor black children live with a mother who never married. Hispanic poverty is primarily caused by low wages even if both parents work. White poverty comprises the largest subgroup of children in poverty nationally (44%), but only 26% in California.
- The children of the poor are three times more likely to die in infancy, four times more likely to become pregnant as teenagers, and are more likely to suffer serious illness, abuse, neglect, and to drop out of school than are their non-poor counterparts. Family income thus serves as a useful proxy for a child's well-being.
- Many poor children are not receiving the benefits of state and federal programs designed to help them. Though a greater proportion of poor children are covered by AFDC in California than in most states, still less than half of eligible families receive AFDC income. Moreover, a smaller percentage of poor children receives the benefits of food stamps, free school

lunches and public housing in California than in the nation as a whole.

 Because the composition of California's poor differs from national norms, with so many California Hispanic and Asian poor, federal policies are not optimally suited to this state. Moreover, even state policies toward the poor may not take into account the great ethnic diversity. Most poor Hispanic families, for example, will not be assisted by increased welfare payments, but could move out of poverty through higher-paying jobs.

## Chapter 5: Child Care and Early Childhood Programs W. Norton Grubb

- Less than a third (28.6 percent) of California families have the father working full time and the mother at home. Approximately 1.14 million California children are in some type of child care, though only 15 percent are in child care centers. Many parents assemble patchwork arrangements, combining their work schedules and small amounts of care by relatives, so that their children need not be in formal child care. In families where both parents work, one-third have at least one part-time worker.
- Very little is known about the quality of child care. Most parents prefer care in their own homes, but often find this is difficult to arrange. Resolution of the ideological debate about quality and adequacy of care seems unlikely in the absence of consensus concerning the proper goals of child care.
- Almost all parents who use child care services report that
  they are satisfied with the quality of the arrangements. However, 21 percent of households using child care reported
  problems severe enough to change arrangements. About 48
  percent of those who changed used family day care.
- In 1986 the average cost of full-time child care for preschool children was \$3,023 a year. For a family of four at the federal poverty level, 50 weeks of care for one child consumed 27 percent of income, while two children in care pushed the family's child care bill above half of income. Even moderateincome families are hard-pressed by child care costs.
- The increase in California's children (ages 6-14), and the entrance of more women into the work force, makes it likely that demand for child care will increase.
- California's child care system and early childhood programs are likely to grow increasingly inadequate both in scope and quality, despite this state's leading role in the development of policy in this area. In the view of most observers and advocates, the current system is plagued by disarray and

Special Feature 123

deficiencies.

 Lack of information or availability appears to prevent a significant number of parents from using centers or family day care. Other families encounter insurmountable problems with cost, scheduling and location. Public programs serve less than 9 percent of eligible poor children.

- California now faces a clash between increasing demand and inadequate funding for child care. The discovery of new child care needs—after school care, infant care, and care for handicapped children—exacerbates the feeling that public subsidies are inadequate. Moreover, real resources committed to publicly-subsidized programs have fallen 20 percent in the past ten years. These declining expenditures appear to have resulted in fewer children being served, as well as in the deterioration of the quality and evaluation of services.
- Limits on local property taxes have increased the state funding burden. California has had a system of centralized funding and diversified programs. It now seems appropriate, however, for the state to adopt the reverse: diversified funding and consolidated programs.
- Every report on children has called for an integrated program of children's services and a coherent state policy. But administrative divisions and the "California model" of highly targeted child care programs make such an approach difficult.
- The search for alternative revenue sources has generated many creative efforts to increase support among local governments and corporations. Valuable as such efforts are, they cannot now generate substantial revenues for child care. Effective revenue diversification would require changes in federal policy and in state law, and a new consciousness on the part of corporations and other private donors.

#### Chapter 6: Education James W. Guthrie

- On average, California students daily spend more waking hours in school (approximately 15,000 before graduating) than in any other single endeavor. Even so, this is about one third less time in school than children in many foreign nations spend.
- Children find their schools and classrooms crowded, and the education system as a whole wobbles under the weight of trying to raise revenues, construct classrooms, and train teachers for the state's large (5 million) and growing number of students.
- The racial and ethnic diversity of children in California schools is unprecedented. Certainly no other state, and probably no other nation, has students from as wide an immigrant

spectrum as does California. Approximately 16 percent of public school students were born in another nation.

