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School Reform and School Finance:
What Did Senate Bill 813 Buy?

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August 1988

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Executive Summary

California spends a huge amount of public money, more than any other state, to support kindergarten through 12th grade schools. These schools now serve more than 4.8 million students, and in 1988-89 the state expects to expend almost \$23 billion for their financial support.

State funding for schools represents an awesome amount of money in an absolute sense and it occupies the largest proportion of the state's overall budget. As if these two factors alone were insufficient to draw attention to school funding, at least two other conditions have been evolving which render education finance an even more visible policy issue. First, enrollments have been expanding recently and are projected to continue to do so well into the next decade. More pupils translates to an even greater demand for financial support. Lastly, public officials, professional educators, business leaders, and citizens generally have come to understand the intensifying significance of an educated workforce in order for California to maintain a competitive position in an increasingly mobilized economy.

Thus, because of the significance of the endeavor, the large amounts of money involved and their visibility in the state's budgeting process and the likely need for even more revenues in the foreseeable future, education has become an intensely political issue in California. Virtually every public official claims to be a proponent of schools. However, some claim that public education needs even more money in order to achieve the expectations held for it while others contend that schools already have adequate resources and need only use them better in order to achieve the desired outcomes. When judged by the amount of rhetoric, name calling, debates, and editorials, school funding is and will likely continue to be an important public policy topic.

This paper seeks to shed added light on the topic by analyzing school financing outcomes on several dimensions. Equity and efficiency are consistently major concerns in school finance policy. Officials, educators, and citizens frequently inquire about the amount being spent, is it enough? How much do we spend relative to other states and relative to California's past history? This paper provides answers to these questions.

In addition, policy makers repeatedly express an interest in the distributional consequences of school funding. Where do the dollars go, and who is benefitting from them? This is a particularly important issue in California in light of the 15-year history of *Serrano v. Priest*. This is California's school finance equal protection suit, a 1976 court decision which triggered major alterations that the legislature and the governor in the levels of school spending permitted local districts. This paper also addresses conditions of school finance equality.

Lastly, what is it that school finance dollars buy? Policy makers enacted Senate Bill 813 in 1983 in a major effort to transfer California's schools into more productive settings for student learning. A variety of education reforms were legislated in hopes that schools would become more rigorous academically. Has that happened? In fact, have added state funds bought more rigorous schooling? This topic also is addressed in this paper.

Major findings from this analysis include the following:

Revenue

- Both aggregate and per-pupil revenues for education increased in California during the 1977-86 decade.
- If inflation and changes in student enrollment are taken into account, however, revenue per pupil increased \$265 or 14.4 percent.
- Education revenue is now derived from volatile sales and income taxes, rather than the more stable property taxes.
- Annually fluctuating allocations have impeded districts' abilities to plan effectively and manage efficiently.

Expenditures

- California fell from 20th in the nation to 30th in expenditures per pupil during the past decade.
- Teachers' salaries have fallen as a percentage of district expenditures.
- In addition, teachers' average daily wage in 1985-86, corrected for inflation, was lower than in 1980-81.
- Of nine categories of expenditures, only benefits, contracts, and salaries for teachers' aides increased as a percentage of total expenditures.
- Formerly low-wealth districts now allocate a larger proportion of their budgets to teacher salaries. This suggests there has been some improvement in the capacity of low-wealth districts to compete for teaching talent.
- Whether or not added teacher salaries are associated with added levels of productivity cannot be determined from currently available data. However, given extensions to the school day and year, it is possible to deduce that productivity has been enhanced.

Senate Bill 813 differed from previous education finance legislation in three major ways:

- By linking additional revenue incentives with increased performance expectations rather than equalization
- By emphasizing the core curriculum and graduation requirements rather than additional services for particular students
- By focusing on the importance of teachers

Summary and Policy Implications:

- Senate Bill 813 enhanced school finance equity.
- Nine SB 813 fiscal provisions were intended to stimulate education reform.
- The law described student performance expectations and defined graduation requirements.
- It delegated decisions about implementation to local initiative.
- It linked additional instructional time and additional revenue closely.
- The Mentor Teacher Program supports structural change and teacher improvement.
- The Minimum Teacher Salary Program is designed to offset teacher shortages due to economic and demographic changes.
- Management and accountability would be enhanced by funding stability and improved reporting systems.
- Improved education productivity depends equally on increased funding levels and improved practices.
- School revenue doubled in the past 10 years. It will have to double again to maintain today's programs and account for inflation and enrollment growth.

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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, Berkeley and Stanford University. It is funded by the William and Flora Hewlett Foundation and directed jointly by James W. Guthrie and Michael W. Kirst. PACE operates satellite centers in Sacramento and Southern California. These are directed by Gerald C. Hayward (Sacramento) and Allan R. Odden (University of Southern California).

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.

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with previous education finance measures that attempted primarily to equalize funding or augment services for particular groups of students. It also describes changes in allocations between expenditure categories during the 10 years between 1976 and 1986.

This report addresses two questions linking fiscal reforms with student achievement. First, as a result of SB 813's "reforms, incentives, and strategies," are California schools better able to meet the legislature's stated goal "to provide for the educational, personal, and career needs of every pupil"? Second, is California merely paying more for the same product, or did SB 813 actually improve education?

Data from a variety of sources have been combined in this report to build a descriptive assessment of SB 813's fiscal and programmatic consequences for student achievement. However, school-by-school analysis of fiscal and education reforms, and their relationship to changes in student achievement, await the availability of school-level fiscal data bases, with which achievement and demographic data can be meaningfully compared. Longitudinal student achievement data would provide the most trustworthy evidence of reform program effects. These data also are not available.³

Organization of Report

This report is organized in the following manner. Revenue and expenditure trends between 1977 and 1986 compiled from state-collected (J-41) data, are described in Chapter 2. Provisions and outcomes of 10 Senate Bill 813 measures having fiscal consequences are examined in Chapter 3. Chapter 4 summarizes findings and policy implications.⁴

³ Three types of data are used: district revenue and expenditure reports (J-41) for fiscal years 1977 to 1986 contained in the State Department of Education's computerized data base, a mail survey of school district business managers, and personal and telephone interviews of selected business managers. Additional finance data, consisting of add-ons to the basic revenue limit for minimum teacher salaries, longer day and year, and summer school costs were examined. The Professional Assignment Information File (PAIF) of the California Basic Educational Data system (CBEDS) provided data on teacher assignments and demographics.

School districts in the mail survey sample were chosen in one of three ways: by a probability proportionate to size sampling strategy (N=30), by reputation of having one of the best business managers in the state (N=10), and by virtue of participation in a PACE study of education reform implementation (N=13) (Odden and Marsh 1987). The first group constitutes a representative sample of districts, based on district size. The second enables comparisons of conditions in districts with exceptionally skilled business managers. The third allows a comparison of survey data with qualitative data obtained from intensive interviews in 13 districts included in the larger study of the effects of SB 813.

⁴ Throughout the lengthy preparation of this report, four experienced Northern California school district business managers, Paul Disario, Pat Gibbons, Lauren Fickett, and Pete Yasitius, provided extraordinary assistance. We are also grateful to Michael W. Kirst of Stanford University and Norton Grubb and Ronald Lee of UC Berkeley for helpful criticism and suggestions, and to Terry Emmett and William H. Gerritz of UC Berkeley for contributing to the study design. The authors are responsible for any remaining errors of fact or interpretation.

Chapter 2

Changes in Education Revenue and Expenditures 1977 to 1986

Summary

- Both aggregate and per-pupil revenues for education increased in California during the 1977-1986 decade.
- When inflation and changes in student enrollment are taken into account, revenue per pupil increased \$265 or 14.4 percent.
- Education revenue is now derived from volatile sales and income taxes, rather than the more stable property taxes.
- Annually fluctuating allocations have impeded districts' abilities to plan effectively and manage efficiently.
- California fell from 20th in the nation to 30th in expenditures per pupil during the 1977-86 decade.
- Teachers' salaries have fallen as a percentage of total school district expenditures.
- Teacher's average daily wages in 1985-86, corrected for inflation, were lower than in 1980-81.
- Of nine conventional categories of school expenditures, only employee fringe benefits, contracts, and salaries for teacher aides increased as a percentage of total school district expenditures.
- Formerly low-wealth districts, those that the *Serrano vs. Priest* court case was intended to assist, now allocate a larger proportion of their budgets to teacher salaries. This suggests there has been some improvement in the capacity of low-wealth districts to compete for teaching talent.
- Whether or not added teacher salaries are associated with added levels of productivity cannot be determined from currently available data. However, given extensions to the school day and year, it is possible that productivity has been enhanced.

California's exceedingly complex school finance system evolved from interactions among the state's disparate political, legal, and economic interests. Eleven provisions adopted in the decade between 1973 and 1983—the *Serrano* decisions, the Rodda Act, Proposition 13, Proposition 4 (the Gann limit), six additional school finance measures, and Senate Bill 813—contribute to California's funding "maze."¹ To meet *Serrano* requirements, SB 90's "squeeze mechanism," a variable cost-of-living adjustment, systematically redistributed resources available for educational purposes to formerly low-wealth districts.²

Collective bargaining, introduced in the Rodda Act, altered intradistrict decision-making structures. Proposition 13 severely limited local property tax collections and consolidated the legislature's role in their distribution, while the Gann limit further restricted the amount of revenue available for all public purposes. In addition to tighter budgets from the rapid inflation of the late 1970s, school district business managers had less authority and flexibility as a result of new legal, legislative, and voter-initiated fiscal policies.