- Despite the breadth statewide of cultures and races, many children, and most white children, attend local elementary schools and classrooms with students like themselves. This racial isolation occurs primarily because of income disparities and residential housing patterns, not because of a deliberate state policy.
- Large and growing proportions of California's school children are from social backgrounds frequently linked with low academic achievement. Almost one quarter of them are from poor households and one seventh are not proficient in English.
- California's children attend classes with many more classmates than do other American children. These large classes reduce the time for individualized instruction.
- California invests only minimally in children's schooling. The state spends less per pupil than the national average, less than other major industrialized states, and a stunning \$2,500 (almost \$75,000 per classroom) less than New York state. However, the huge numbers of children involved statewide, plus constitutional impediments to added spending, render it unlikely that public investment will be increased in the short run.
- Academic achievement of California's top-performing students compares favorably with that of their counterparts throughout the nation. Black and Hispanic school achievement, while still below average, has been increasing. Elementary students study and perform well in standard academic subjects, e.g., reading, mathematics, and written language. Secondary students increasingly enroll in rigorous academic courses.
- These favorable facts mask unsettling conditions. Only slightly more than a quarter of high school graduates have taken courses permitting them to attend state universities.
   California students have great difficulty with problem solving and the more complex higher order skills.
- High secondary school dropout rates doggedly persist, and the academic performance of large numbers of secondary school children is so poor that they are unlikely to participate effectively, either as workers or as citizens. Despite these conditions, students, when surveyed, express substantial satisfaction with their schools.

#### Chapter 7: How Children Spend Their Time and How Community Factors Affect Their Well-Being Donald E. Miller and John B. Orr, with Marc J. Ventresca and Claire Smrekar

- Neighborhoods shape the life of the child. They are the child's universe. And the nature of that universe—rural or urban, homogeneous or cosmopolitan, nurturing or forbidding—in large measure determines the character of that child's social life and access to recreational and educational resources.
- Children's leisure activities are also affected by social and economic factors such as social class, family status, parental values, ethnicity, physical health, and personal values.
- Between one-fifth and one-third of school-age youth belong to voluntary youth organizations. Many of the functions previously performed by the family are now assumed by formal youth organizations.
- The constituency of youth organizations is changing.
   Children from low-income and working families are increasingly targeted, and many single-sex organizations have gone coed.
- Many children spend significant amounts of time participating in organized sports programs. Among Oakland sixth-graders, for example, half of the girls and almost three-fourths of the boys are active in at least one sports program. Teenage boys spend about an hour a day in these activities, girls about half an hour.
- Girls today find greater opportunities for participation in organized sports. As one measure of this trend, two girls for every three boys now earn a varsity letter, as compared with the one for every three who earned letters twenty years ago.
- Recreational participation suffers from limited availability of facilities in some parts of the state, and from limited accessibility in other places. In Los Angeles, Hispanic children find themselves with a surplus of baseball diamonds and a drastic undersupply of soccer fields. Elsewhere in the state, parents worry about the safety of recreation facilities and of the neighborhoods in which the facilities are located.
- California libraries are struggling to adapt to demographic and social trends affecting children. Though many immigrant children remain unfamiliar with the local library, their sheer diversity requires that in San Francisco, for example, children's materials be collected in 37 languages. Throughout the state, children of some working parents are using libraries as de facto after-school day care centers.
- Religion plays an important role in the lives of half of

America's teenagers. In the western U.S., one third of high school seniors attend services once a week or more, while an additional sixth go once or twice a month. Black teenagers are more active in religion than are white teenagers.

- Children spend more waking hours watching television than they spend in any other single activity over the course of childhood. Black children watch considerably more television than do white children.
- Youth devote about one-fifth as much time to music listening as they do to TV watching.
- A greater proportion of youth works today than ever before. Two out of three high school students do part-time work, the major out-of-school activity of older teens. A fourth of all seniors work at least 26 hours per week, with possible detriment to their studies. Girls and boys work about the same number of hours, but their jobs remain sex-stereotyped.
- Youth work mainly at minimum wage jobs and do so to have spending money. The disposability of teenage income reflects an intensification of teen consumerism.
- Many of the activities in which children spend their time are made possible by local governments and by the voluntary sector. If opportunity is not equitably available, this reliance on localities and voluntarism may increase the disparity of resources across neighborhoods, cities, and counties. Children from low-income areas are thus more likely to lack the variety and quality of programs and facilities publicly available to children in more affluent areas.
- The well-being and enrichment of children is best assured by the availability of a wide diversity of recreational and educational facilities and programs.

#### Chapter 8: Health

Neal Halfon, Wendy Jameson, Claire Brindis, Philip R. Lee, Paul W. Newacheck, Carol Korenbrot, Jacquelyn McCroskey, and Robert Isman

- Medical and public health developments in this century
  have substantially improved children's health. Infant mortality has declined dramatically; treatment of childhood diseases
  has improved and immunization has virtually eliminated
  several previously common childhood diseases.
- The vast majority of children in California are considered to be in excellent or good health by their parents. Fewer than 10 percent of California children are considered to have severe health problems and/or chronic disabilities that limit their activities. But parents of poor children are two or three times more likely to report their children are in poor or fair health.
- The conditions of children's health requires more than an

Special Feature 125

examination of diseases and impaired functioning. The effects of poverty, poor nutrition, parental neglect, adult drug and alcohol abuse, child abuse, and risk-taking behavior are currently endangering children.

- Accidents, suicide, drugs, and violence have increased in importance relative to infectious diseases as problem areas. In the 5-14 age group, intentional and unintentional injuries rank as the leading cause of death. Adolescents are the one group in society with an increasing mortality rate. But, interventions are difficult to identify, target, and sustain with sufficient intensity to make a difference.
- Existing categorical programs do not adequately address the health needs of growing numbers of very high risk children (children in foster homes, teenage mothers and their babies, drug exposed children, and homeless children). Moreover, the fragmented delivery of many health and related social services makes multiagency integrated services exceedingly difficult.
- There are no clearly defined or agreed upon health goals. A revised policy would define good health, gather data related to children and family health, conduct a needs assessment, and propose programs for addressing such needs.
- White children, on the average, visit a doctor more than one-and-a-half times more often than do minority children.
   This lack of preventive care may lead to more serious ailments that must be treated in hospitals or by other expensive interventions.
- California has traditionally had a low rate of infant mortality compared to other states, but has fallen in rank recently (7th in 1970 to 14th in 1985). In 1985, the infant mortality rate in California actually rose. This increase may be related to health care gaps or changes in adult behavior such as drug abuse.
- Infant deaths due to prematurity and birth defects have three clear "risk factors"—race, low socioeconomic status, and low level of education. Black infant mortality rates are nearly twice that of whites.
- A substantial proportion of infant mortality is preventable, particularly through the prevention of low weight births by improving the content, access and utilization of prenatal services to low-income women who are at high risk of having low birth weight babies.
- Unemployment and changes in employment patterns (for example, small, service-oriented businesses) have left many women uninsured. Women in families with incomes below the poverty level, while constituting only 17 percent of reproductive age, constitute 37 percent of the uninsured, even when those with Medicaid are included among the insured. Black

women are 1.5 times as likely as non-Hispanic whites to be uninsured. To the extent that low-income births will rise, birth outcomes can be expected to worsen until women have access to effective prenatal care.

- Although a 1987-88 survey of drug and alcohol use among California students found the percentage of seventh-, ninth-, and eleventh-grade students who have used these substances has declined, the numbers still remain high. More than forty percent (42.4%) of eleventh graders reported that they had tried illegal drugs and 61.5% said they had been drunk at least once by the time they were age 16. Nearly half (45.8%) of all eleven year olds said they had tried alcohol; 10% said they had gotten drunk.
- The numbers about cigarette smoking are more encouraging. Nearly three-quarters of eleventh graders (73.3%) reported in 1987-88 that they had never smoked a cigarette.
- There is some evidence education programs may be having an effect. On the 1988 survey of students, 63.1% of eleventh graders said they had learned in school that drugs and alcohol are harmful.
- Drugs and alcohol continue to be serious problems, especially in poor and minority communities. For adolescents confronted with school failure, an unsupportive home environment, and perceptions of few life options, use of drugs and alcohol often present a too-attractive alternative.
- Sexual activity has increased among American adolescents since the early 1970s. National statistics show the average age at first sexual intercourse is 17.1 for females and 16.5 for males. By age 20, three out of four females and five out of six males will have had sexual intercourse at least once.
- California has the second highest teenage pregnancy rate in the country: for 15-19 year olds, it is 143 per 1,000. One in ten of California's pregnant teenagers did not receive any prenatal medical care or did not begin care until the third trimester.
- In 1985, California's public costs for families begun by the first births occurring while the woman was a teenager were \$3.08 billion dollars. Had these births been delayed until the mother was 20 years old, 40 percent—\$1.23 billion dollars—would have been saved in 1985.
- The California Immunization Program combines the efforts of the California Department of Health, local health departments, and the private sector to prevent, control, and eliminate vaccine-preventable diseases.
- Currently, over 96 percent of California's kindergartners have received adequate immunizations for measles, rubella, and mumps. DPT and polio vaccination rates are slightly lower because of difficulties in making sure the child received