In the 10-year period examined by this report, turbulent changes from year to year in total revenue appropriations accompanied unprecedented changes in funding sources and interdistrict allocations. Expenditures changed less dramatically. For the state as a whole, per-pupil expenditures increased in real terms. However, formerly low-wealth districts had more to spend, as a result of *Serrano* reallocations, while formerly high-wealth districts, on an inflation-adjusted basis, spent substantially less general-purpose revenue per pupil. Hence, different rates of increase in teacher salaries, for example, were observed in formerly low-wealth and high-wealth districts. Since the court ruled in 1983 that revenue per pupil had been equalized and that further equalization would be detrimental to the majority of the state's children, appropriations for equalizations were substantially reduced. Thereafter, similar rates of change in expenditures were observed throughout California. The 10-year history of changes in revenue and expenditures are reviewed in this chapter.

Revenue

Each year between 1976 and 1986, with the exception of 1978-79, the legislature appropriated additional revenue for K-12 education, but additional appropriations were frequently insufficient to account for inflation. Since student enrollment declined during the first six years, however, appropriations per ADA were more consistent from year to year than were total revenues (Figure 1).

¹Numerous studies describe the intense political environment which instigated these legal and legislative changes. For example, see Elmore and McLaughlin (1982); Levy (1979); Coons, Clune, and Sugarman (1970); Meltsner, Kast, Kramer, and Nakamura (1973); Odden and Webb (1983); and Wise (1967).

²Low-wealth districts were those in which the assessed property valuation per pupil was less than the average assessed valuation per pupil for the district's size and type.

Chapter 1

Introduction

Senate Bill 813, the Hughes-Hart Educational Reform Act of 1983, embodied California's initial response to the nationwide school reform movement. Proponents, Superintendent of Public Instruction Bill Honig, State Senator Gary K. Hart, and Assemblywoman Teresa Hughes, incorporated provisions to improve funding, restore educational breadth and standards, and enhance school districts' abilities to attract and train new teachers.

Senate Bill 813's authors anticipated that a simultaneous infusion of three types of remedies—higher expectations, increased graduation requirements, and additional revenue—would revive California's ailing secondary schools. By linking additional fiscal resources with school improvement, the authors expected student achievement and professional productivity to surpass what could be anticipated from any one of the three remedies alone. Although SB 813 was not solely a finance bill, nine of its provisions, the subject of this report, had important fiscal implications.

Although it substantially boosted revenue equity (Commission on State Finance 1986), SB 813 differed from earlier education finance bills because it departed from former practices of providing revenue simply to equalize per-pupil expenditures or to augment services for special categories of students. Instead it established several mechanisms for enhancing the teaching profession and offered a reform smorgasbord from which school districts could develop locally suitable improvements. SB 813's authors anticipated key emerging educational policy issues: California's changing student and teacher demographics, an evolving shift in equity standard from emphasis on equalizing resources and creating remediating processes toward equalizing performance and maximizing individual achievement, and the approaching voter-authorized limits on government which would compel increased efficiency and productivity.¹

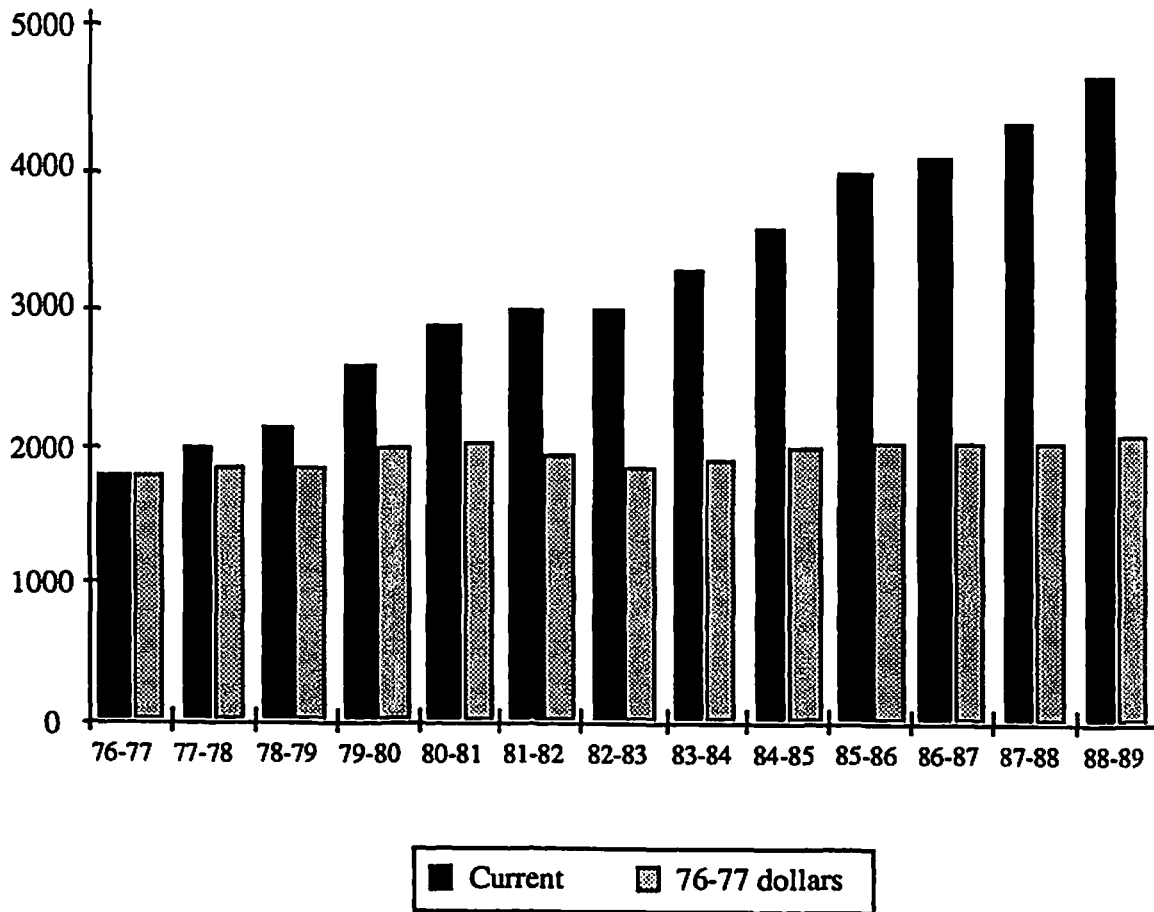
Purposes of this Report

Senate Bill 813 focused on secondary school reform. Therefore, this report analyzes the impact of its fiscal provisions in unified and high school districts. It compares the fiscal consequences of SB 813's emphasis on improving the core curriculum for all students²

¹ The legislature did not create new policies in a vacuum, however. Many districts had begun to expand graduation requirements and improve curriculum prior to the passage of SB 813, evidence of growing support for higher performance standards and increased expectations for both teachers and students.

² Senate Bill 813 contained a large number of other provisions. Only those having both fiscal and school improvement consequences are examined here.

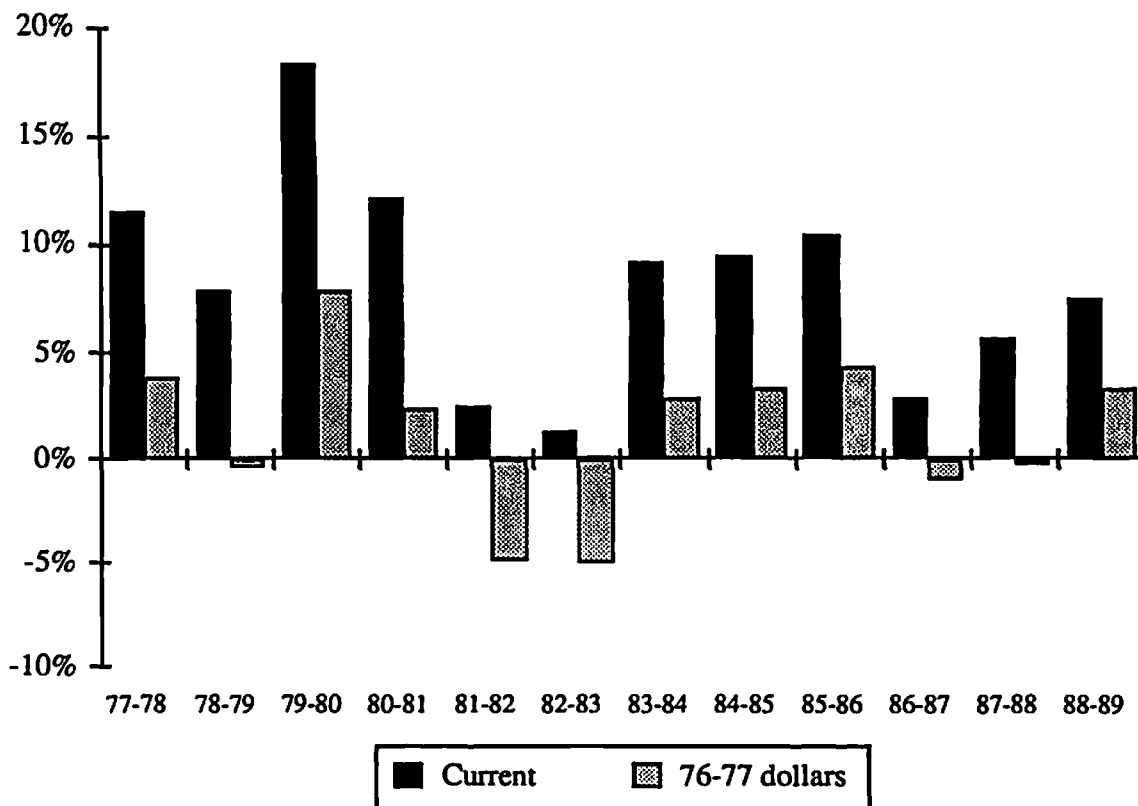
FIGURE 1 K-12 Revenue Per ADA (Current and 1976-77 dollars)



SOURCE: Legislative Analyst's Report 1985 and 1988-89.