the whole series.

- Stronger laws more strictly enforced, such as those requiring students in grades K-12 to show adequate immunization, have been a major cause of higher immunization levels, although poorer children and minorities are still at greater risk of not being immunized.
- In the last decade the cost of completely immunizing a single child through public vaccination programs has risen an astonishing 700 percent from \$5.00 to \$32.00, largely as a result of manufacturers responding to skyrocketing liability insurance costs.
- Added immunization programs should be targeted to high-risk groups—toddlers, teens, and families in poverty.
   New immigrants continue to suffer linguistic and cultural barriers that inhibit their access to immunization.
- Although the vast majority of children have access to adequate quantities of nutritious food and do not go to bed hungry, there are indicators of a growing problem of malnutrition and hunger.
- California supplements federal food programs with state funds and serves children through programs like Food Stamps and School Lunch. In 1985, 60 percent of the members of households participating in the Food Stamp Program were children. Food stamp benefit levels, however, have not kept pace with the inflationary increases in food costs.
- Dental caries and periodontal diseases are the most prevalent diseases affecting California children. Poor and minority groups have much greater prevalence of dental decay than their wealthier, non-minority peers. Data from the 1983 National Health Interview Survey indicate that poor and minority children were significantly less likely to have made a dental visit in the past year, and were far more likely to have never seen a dentist, than higher income and white children.
- Community water fluoridation remains the most cost effective method available for caries prevention. While nationally 67 percent of community water supplies are fluoridated, only 17 percent of those in California are. Almost all major U.S. cities have fluoridated water; however, Los Angeles, San Diego, San Jose, and Sacramento remain unfluoridated.
- Half of dental decay can be expected to occur by kindergarten, yet only 10,000 preschool age children are currently enrolled in a state program to prevent tooth decay.
- Although the proportion of the population with dental insurance has increased substantially over the last 20 years, poor and minority group children still rank low. Medicaid has been ineffective in alleviating this problem. Medicaid children were only two-thirds as likely to receive a dental exami-

nation as children in general and only slightly more than half as likely as the average privately insured child.

- The lack of availability and accessibility of dental services in California is worsening. MediCal needs to be restructured to include more dentist participation, alternative funding mechanisms, and publicly-funded dental care programs where no providers exist to serve children who need care.
- The Child Health Disabilities Program (CHDP), which
  offers health assessment screening services, including a
  health history, physical examination, immunizations, vision
  and hearing test, nutritional assessment, and a variety of
  screening and lab tests, serves only 22 percent of the eligible
  children.
- Development disturbances can be physical, mental, emotional, or a combination of these. California has two main systems for delivering developmental services: special education in the schools and assistance provided by the California Department of Developmental Services (DDS).
- California's schools provide special education for 400,000 mildly to severely handicapped students.
- DDS clients have specific limiting conditions that are not primarily physical in nature but stem from problems in the central nervous system; for example, cerebral palsy, epilepsy, and autism. Children with severe physical disabilities are generally served by California Children's Services (CCS).
- CCS considers almost all catastrophic physical conditions eligible. Financial eligibility is more liberal in California than in many other states. Currently, children are eligible for CCS services if family income is below \$40,000 a year or if medical care expenses exceed 20 percent of family income.
- In the last two years, CCS caseloads have increased substantially, from an annualized rate of 74,000 during the first part of 1984 to one of 87,000 during the first part of 1986. However, expenditures for CCS have not kept pace with increased caseloads.
- The United States has not developed a health care system
  that can guarantee health care to all citizens. The coupling of
  health insurance with employment means that economic
  trends, such as rising unemployment, will increase the number
  of uninsured children.
- MediCal is the primary insurer for children in poverty.
   MediCal currently serves 1.5 million children and has standards of eligibility and benefits that are generous in comparison to other states—California provides 32 of the 33 optional services that states can elect to provide under federal regulations. However, MediCal children often do not receive quality care in comparison to those with private sector insurance.

## Chapter 9: Mental Health Donna Weston, Linnea Kiee, and Neal Halfon

- Rapidly changing social conditions have dramatically affected the range of cultural and family situations that may be associated with mental health problems. Although these risk factors are still not adequately understood, changing family structures, economic hardship, genetic and biological factors, and the dynamics of "dysfunctional" families are important factors.
- Identification, diagnosis, and treatment efficacy for psychological and emotional problems remain highly uncertain, with effectiveness data scarce and difficult to interpret. Data on frequency of different types of problems and disorders, age of onset, severity, and other prevalence data are largely unavailable.
- Estimates of severe emotional disturbance range from about 2 percent, or 142,000 children, to 8 percent, or 568,000 children. Nonetheless, fewer than 10,000 children and adolescents in California's public schools have been identified as severely emotionally disturbed.
- More than 50,000 California children and adolescents are
  in foster care. The prevalence of emotional, behavioral, and
  developmental problems among these children is common.
  Studies report between 30 and 80 percent of foster children
  examined for psychological problems to be moderately to
  severely impaired.
- Abused children often come from highly stressed, multiproblem families, warranting a family and child treatment focus.
- Alcohol use in pregnancy can lead to mental retardation and fetal alcohol syndrome in offspring. An increasing number of babies are being born to women using drugs, particularly crack/cocaine, resulting in a broad range of developmental problems for newborns.
- Public policy has not been targeted to the establishment of a continuum of mental health services to meet the continuum of need. Services are heavily weighted toward expensive inpatient hospitalization and are not balanced with improved residential, outpatient, and preventive services.
- Determining the expenditures for children's mental health services is difficult because funds for children are intermingled with resources for adults. Despite the broad array of government and private funding, gaps in resources and services remain.

## Chapter 10: Child Abuse and Child Welfare Services Richard P. Barth and Marianne Berry

- Increases in reports of child abuse have strained the welfare system. In 1987, California investigated 61,090 reports of child abuse. Between 1981 and 1988, reports of physical, sexual, and emotional child abuse rose 212% in California.
- Two out of three families reported for child abuse receive no preventive, interventive, or follow-up services. (The state currently has no common definition of "substantiated child abuse.")
- Recipients of child welfare services in California are disproportionately members of minority groups. More than half the families whose children are under court-ordered protection at home are minorities. Black children are reported for abuse and receive formal services at twice the rate expected by their proportion in the population.
- Homeless children have no predictable place in the child welfare system. Since the mid-1980s, the focus on children at risk of physical and sexual abuse has left the increasing numbers of homeless and neglected children virtually without child welfare services.
- California's policy of family reunification, coupled as it is with inadequate support and insufficient follow-up services, fails adequately to protect children from subsequent abuse.
- Each year, one out of every one hundred California children spends time in foster care. In 1988, the number of California children in foster or residential care reached 44,337.
- Despite the large number of children in foster care, California still has an inadequate number of foster care families. Without increased funding for foster care, the quantity and quality of foster parents will continue to decline as the numbers and needs of children increase.
- Studies show that adopted children fare better in the long run than do children placed in foster care. Nevertheless, compared to other states, California has a smaller proportion of adoptions and a larger proportion of foster care placements. Only 30% of children in foster care in 1985-86 were recommended for adoption.
- Assuming no changes in the existing level of services, and assuming that homelessness, substance abuse, and child abuse and neglect remain at their current level of severity, the quality of children's lives will diminish.
- In order to make informed policy and practice decisions,
   California needs a statewide data management system that

tracks individual children across time and services plus a system of key indicators of specific harms suffered by children and critical conditions of family life.