District business managers faced difficult adjustments, however, because funding levels changed erratically from year to year (Figure 2) as the legislature brought allocations into compliance with the *Serrano* decision and Proposition 13.³ Beginning in 1973-74, cost-of-living increases were adjusted to bring districts' base revenue limits⁴ within the *Serrano*-required \$100 band around the average expenditure for district size and type.

FIGURE 2 Percent Change in Funding per ADA (current and 76-77 dollars)



SOURCE: Legislative Analyst's Report 1985 and 1988-89.

³Some of the reductions did not affect classroom expenditures. "Pursuant to Ch[apter] 330/82 (SB 46) the Public Employees Retirement Board reduced the employer contributions to PERS that school districts were required to make in 1982-83. Recognizing the saving (to be realized) . . . the Legislature provided for a corresponding reduction in revenue limits in the Budget Act of 1982." Legislative Analyst's Report (1985, 1081).

⁴ The base revenue limit is "a basic education amount per unit of average daily attendance" which forms the central core of each district's general fund for general operating expenses. In addition, districts received revenue limit adjustments, such as an allowance for declining enrollment, which did not fall under the equalization provisions of *Serrano v. Priest*. (Goldfinger 1985)

Serrano equalization and the transition to a state-funded system occurred during a period of economic instability when income and sales tax revenue declined; thus, relatively little additional revenue was available for equalization, and only a few districts received the average increase. Annual cost-of-living adjustments for formerly high-wealth districts lagged well behind the rate of inflation (that is, were "squeezed"), while formerly low-wealth districts received cost-of-living adjustments in excess of the inflation rate (Figure 3). It is not surprising that business managers in the survey sample indicated that unpredictable funding levels impeded efficient fiscal management .

FIGURE 3 Inflation-Adjusted Per-Pupil Revenue Increases by District Type and Wealth Category

Year	HIGH SCHOOL		UNIFIED	
	Low	High	Low	High
77-79	266	145	413	201
79-81	576	494	360	40*

* Highest-wealth unified districts apparently received more per pupil than lowest-wealth unified districts between 1979 and 1981.

Funding contractions were much more severe for high school districts than for unified districts. Secondary districts not only were more severely squeezed than unified or elementary districts, they fell further and further behind every year, relative to other types of districts (Goldfinger 1985).

Between 1977 and 1983, per-pupil revenue for all districts in current dollars increased \$1,207 (up \$58 when corrected for inflation). SB 813's infusion of new funds, \$281 per pupil (\$54 corrected for inflation), exceeded that year's inflation rate and accommodated the growth in student population but did not fully compensate for prior years' funding shortfalls (Figure 4). In the 10 years from 1977 to 1986, total per-pupil revenue increased 118.8 percent, while per-pupil revenue, corrected for inflation and including additional reform revenue, increased 14.4 percent.

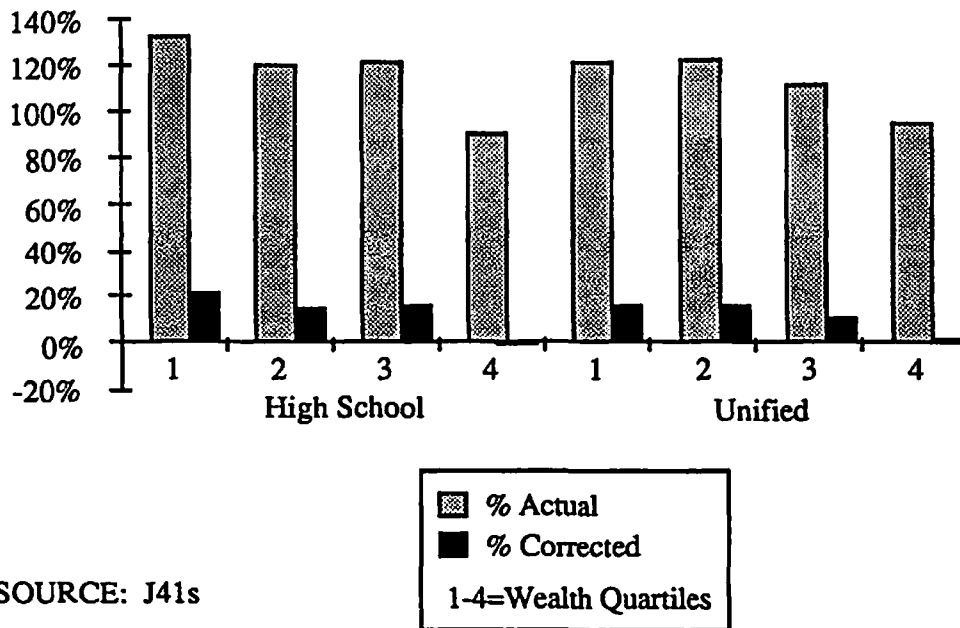
FIGURE 4 K-12 Total Revenue, 1976 through 1985-86 (dollars in millions)

Year	Total Funding	ADA	Total Funding		1976-77 Dollars	
			Per ADA	Percent Change	Per ADA	Percent Change
1976-77	8,654.7	4,718,800	1,834	11.2	1,834	--
1977-78	9,516.6	4,652,486	2,045	11.5	1,904	3.8
1978-79	9,425.6	4,271,181	2,207	7.9	1,897	-0.4
1979-80	10,981.6	4,206,150	2,611	18.3	2,046	7.9
1980-81	12,341.2	4,214,089	2,929	12.2	2,095	2.4
1981-82	12,615.4	4,200,678	3,003	2.5	1,992	-4.9
1982-83	12,864.1	4,230,065	3,041	1.3	1,892	-5.0
1983-84	14,150.0	4,259,631	3,322	9.2	1,946	2.8
1984-85	15,813.1	4,351,416	3,634	9.4	2,011	3.4
1985-86	17,931.6	4,468,699	4,013	10.4	2,099	4.4
1986-87 (est)	19,104.8	4,627,169	4,129	2.9	2,076	-1.1
1987-88 (est)	20,649.7	4,730,562	4,365	5.7	2,071	-0.3
1988-89 (bud)	22,836.5	4,864,227	4,695	7.6	2,142	3.4
Cumulative Change						
Amount	14,181.8	145,427	2,861	--	308	
Percent	163.9%	3.1%	160%	--	16.8%	

SOURCE: Legislative Analyst's Report 1988-89

Despite SB 813 augmentation, large, high-wealth *secondary* districts actually received less per pupil in 1986 than in 1976. Large, high-wealth *unified* districts fared scarcely better. Proportional changes emphasized the differences (Figure 5).

FIGURE 5 Percent Increase in Revenue Per ADA by District Type and Wealth Category, 1977-1986 (current and 76-77 dollars)



SOURCE: J41s

Meanwhile, sources of revenue changed substantially (Figure 6). In 1977, local property taxes, traditionally an extremely stable revenue source, accounted for over half of district revenue. By 1986, as a result of Proposition 13, districts received virtually their entire apportionment from volatile state income and sales taxes, placing schools (and other state-funded activities) at the mercy of business cycles. For school district business managers, fiscal decisions are now both more complex and less predictable.

FIGURE 6 General Fund Revenue Percent by Source, 1977, 1983, 1986

	State	Federal	Local	County	Current Dollars/ADA
1977					
Small High School	20.90	7.90	69.66	2.06	2557
Large High School	30.90	6.70	60.80	1.70	1811
Small Unified	23.80	10.20	64.60	1.80	2165
Large Unified	41.00	6.00	52.00	1.00	1570
1983					
Small High School	44.61	6.92	47.86	1.22	3648
Large High School	57.00	5.00	37.00	0.00	2873
Small Unified	45.40	3.20	50.80	0.60	3126
Large Unified	52.80	7.50	39.20	0.70	2496
1986					
Small High School	52.30	3.60	44.00	0.30	5088
Large High School	60.00	4.00	36.00	0.00	3877
Small Unified	56.50	6.60	36.80	0.30	4580
Large Unified	69.00	4.00	26.00	0.00	3337

Expenditures

Unified and secondary district expenditures declined eight percent (corrected for inflation) between 1976 and 1983 (Figure 7). For California's schools as a whole, and particularly its largest, high-wealth districts, declining expenditures had serious consequences, including teacher layoffs, slowing salary increases, and reduced budgets for supplies and contracts. Only benefits were impervious to the statewide trend.

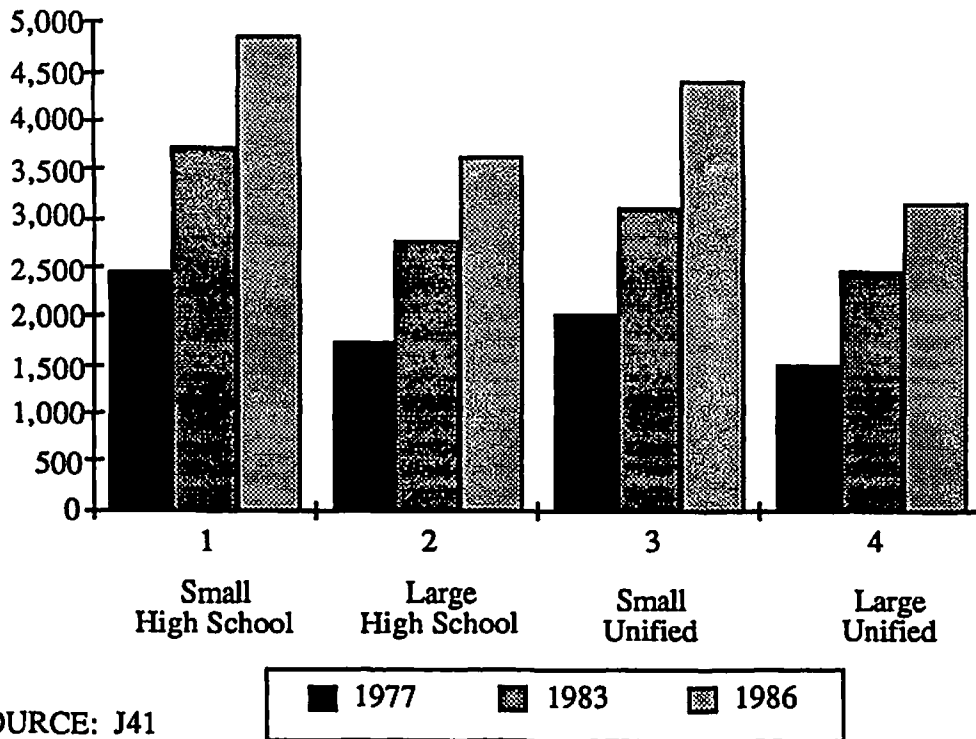
FIGURE 7 Change in Expenditures Per Pupil, Actual and Inflation-Adjusted (1977 = 0) by District Type

Year	SECONDARY		UNIFIED	
	Actual	Corrected	Actual	Corrected
77-83	1050	-28	991	2
83-86	864	169	855	187

California's education expenditures also declined in comparison with other states. In 1976-77, California ranked 20th nationally in per-pupil expenditures, spending only \$22 less than the national average. By 1982-83, it had fallen to 30th place, spending \$187 per pupil below the national average (Goldfinger 1985). Following SB 813, California's rank began to improve once again. Nevertheless, California spent \$1,900 less per pupil than New York, \$485 less than Illinois, and \$242 more per pupil than Texas in 1983-84 (Myers 1984).

When districts finally received SB 813 revenue, small districts received more per pupil than large districts, reflecting expected economics of scale in the larger district. (Figure 8).

FIGURE 8 Current Expenditures Per ADA by District Size and Type, 1977, 1983, and 1986

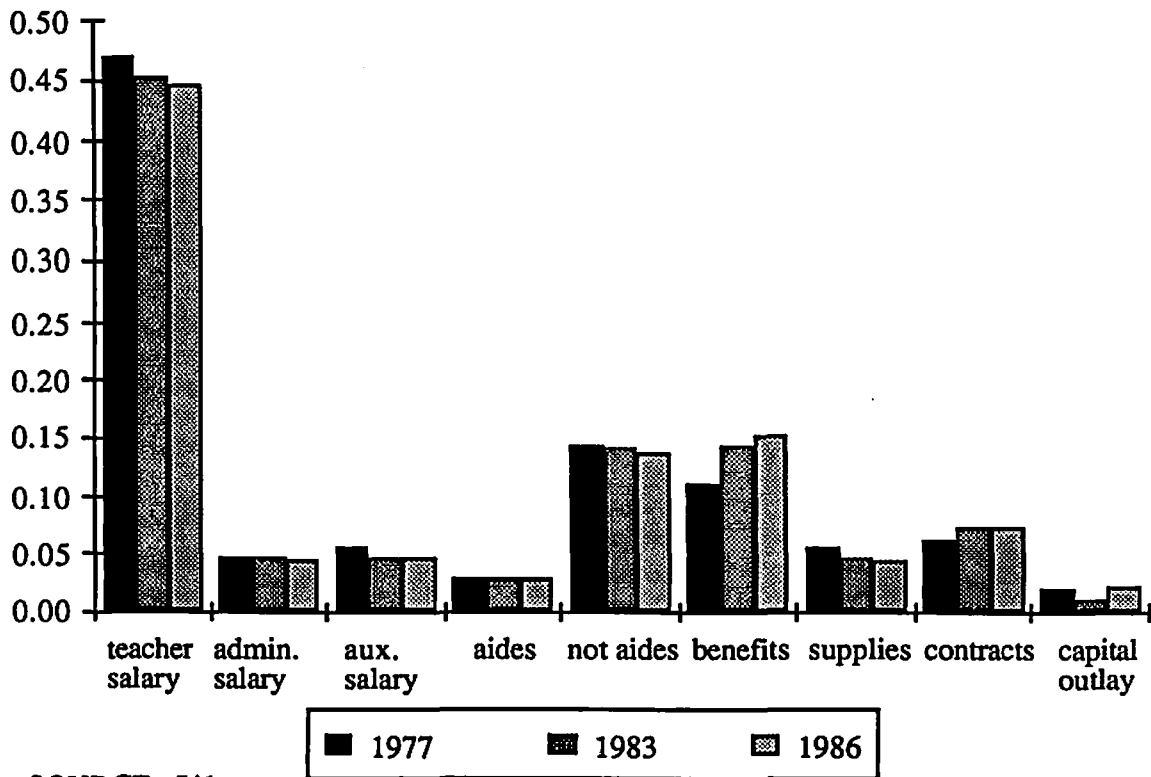


SOURCE: J41

Expenditures by Category

Salary costs dominate school district general-fund expenditures. The cost of employee benefits, supplies, and services each claim a much smaller share of total expenditures. Between 1976 and 1986, the overall proportion of school districts' general fund expended for salaries and benefits declined only slightly, from 85.9 percent to 85.8 percent. However, distributions among job classifications and between salaries and benefits did change (Figure 9). The percentage of total expenditures for teacher salaries declined. Prior to SB 813, the percentage of expenditures for salaries for counselors and noninstructional classified personnel (clerical, maintenance, and tradespersons) also declined, while the percentage of salaries for administrators and instructional assistants increased.

FIGURE 9 Expenditures by Category as Percentage of Total Expenditures



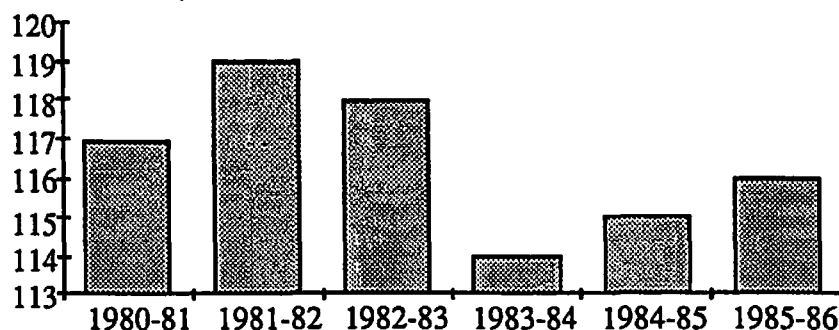
SOURCE: J41

The most problematic change, however, has been the continued erosion in teacher salaries.⁵ Following SB 813, average teacher salary per ADA in constant dollars increased \$77 (a nominal increase of \$330 per ADA). At the same time, virtually all districts also added five days to their instructional year. As a result, teachers actually earned \$4 less *per*

⁵Cf. Levin (1985), Rumberger (1987). Cf. also, Harris and Associates (1985) and Gerritz, Koppich, and Guthrie (1986) for teachers' reactions to declining salaries and worsening working conditions.

day on average (corrected for inflation) in 1985-86 than in 1982-83 (Figure 10).⁶ Despite what appears to be nearly a 100 percent increase between 1977 and 1986, the average teacher actually received less per hour in 1986.

FIGURE 10 Teacher's Average Daily Wage (dollars corrected for inflation) 1980 to 1986



SOURCE: California State Department of Education, Selected Financial Statistics

Some of the decline in teachers' average daily rate and the percentage of expenditures for teachers' salaries may be explained by demographic changes in the teaching profession. *Conditions of Education in California 1988* (Guthrie et al. 1988) indicates that California's average teacher salary, corrected for inflation and experience, has held constant in the last two years. Figure 11 suggests that an increasing proportion of novice teachers may account for some of the decline in average teacher salaries.