#### Chapter 11: Children, Delinquency, and the Law Thomas David and Marc J. Ventresca

- Many indicators and measures of criminal activity among youths have posted steady declines since the early 1970s. Yet the youth population incarcerated in state and county facilities shows substantial and continuing increases, as do other system indicators as the average period of incarceration, length of probation, and average probation load.
- From 1980 to 1985, the statistics on correctional populations show significant increases. The number of juveniles on probation rose by 66 percent; juveniles in county detention centers, camps, and ranches grew by 24 percent, and the juvenile population of the Youth Authority grew by 66 percent. In all, there were 85,941 Californians under age 18 who were being controlled by various state and local correctional agencies. The proportion of California youth under correctional supervision increased by 50 percent between 1980 and 1985.
- These data portray a system that is becoming more formal, more restrictive and more oriented towards punishment. In addition, probation caseloads have increased to levels that make adequate supervision unrealistic and county and state facilities face chronic and severe overcrowding.
- Juvenile justice in California is not an integrated or coordinated system, but rather a collection of agencies tied together for the processing of juvenile offenders. There is often a lack of linkage between prevention programs, corrections, probation, and social support services.
- Policies vary greatly among counties. Some counties have no local facilities and commit juveniles with low-level offenses to state facilities with hardened criminals.
- California incarcerates a higher proportion of its juvenile offenders than do other states with comparable large and heterogeneous youth populations.
- Data on the characteristics and conditions of youths in the juvenile justice system are rudimentary and largely administratively driven. There is a paucity of information about access to educational opportunities, training and rehabilitative programs, and about the quality of life of incarcerated youths. The diversity in legal definitions of delinquency, inaccuracies in counting, and inconsistency in enforcement make it difficult to fix a "true" incidence of delinquency itself.
- · Contrary to popular belief, fewer California youths

- had contact with the legal system and juvenile arrests actually declined through much of the 1980s. Arrests have increased slightly in recent years, paced by increased drug arrest rates (22 percent), especially for narcotics (70 percent). Nevertheless, rates remain at levels well below those of the 1970s.
- As a group, juveniles in California are 45 percent more likely to be arrested than are adults. Variations occur, however, among specific crime categories. Property crimes account for the majority (62 percent) of juvenile felony arrests.
   Juveniles account for 26 percent of all property-related felony arrests.
- Boys accounted for 77 percent of all juvenile arrests.
   Most juvenile arrests are white (53 percent), with Hispanics 28 percent and blacks 25 percent.
- Older youth, boys, certain racial and ethnic minorities, poor and urban youth are all more likely to be arrested. But substantial variations exist by county, reflecting variations in the structure and practice of juvenile justice, as well as differences in county youth populations.
- The discretion exercised by law enforcement agencies and individuals (police officers, etc.) in deciding which individuals should be entered into the system and for what behaviors further contribute to variation in practice.
- The average length of stay in the California Youth Authority has increased from 12.7 months in 1975 to 17.4 months in 1988.
- Policy makers and the public at large have not reached a consensus on how to improve juvenile justice. Opinion polls show that although the general public wants less leniency in the courts, there is also continued endorsement for treatment and rehabilitation as the primary purposes of juvenile corrections.
- Worthy treatment and rehabilitation objectives must be balanced against the need to protect the public, to communicate an appropriate social sanction for wrongdoing, and to effect restitution both to victims and to society at large.
- The burgeoning population of incarcerated juvenile offenders will require substantial increased operational and capital funding from the state. As California reaches legislated spending limits, increasing juvenile justice costs may mean reducing state and local ability to pay for other social services.

#### Chapter 12: Income Support Programs Jacquelyn McCroskey

- About two thirds of AFDC recipients are children; in 1986, an average of 1,098,000 California children per month relied on AFDC for the basics of life.
- Overall, AFDC recipients are younger, have less education and higher levels of poverty, are more likely to be nonwhite, and have younger children than do child support recipients.
- California's need standard for AFDC was more generous than that of any other state in 1970, but by 1987, 13 states had more generous need standards, thus providing access to a broader range of families.
- Though locally administered, income programs are authorized and primarily financed by the federal government. In large measure, federal decisions drive the programs and shape the context in which California's state and county governments can operate. California must continue to assure that counties have the flexibility to effectively meet widely ranging local needs.
- California's welfare reform program—Greater Avenues
  to Independence (GAIN)—was designed to offer a comprehensive range of services, including job search, basic adult
  education, English as a second language, career assessment,
  vocational education, on-the-job training, transitional employment, pre-employment preparation, child care, transportation, and other support services. However, the program is
  not yet fully implemented and budget restrictions may significantly limit the scope and effectiveness of the intended reform.
- GAIN provides a timely opportunity to rethink income support policies and to improve the conditions of families living in poverty. Establishing formal relations between county welfare departments and economic development agencies, colleges, occupational centers, child care providers, and other major service providers will be challenging, but may bring a fragmented system into closer alignment, an outcome with potential long-term benefits for California's families.
- Almost one million (942,248) California households received child support in 1984-85, and approximately half were also AFDC recipients. The average monthly child support payment per household in California for the first quarter of 1986 was \$159.74, while the U.S. poverty guideline was \$150 per month per child.
- State and national studies suggest the need for systemic changes in California's child support program, including mechanisms for determining paternity, standard of need, and