Expenditures for benefits increased in education, as in other economic sectors, as health insurance costs climbed in the late 1970s, growing from 11 percent of total general-fund expenditures in 1977 to 15 percent in 1986, a 158 percent increase compared to a 90 percent growth in total expenditures. Benefits consumed 20 percent of total expenditure growth in the 10-year period. Between 1976 and 1983, benefits per ADA⁷ soared \$271, 22 percent of the increase in total expenditures in the seven-year period.

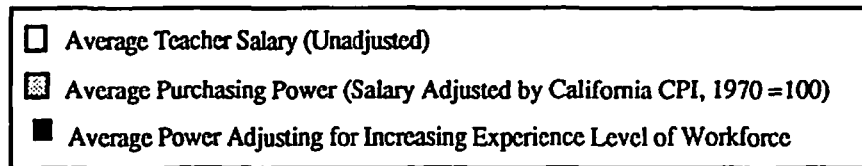
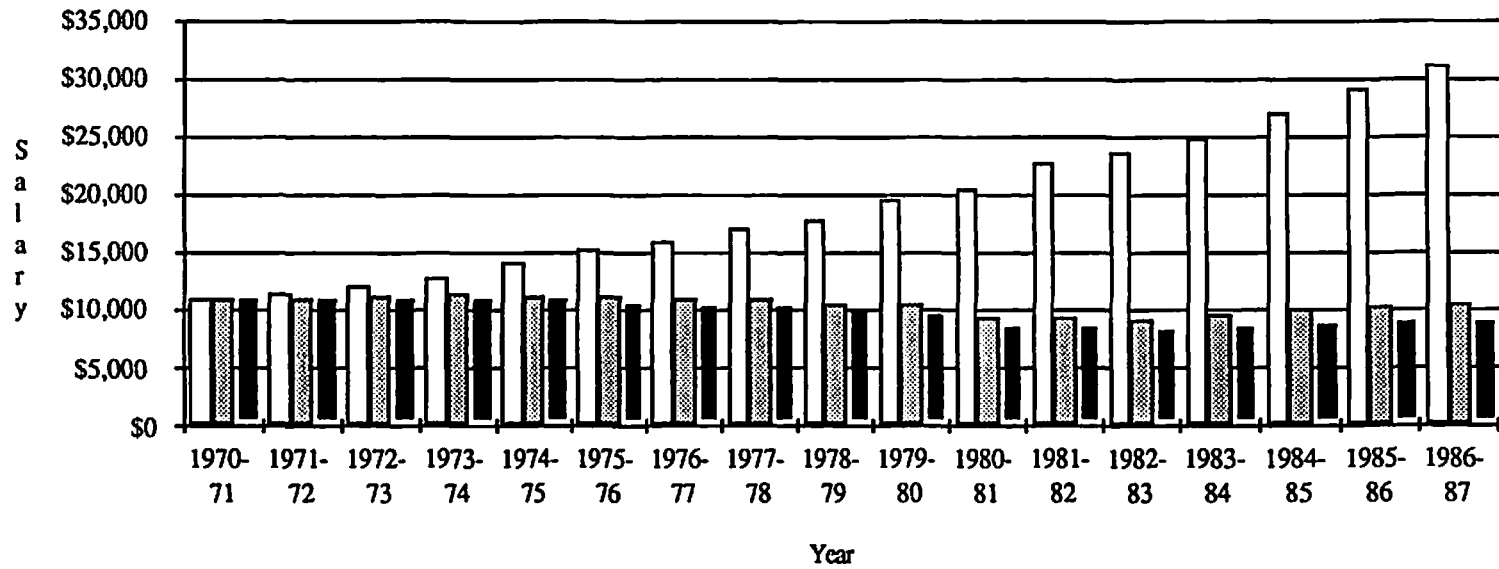
Whether intentionally or not, teachers have apparently assigned all the risks of escalating insurance costs to districts. Thus, their annual cost-of-living adjustments are not eroded by unpredictable increases in the costs of benefits.

Nonpersonnel expenditures, except for service contracts (for example, instructional consultants, insurance, rentals, and repairs), also declined in the 10-year period examined here. Expenditures for supplies declined steadily between 1977 and 1983, from 5.6 percent of total expenditures to 4.6 percent. In inflation-adjusted dollars, districts spent less for supplies in 1986

⁶Most teachers also worked a longer day after SB 813, for which we did not attempt to account.

⁷J-41s combine benefits for classified and certificated personnel into one expenditure category. Therefore, they cannot be accounted for separately by classification.

FIGURE 11 Average California Teacher Salaries, 1970-1986, Adjusted for Inflation and for Increasing Experience Level of Workforce



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

than in 1977, despite extra revenue from SB 813. Contracts for personal services increased from \$354 million in 1977 to more than \$795 million in 1986, a 125 percent increase. Contracts were 6.3 percent of total expenditures in 1977 and 7.4 percent in 1986 (Figures 12 and 13).

FIGURE 12 Total Expenditures, Percent by Category, High School and Unified Districts, 1977, 1983, and 1986

Category	1977	1983	1986	Percent Change
Teachers	47.21%	45.24%	44.60%	-0.06
Admin	4.60%	4.91%	4.54%	-0.01
Auxilliary	5.71%	4.87%	4.68%	-0.18
Aides	2.82%	3.13%	3.07%	0.09
Othr Classified	14.40%	14.21%	13.77%	-0.04
Benefits	11.17%	14.41%	15.15%	0.36
Supplies	5.58%	4.60%	4.41%	-0.21
Contracts	6.30%	7.31%	7.44%	0.18
Other Outgo	2.21%	1.33%	2.34%	0.06

SOURCE: J41

Figure 13 Total Expenditures Unified and High School Districts

Expenditure Category	1977	1983	1986	Percent Change
Certificated	\$217,203,563	\$4,355,336,087	\$5,742,044,658	0.78
Aides	155,181,009	246,316,581	326,745,951	1.11
Not aides	808,526,118	1,128,833,453	1,471,968,469	0.82
Benefits	627,120,428	1,144,600,456	1,619,587,726	1.58
Supplies	313,546,981	365,225,919	471,384,326	0.50
Contracts	353,961,893	580,439,046	795,380,414	1.25
Other	140,415,413	122,650,294	264,986,159	0.89
Total	\$615,955,405	\$7,943,401,836	\$10,692,097,703	0.90

SOURCE: J41

Figure 12 shows total expenditures by category for 1985-86. Plainly, teachers did not consume a disproportionate share of the additional revenue from SB 813. This parallels the findings in a study in Los Angeles County of expenditure changes following SB 90 (Kirst 1977). After several years of collective bargaining, teachers' position has not improved at the expense of other budget segments.

The State Department of Education (SDE) recently analyzed classroom costs by expenditure category (Figure 14). In a similar study in 1987, the auditor general reported no substantive analytical differences. In fact, of all budget categories, only the rate of increase in expenditures for supplies is lower than the rate of increase in expenditures for certificated salaries.

FIGURE 14 Expenditures Per School, 1985-1986

Category	Expenditure per School	Percent of Total
<i>A. Classroom Expenditures</i>	<i>\$1,286,000</i>	<i>63%</i>
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%
<i>B. Other Site Expenditures</i>	<i>629,000</i>	<i>31%</i>
Operation, Maintenance, Transportation	395,000	19%
Instructional Support	95,000	5%
School Site Leadership	139,000	7%
<i>C. District/County Administration</i>	<i>120,000</i>	<i>5.5%</i>
<i>D. State Department of Education</i>	<i>11,000</i>	<i>0.5%</i>
<i>Total Operating Expenditures</i>	<i>\$2,046,000</i>	<i>100%</i>
<i>School Facilities/Capital</i>	<i>\$ 133,000</i>	

SOURCE: State Department of Education (1987)

Expenditure Differences and Wealth Category

As Figure 15 indicates, the magnitude of change in teacher salaries over the 10-year period was related to a district's size and type and to its former wealth⁸ category. Teachers' salaries in formerly low-wealth districts (wealth=1), whether small or large high school districts, or small or large unified districts, increased more rapidly than did salaries in formerly high-wealth districts (wealth=4).⁹ This would be expected, of course, because of AB 65's "squeeze" formula.

⁸For this analysis, districts were separated first into types (high school or unified), then by size (small and large, as established in the *Serrano* case), and finally into quartiles by former wealth category. For example, a district could be described as a large, high-wealth, unified district if it enrolled 1,500 or more students in grades K-12 and was in the top quartile by assessed property valuation per pupil.

⁹The only exceptions to the general trend were in the four small high school districts in categories two and three, where the higher-wealth district increased salaries markedly, while the lower-wealth districts behaved more like the highest-wealth districts.

FIGURE 15 Percentage Increases in Teachers' Salaries by District Size, Type, and Former Wealth Status, 1977-1983 and 1983-1986

Wealth Category	HIGH SCHOOL		UNIFIED	
	Small	Large	Small	Large
	1977-1983			
1	70%	63%	55%	64%
2	37	53	59	62
3	56	56	54	61
4	30	51	45	51
	1983-1986			
1	20	30	38	26
2	20	31	31	28
3	41	27	33	25
4	36	22	31	25

A question raised by these salary differences is whether SB 813's salary increases were more closely associated with increased productivity (most districts at least increased instructional time) than were salary increases following equalization. Formerly low-wealth districts may have hired more teachers or merely augmented step and column levels for the regular teaching force, thereby increasing their competitive position in hiring effective teachers. Formerly high-wealth districts reduced salary expenditures by laying off many teachers with between 10 and 12 years seniority. Individual district-level analysis would be required to determine whether earlier salary increases produced lower class sizes, resulted in hiring more qualified teachers, or merely increased prices for the same level of education.

Chapter 3

SB 813 Fiscal Measures

Summary

- Senate Bill 813 used fiscal incentives in combination with exhortation and permissive programs to encourage districts to implement widely supported changes in school practice.
- Senate Bill 813 created matching, incentive, and block grants to stimulate changes in education practices. An unfunded mandate—increased graduation requirements—had fiscal consequences.
- The more straightforward the implementation, the more widespread and immediate was participation. Districts took longer to begin programs with complex regulations, and fewer districts participated in them.
- Senate Bill 813 fiscal measures buttressed the education reform agenda by building the teaching profession, providing additional lay services for all students, and increasing instructional time.
- Despite the high documented cost of increased graduation requirements, half of district business managers who responded to the survey reported no encroachment on other programs.

Senate Bill 813 differed from previous education finance legislation in three major ways:

1. By linking additional revenue incentives with increased performance expectations rather than equalization
2. By emphasizing the core curriculum and graduation requirements rather than additional services for particular students
3. By focusing on the importance of teachers

Senate Bill 813 linked increased graduation requirements with fiscal incentives and exhortation to rebuild the core curriculum for all students (Odden 1987). In exchange for increasing instructional time and productivity, the legislature increased education appropriations 11.5 percent in one year. Senate Bill 813 shifted the education focus from equity to excellence. Its authors affirmed that performance standards and professional accountability would benefit all students, not just the college bound.

High school and unified districts obtained SB 813 funds for nine programs which will be described in this section.¹ As Figure 16 indicates, districts did exercise their right to chose programs most suited to local conditions. At the same time, the legislature avoided future claims for nonfunded or partially funded mandated programs (Goldfinger 1985).

FIGURE 16 Percentage of High School and Unified Districts Participating in SB 813 Programs

<u>Program</u>	<u>Participation Rate</u>
Longer school day and year	100%
Opportunity classes	5% *
Summer school	86%
Tenth grade counseling	100%
Mentor teachers	90%
Minimum teacher salary	50%
CTIIP	90%
Secondary textbook	100%
Graduation requirements	100%

* Includes elementary districts.

Longer School Day and Longer School Year Incentives

The largest portion of SB 813's reform revenue was dedicated to lengthening the school day and year. Every California district received additional revenue under this provision.

In 1984-85, districts operating school for at least 180 days were entitled to an additional \$35 per unit of average daily attendance (ADA), exclusive of adult and summer school. Thereafter, districts were required to maintain the 180-day instructional year in order to retain the financial bonus.

Based upon the number of instructional minutes offered in 1982-83 and instructional minutes offered in 1983-84, districts received a bonus of \$20 per ADA in grades K-8 and \$40 per ADA in grades 9-12 for each of three years for approaching and subsequently maintaining the required annual number of instructional minutes in all grade levels: 54,400 minutes in grades 4-8 and 64,800 minutes in grades 9-12.

¹Only provisions affecting secondary schools will be described here.

To achieve the minimum targeted instructional time, schools had several options for increasing the school day or year: they could add a home room period where none previously existed, increase passing time between class periods, lengthen each period, or increase the number of school days in the year.

Several sample schools had begun the process of lengthening the day prior to SB 813. Where funding constraints had forced elimination of an instructional period, the addition of a 6th period increased instructional time by 20 percent; in some cases, the new instructional day exceeded the state minimum.

Increased time and increased school productivity are perceived to be closely linked.² By encouraging districts to increase instructional time in exchange for additional funding, the legislature augmented revenue and avoided two pitfalls,³ either of which could have scuttled the education improvement effort: involving schools in implementing a complex new program or, alternatively, appearing to pay more for the same level of effort. Although educators disagree about key needed reforms, most agree that local districts can best decide on local priorities and implement locally effective programs. This approach also has merit because it reflects current thinking on optimal management practices in large and "loosely coupled" organizations, both public and private.⁴ Thus, the legislature delegated to local districts responsibility for implementing local reform within the context of a longer instructional day and year. It is not likely, however, that additional time, by itself, except in districts where a full period was added, contributed greatly to education reform (Odden and Marsh 1987). After all, it is what happens during the additional instructional time that affects education outcomes.

Three Programs To Assist Students

Three specific programs were devised to assist "at-risk" students: junior high school opportunity classes, summer school, and 10th grade counseling.

Opportunity Classes

Opportunity classes provide supplemental instruction and counseling to 7th through 9th grade students at risk of dropping out, or otherwise unable to participate in regular classes. The program is designed to facilitate "remediation, rehabilitation, and return,"

²Widely disseminated research (Stevenson 1985) indicated that Japanese students spent far more time in school than American students. Additional time was seen to be a sine qua non of improved productivity.

³ In addition to avoiding mandated costs claims.

⁴Cf., among others, Boyd (1988).

rather than long-term placement outside regular classes (Goldfinger 1985). Districts may apply to the State Department of Education to establish remediation and counseling programs that return students to regular classes as soon as possible, that fulfill a demonstrated need for services, and that incur costs above the basic revenue limit.

The 1984-85 Budget Act authorized funding the program, but it tied the \$400 per-pupil funding to growth in program ADA, rather than enrollment, making it fiscally unsound, from the district perspective. Hence, districts that wanted to implement programs could not do so because costs would greatly exceed \$400 per ADA (Goldfinger 1985).

10th Grade Counseling

The 10th grade counseling program's goal was to increase graduation rates by providing academic counseling for pupils reaching the age of 16, or prior to the end of the 10th grade, whichever occurred first. To supplement existing counseling services, each district, in 1983-84 and 1984-85, received an additional \$20 for each 10th grade pupil.

Districts responded to the 10th grade counseling program in a variety of ways (Swain 1985). Some purchased computerized career selection programs. Others hired additional counselors or increased the hours of currently employed counselors or teachers.

Counseling is intended to ensure that individual students remain in school, meet graduation requirements, and prepare for college, if the latter is a student's goal. As is clear from the range of counselor:student ratios—1:71 to 1:440—encountered in the 13 schools in the PACE study of school reform (Odden and Marsh 1987), actual programs vary widely and do not follow a consistent pattern of implementation. As a result, program quality is mixed. Most sample high schools involved parents in the counseling program and counseled students once a year. One school provided counseling twice a year, four schools counseled 9th grade students, and one school implemented the program in the 8th grade.

Additional Revenue for Summer School

A third elective program provided additional revenue—\$1.59 per hour for up to five percent of a district's October enrollment multiplied by 120 hours—to establish and maintain summer schools offering core curriculum classes. SB 813 reestablished summer schools that many districts had eliminated in the funding crunch. In addition to graduating seniors, summer schools were to include 11th graders needing additional units to graduate on time and students needing additional instruction to fulfill proficiency standards.

Total summer school outlay for core programs rose from \$38 million in 1984-85 to \$55 million in 1986-87. Although a carefully managed summer school could provide additional revenue for the regular school program,⁵ the Association for the Improvement of Secondary Education (AISE) reported that 35 of 96 participating secondary districts (36 percent) exceeded the five percent funding cap by a total of 400,000 hours in 1985-86.⁶

Since two of three summer school objectives apply only to high school students, it is reasonable for secondary districts to be more restricted by the five percent cap than unified or elementary districts. Nevertheless, AISE also reported that 69 of 237 unified districts (29 percent) and 98 of 275 elementary districts (36 percent) reported exceeding the limit on funded hours.

Programs to Improve Teaching and Increase Teacher Professionalism

Business managers interviewed for this report stated that improved morale was one of SB 813's major benefits. In addition to salary increases from longer school day and year funding, three optional revenue programs in SB 813 also contributed to teacher morale and professionalism: the Mentor Teacher Program, Classroom Teacher Instructional Improvement Program (CTIIP), and minimum teacher salary.⁷

Mentor Teacher Program

The California Mentor Teacher Program provides state-funded stipends of \$4,000 per year⁸ for up to five percent of classroom teachers in California. In order to qualify for a stipend, a candidate must be a credentialed, permanent classroom teacher with recent teaching experience and demonstrated exemplary teaching ability.

The law provides for a selection committee, composed of a majority of classroom teachers, to nominate candidates for mentor positions. Candidates, selected by the school board from among those nominated, assist and guide new and experienced teachers and develop curriculum. According to SB 813, a mentor's primary function is to assist new teachers. Mentors are required to spend at least 60 percent of their time "in direct instruction of students" and may not formally evaluate other teachers.

⁵Personal communication, P. Gibbons, P. Yasitis, and P. Disario.