- training of enforcement personnel. The child support program has not been conceptualized as a complement to the welfare program or adequately integrated into its administration.
- Although data collection systems are not yet at the point where individuals can be tracked across programs, it should be possible to develop better methods of aggregating data across programs serving children. In order to do so, policymakers must redefine the optimal administrative and conceptual relationships between systems to reflect the multiple needs of families and children rather than the convenience of departmental categories (for example, relationships between income support and the need for child abuse or juvenile justice services).
- Programs which provide basic food and shelter for children are manifestly beneficial both for children and for society, but there is too little research which examines how California's children are affected by its income support policies. The available data focus on systems and fiscal accountability issues rather than on the beneficial or deleterious child outcomes of current or potential income support strategies.
- A changing economy, along with recognition of the current welfare system's inadequacies, is rekindling debate on income support policies for children in California. Is it the purpose of income support programs to provide a minimum acceptable level below which no child shall be allowed to fall, or is it their purpose to ensure that parents achieve economic independence? Should parents retain the economic responsibilities of providing for their children regardless of ability to fulfil those responsibilities? What kinds of strings (for example, parental work obligations) should income support benefits carry?

## Chapter 13: Policies for Children with Multiple Needs Shirley Brice Heath and Milbrey Wallin McLaughlin

- This analysis is derived largely from the preceding chapters that demonstrate problems in service provision, conceptualization of needs, availability of data, and implementation of youth policies. The earlier chapters stress that such areas as poverty, juvenile incarceration, and child care are increasing, while children's services are overloaded, underfunded, static, and out-of-sync with dynamic societal changes.
- Children with multiple needs are underserved because of a lack of preventative services, failure to help children over time, failure to meet enough of a child's needs to assure a satisfactory outcome, and lack of coordination across service areas.

- The policy structure itself is beset by problems resulting from separate funding streams, inconsistent eligibility criteria, splintered organization of interest groups, and legislative jurisdictions that preserve service fragmentation.
- More money for the existing melange of programs will not provide the crucial improvement for children with multiple needs. Nor can any single entity, such as the school or family, deal effectively with interrelated youth problems.
- California's policies have not kept pace with the state's current and projected demographic picture of altered family life. Changing demographic characteristics have driven policymakers to respond to the needs of separate institutions that plead for segmented state action and funding.
- Few county departments have developed mission statements or department-wide master plans for children that identify the department's goals and objectives, integrate resource allocation and service delivery systems, assess the effectiveness of their efforts, or coordinate activities of divisions within departments.
- Few schools or services assist youths to deal with either the work world or the bureaucratic maze of public services.
   Adults in both schools and service agencies talk at youths, labelling their problems and fixing solutions dictated by administrative fiat or "that's just how it's done" procedures.
- In the short range, policy should focus on underservice and underfunding in such areas as child abuse, education, and health. In the long run, the goal should be to overhaul our current policy approach.
- Institutions tend to treat problems as acute rather than chronic, as episodic rather than continuing, and do not regard themselves as learning environments that help children help themselves.
- The data collected rarely inform reflective or dynamic responses by those within the agencies. Data focuses on financial "inputs" into programs, rather than outcomes. Information is administratively driven in the interest of service stabilization, and promotes reactive and prescriptive, rather than proactive and preventive, reforms.
- Service professionals within agencies seldom view their work as interactive and interdependent with the work of those in other agencies. Inadequate interprofessional preparation often begins at the university. Professionals such as teachers, nurses, and probation officers are prepared in segmented schools and programs that rarely stress the interrelatedness of children's problems.
- Promising local efforts to restructure and reconceptualize youth services have a number of common features. These features include outside flexible funding, top level commit-

- ment, implementation tailored to local contexts, middle-level administrative cooperation, and prior experience in trying to integrate services.
- Much of the duplication and confusion of fragmented children's service delivery can be prevented by providing related services at the same site such as schools. Where possible, services targeting a shared clientele should be located under one roof.