⁶In its Legislative Packet (October 29, 1987)

⁷Each of these was similar to programs recommended in the Commons Commission Report, *Who Will Teach Our Children?* (1985), which focused on improving education through improving the teaching profession.

⁸Districts received an additional \$2,000 per year per mentor for support costs associated with the program, including release time, conference and workshop fees, and additional materials and supplies.

High school districts employed 265 mentor teachers in 1985-86 and 1,734 teachers with four or fewer years of teaching experience. Unified districts employed 585 secondary level mentors and 3,931 similarly experienced secondary teachers (PAIF). Business managers in the survey reported that mentors devoted most of their time to developing curriculum materials and the least amount of time training new teachers, despite the favorable 6:1 ratio. That was confirmed in the sample districts and in districts interviewed by the State Department of Education. Although the Mentor Teacher Program provides a unique opportunity to increase teacher effectiveness through peer coaching and structured induction programs, several organizational characteristics of school districts constrain effective implementation.

There are at least five reasons why, despite SB 813's clear priorities, mentor teachers were more likely to concentrate on developing curriculum than on inducting new teachers or conducting inservice training for experienced teachers. First, in the absence of strong district leadership, mentors would perform more familiar activities, such as curriculum development, rather than create new roles and programs. Assisting new teachers requires specific skills and training which even highly qualified classroom teachers do not necessarily possess. Second, it is likely that mentors and new teachers were not distributed equally throughout a district or by departments. New teachers are often concentrated in certain schools, while mentor assignments would be more likely to be balanced by school and department. Even highly qualified teacher trainers have difficulty guiding secondary teachers of subjects outside their area of specialization. Foreign language mentors would be of little assistance to new English, math, or science teachers. Third, since formal induction programs are rare (Little, Gerritz, Guthrie, Kirst, and Marsh 1987), existing programs into which mentors could easily be incorporated would be unusual. Indeed, mentors may have been somewhat constrained by existing staff development programs that did not include them (Little, et al. 1987). Fourth, the isolated and independent nature of most teachers' work environments provides little foundation for creating induction programs and for obtaining more than voluntary participation. Fifth, teachers have been observed to resist hierarchical skill-based distinctions. In some schools, the designation "mentor" impeded peer collaboration. It is not surprising, given these conditions, that mentors' activities were only "slightly coordinated with local or state-promoted school reform" (Odden and Marsh 1987). These characteristics of teachers' work environments should be considered by those who would incorporate the Mentor Teacher Program into a component of a teacher career ladder.

Odden and Marsh and their colleagues observed that mentors were more visible and more effective when administrators knew about the program, supported the mentoring role, and encouraged mentors to obtain training in clinical teaching. Mentor programs were affected by labor issues; bargaining delayed or altered implementation in some sample schools. Administrative direction and leadership contributed to the overall effectiveness of the mentor program.

Minimum Teacher Salary

Senate Bill 813's authors anticipated that higher starting salaries would improve both the quality and quantity of teacher applicants, thereby averting the projected teacher shortage. Districts could elect to subsidize starting salaries of new, fully qualified, regular teachers as long as increases on the lowest step did not result in higher salaries for more experienced teachers.

For each teacher whose salary was supported by this provision, a district's revenue limit would be augmented by the marginal increase in salary (equivalent to the difference between the lowest scheduled salary and 1.1 times that salary up to \$19,048 in 1984-85), plus the accompanying State Teachers Retirement System (STRS) contribution. The district would receive similar increases for teachers hired at any salary step less than the prior year's limit, augmented by the state's cost-of-living allowance (COLA). Districts that managed their participation carefully could receive large amounts of additional revenue in the year of participation (Goldfinger 1985).

The additional revenue, incorporated into the base revenue limit (but not subject to the standard COLAs in future years), would support the salaries of teachers hired during the three-year program period. After the implementation period, districts would use unsubsidized general-fund revenue for new teachers' salaries. In addition, salary schedules were compressed, as lower steps and columns came under the measure's cap. Teachers with more seniority would receive little salary recognition for their persistence, thus undermining the program's employment incentives. At the same time, future unsubsidized salary costs would impinge heavily on general-fund revenue.

In their evaluation of the Minimum Teacher Salary Program, Emmett and Garms (1986) described several more reasons for districts' reluctance to participate. Program guidelines were difficult to interpret and implement. Teacher unions resisted increasing salaries for novice teachers without simultaneously increasing salaries for their more experienced members. Districts could not count on obtaining adequate general fund revenue to maintain increased salaries for large numbers of new teachers who might be required in the future. Some districts, in contrast, never hire teachers in the lowest steps and columns. By the time many districts, especially smaller ones, finally understood the program, it was no longer available. In addition, secondary districts hired relatively few teachers between 1983-84 and 1985-86, when the program was in effect.

The Minimum Teacher Salary Program benefited rapidly growing districts with mid-range teacher salaries. Districts in which few teachers were hired, received little. Districts with salaries below the mid-range received less than districts with higher salaries because the percentage increase on their low salaries did not contribute as much to their base revenue limit. Districts in which teacher salaries were at the higher end of the range

could not augment their salaries to the same degree because of the annual cap on salary levels. Nor were districts which hired experienced teachers able to participate; they had no teachers in the lowest steps of the salary scale.

The program's complex provisions encouraged a strategic approach. Goldfinger described several strategies to maximize revenue from the Minimum Teacher Salary Program. Some districts received minimum teacher salary revenue in one of the three years, but not the other two, even though they hired beginning teachers each year. More than 50 percent of high school districts participated in at least one of the three years as did 70 percent of unified districts. In 1985-86, however, only 50 percent of secondary districts with beginning teachers participated. Forty-nine unified districts which hired new teachers never participated. Less sophisticated and smaller districts could not take advantage of the program. At the other end of the continuum, Los Angeles Unified School District obtained more than \$1 million during the program's second year of operation.

Whether or not the Minimum Teacher Salary Program influenced the outcome, beginning teachers in 1985-86 were more highly educated (84.3 percent with master's degree or better, compared to 80.3 percent in 1983) and earned 23 percent more, on average, than beginning teachers in 1982-83 (PAIF).

Even though participation was much lower than expected, the Minimum Teacher Salary Program focused attention on the importance of increasing salaries to avert an impending shortage of qualified teachers. If nonparticipating districts also raised minimum salaries, as is likely, to retain their competitive position, the program's goal was achieved with little additional state revenue. The Minimum Teacher Salary Program may well be an example of a matching grant which leveraged desired changes in nonparticipating as well as participating districts (Levin and Tsang 1982).

Classroom Teacher Instructional Improvement Program (CTIIP)

CTIIP provided up to \$2,000 per individual, permanent, full-time teacher or mentor teacher, for up to five percent of a district's permanent teachers.⁹ The program's objective was to "encourage teachers, individually or with others, to improve the quality of instruction." A committee, composed of a majority of teachers selected by their peers and at least one principal, appointed by the superintendent, evaluated and recommended projects. The district governing board accepted projects likely to "improve instruction in those areas of the district with greatest need" for funding.

⁹Administrative costs not greater than five percent of the district's entitlement, based on the number of eligible teachers, were provided.

In 1984-85, 15,000 teachers¹⁰ in 872 districts participated in this program. In 1985-86, 16,600 teachers in 940 districts received CTIP grants. At least one district found that CTIP caused an enormous increase in accounting costs. The district's chart of accounts "ballooned," according to the business manager, as each CTIP grant was treated as a categorical program with unexpended funds carried from year to year.

Education foundations frequently fund similar programs¹¹ in order to reward teachers' initiative and good ideas and to encourage teachers to enhance their instructional programs.¹² Although SB 813's authors specifically included CTIP in the state's annual budget to make it a permanent program, the governor vetoed CTIP in 1987.

Instructional Materials—A Mandated Program

In each of the four years prior to SB 813's adoption, districts spent less per pupil (corrected for inflation) for instructional materials and supplies than the previous year. Districts purchased fewer textbooks, library books, paper, and scissors. A Northern California district, a primary feeder district to the University of California, Berkeley, was embarrassed when the community learned that its physics texts contained phrases such as, "when we get to the moon. . . ." Superintendent Honig emphasized that rigor, standards, and achievement would count for little if teachers had outdated textbooks from which to teach. Hence, SB 813 allocated an additional \$14.41 per secondary pupil (\$18 million in 1983-84) for instructional materials and textbooks, extending the constitutional mandate to provide elementary schools instructional supplies and textbooks to secondary schools. Senate Bill 813 required districts to certify in an "open meeting" that the additional funds, over and above what would have otherwise been spent, were used to purchase educational materials. Senate Bill 813's additional funds "provide[d] for flexibility of instructional materials" in secondary schools.

One Unfunded Mandate—Increased Graduation Requirements

A rigorous secondary liberal arts education, including science and mathematics, is said to be essential preparation for entry-level jobs and college work. Prior to SB 813, such a program was not universally required for graduation; in 1983, course availability and graduation requirements varied widely. For example, 45 percent of districts responding to a survey for this report required either just one year of history or one year of mathematics for graduation.

¹⁰This number includes elementary participants, as well.

¹¹For example, Oakland's Marcus Foster Institute regularly funds teacher-initiated projects.

¹² See, for example, Richard Murnane (1985).