## Chapter 14: State Policymaking for Children Claire Smrekar

- A set of historical, political, organizational, and ideological forces has combined to shape a children's service delivery system in California described as fragmented, inefficient, and ill-conceived.
- Children's policy has evolved in response to a series of incremental and explosive periods in social welfare policy over the past several decades. In the 1960s, the Great Society gave birth to large categorical programs developed to target services for vulnerable children and their families. The Reagan Administration's New Federalism ushered in a period of consolidation and realignment as major categorical programs serving children were collapsed into block grants. Fundamental shifts in decision making, governance, and accountability accompanied these sweeping programmatic changes.
- A series of reports, hearings, and commissions has examined the condition of children's policy in California and recommended an array of organizational and regulatory remedies. Most recommendations involve relatively modest efforts to construct organizationally greater control, coordination, and efficiency in the delivery of children's services. Few of the recommendations involve a more sweeping, substantive exploration of the ways in which children's needs are perceived and defined.
- Despite the flurry of programmatic initiatives—including state legislative committees on children, children's budgets, children's codes, and commissions on children—most states continue to organize and deliver children's services through the traditional executive agency arrangement. At both state and local levels of government, the bureaucratic structure persists in an array of eligibility requirements, procedures, standards, categories, assessment tools, and treatment protocols. In response, states (including California) and localities have adopted various approaches aimed at improving communication processes, coordination, and integration of services within these existing bureaucratic arrangements.

A supportive and responsive children's policy must ultimately evolve out of a process which takes account of the complexities of childhood and the ambiguous relationship between family and state. By fostering the cooperation of the childserving professions across such fields as education, health, and social work, the process of crafting a children's policy for California can move toward this goal.

# Working Paper: An Exploration of County Expenditures and Revenues for Children's Services Paul Goren and Michael W. Kirst

Editor's Note: This working paper is not included in the PACE Report but is available through the Berkeley PACE office.

- State and federal lawmakers increasingly look to county governments to provide a growing array of mandated programs for children, and often require counties to share the cost of these services. As a result, counties are now the major governmental providers of an ever-expanding list of children's services, other than education.
- Though expected to bear a larger share of the burden, county governments are facing local and state constitutional revenue constraints that ill-equip them to respond to the growing need for children's services.
- At the county level, funding for children's services is composed of a volatile mix of revenues, with an overwhelming and precarious dependence on federal and state monies.
   Reduced federal support for social services, together with the dual mechanisms of Proposition 13 and the Gann limits on state spending, have required counties to do more for children with less resources.
- Counties are left unable to raise local revenue necessary
  to support non-mandated, discretionary programs such as
  children's protective services and child abuse prevention.
   Some localities are unable even to participate in federal or
  state matching programs for children, simply for the lack of
  local matching funds.
- The intensifying competition for scarce resources exerts
  a fiscal "squeeze" on children, as counties ration their
  children's services to stay within budget limits. County
  officials report cutting children's services in order to fund
  adult correction and other state- and federally mandated
  services for adults.
- By forcing children's programs to focus on acute care rather than on prevention, present policies create a potentially negative cycle of long-range implications for the condition of children.

Few California counties collect data on their total expenditures on children. More coherent children's policy requires better data systems and analysis at the county level.

Working Paper: Child Care Quality from the Child's Perspective: A Hypothetical Account and Research Review

Lyda Beardsley

Editor's Note: This working paper is not included in the PACE Report but is available through the Berkeley PACE office.

- This monograph, written as a narrative, considers the growing body of research on child care quality from the child's perspective.
- Over the past decade, early childhood educators and researchers have begun to identify a number of characteristics they believe are essential to the provision of quality out-ofhome care for young children.
- Indicators of quality of care cited include adult/child ratio, group size, caregiver training, quality of adult-child social or verbal behavior, and effects on specific outcomes (i.e., on language or social development) for children in care.
- Yet no previous study has described the cumulative effects of specific quality indicators on the overall character of a child's experiences in child care.
- This report takes a fresh look at current quality issues in child care from the perspective of the child by introducing a group of fictional preschool age children and following them through a hypothetical day in each of two quite different child care settings. Though fictional, these accounts are based on a sampling of real events in both good and poor quality child care facilities.