Effective in the 1986-87 school year, SB 813 mandated new statewide high school graduation requirements. The University of California and the California State University increased entrance requirements at approximately the same time SB 813 required districts to offer all elements of the UC and the CSU admission requirements to interested, able students.

Most sample districts increased high school graduation requirements in anticipation of the SB 813 mandates, timing the implementation just prior to SB 813's deadline. English and mathematics requirements in sample districts generally fall between SB 813 mandates and State Board of Education model recommendations.

The mandate to increase graduation requirements was the only SB 813 provision with serious fiscal consequences without at least some revenue for implementation. Most costly of all was the requirement for a second year of science and the distribution between biological and physical sciences. Before this requirement was enacted, there was a shortage of science teachers (Guthrie and Zusman 1983), texts were outdated, and laboratories were inadequate. Requiring an additional year of science could not have improved the situation. In 1986, the year requirements went into effect, one-third of secondary science classes were taught by inappropriately certificated teachers (Cagampang and Guthrie 1988).¹³

The shortage of fully qualified teachers is only part of the problem in providing an adequate secondary science program. Building and equipping science laboratories, without which science may be merely another reading course, is expensive. How did school districts meet this challenge?

California has a procedure by which local jurisdictions petition the state to reimburse costs incurred in implementing unfunded state mandates. One district, representing all others in the similar situation (in this case, Santa Barbara), establishes the real cost of the mandate (Figure 17), and petitions the state to provide reimbursement. Santa Barbara spent \$505,000 to implement the science requirement, or \$86 per student. At that rate, implementing the additional year of science cost \$106 million dollars in 1985-86 for California's 1.2 million secondary students. The actual reimbursement rate will be negotiated, and districts may eventually be reimbursed for some costs of implementing the additional science requirement. It may be even more difficult for districts to establish costs of implementing the remaining graduation requirements (Goldfinger 1985).

¹³Teachers who indicated on CBEDS that they had neither an appropriate *single-subject* credential (e.g., math for a math assignment, life science for biology or other life science course, or physical science for chemistry or physics) nor a *general-secondary* credential (which licenses the teacher to teach any secondary subject, regardless of the undergraduate major) are inappropriately certificated.

FIGURE 17 Implementation Costs of Additional Year of Science for Graduation Requirement, Santa Barbara High School, 1985

<u>Expenditure Categories</u>	<u>Costs</u>	<u>ADA 1985-86</u>	<u>Costs /ADA</u>
Three Laboratories	256,285		
Architect	53,139		
Inspector	6,640		
Furniture	69,312		
Supplies	8,081		
Teachers (84-85)	45,361		
Teachers (85-86)	66,516		
Total	\$505,334	5,850	\$86.38
California Total	\$105,965,776	1,226,713	

Given the high cost per pupil reported by Santa Barbara in implementing SB 813's science requirement, it is difficult to understand district business managers' responses to the following survey question:

Some business managers reported that SB 813 did not provide enough additional revenue to implement its provisions; therefore, their districts had to supplement SB 813 revenue with additional general purpose revenue to implement the reforms. Did that happen in this district?

Fifty-two percent of the business managers who responded reported that SB 813 programs entailed no encroachment on other programs.

Chapter 4

Summary and Policy Implications

Summary

- Senate Bill 813 enhanced school finance equity.
- Nine SB 813 fiscal provisions were intended to stimulate education reform.
- The law described student performance expectations and defined graduation requirements.
- It delegated decisions about implementation to local initiative.
- It linked additional instructional time and additional revenue closely.
- The Mentor Teacher Program supports structural change and teacher improvement.
- The Minimum Teacher Salary Program is designed to help districts offset teacher shortages due to economic and demographic changes.
- Management and accountability would be enhanced by funding stability and improved reporting systems.
- Improved education productivity depends equally on increased funding levels and improved practices.
- School revenue doubled in the past 10 years. It will have to double again to maintain today's programs and account for inflation and enrollment growth.

Equity Consequences

Equalization funds provided in Senate Bill 813 increased compliance with court-defined standards of school finance equity. The proportion of students within *Serrano III's* standard—the \$100 band adjusted for inflation—increased from 90.6 percent of students to 95.4 percent (Figure 18). Using *Serrano II's* standard, the improvement was even more dramatic. The proportion of students within the \$100 band increased from 70.1 percent to 91.5 percent between 1983-84 and 1986-87 (projected) (Commission on State

PERCENTAGE OF AVERAGE DAILY ATTENDANCE

FIGURE 18

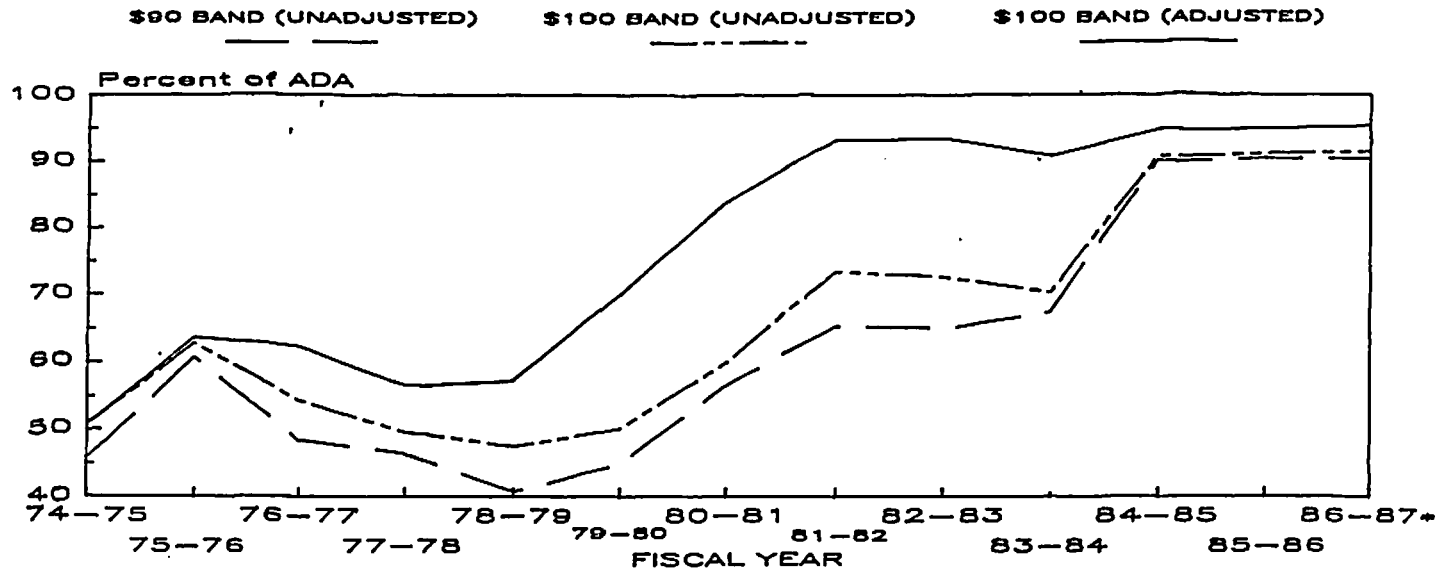


TABLE A

	<u>74-75</u>	<u>75-76</u>	<u>76-77</u>	<u>77-78</u>	<u>78-79</u>	<u>79-80</u>	<u>80-81</u>	<u>81-82</u>	<u>82-83</u>	<u>83-84</u>	<u>84-85</u>	<u>85-86</u>	<u>86-87*</u>
\$90 Band (Unadjusted)	45.7%	60.6%	48.3%	46.3%	40.7%	44.8%	56.4%	65.2%	64.8%	67.3%	89.8%	90.4%	90.4%
\$100 Band (Unadjusted)	50.7%	62.7%	54.2%	49.5%	47.4%	50.1%	59.8%	73.2%	72.4%	70.1%	90.5%	91.1%	91.5%
\$ Value	\$100	\$108	\$115	\$123	\$134	\$154	\$172	\$191	\$195	\$202	\$212	\$220	\$228
\$100 Band (Adjusted)	50.7%	63.5%	62.2%	56.3%	57.2%	69.8%	83.6%	93.2%	93.4%	90.6%	94.7%	94.9%	95.4%

* Projected

Source: Department of Education

Commission on State Finance
December 1986

Finance 1986). A finance equity measure proposed in the Commission report—equalized revenue per ADA as a proportion of all general fund revenue per ADA—showed similar progress in finance equity, from 94.1 percent in 1983-84 to 97.9 percent in 1986-87 (Figure 19). In his opinion, Judge Lester Olsen, the trial judge for the *Serrano* cases, quoted Charles Benson: "The progress toward equitable financial treatment of students since 1974 is a remarkable accomplishment" (quoted in Commission 1986). Nevertheless, the *Serrano* plaintiffs continue to pursue their claim that California remains out of compliance with the original *Serrano* standard, "a difference substantially less than \$100 per pupil." Surprisingly large disparities remain between expenditure levels in the very lowest and very highest expenditure districts. However, it is questionable whether additional equalization would do more to improve student achievement than revenue targeted toward specific reforms.

Several SB 813 provisions examined for this report potentially affect equity. Flat grant payments that become part of the revenue limit, such as longer school day and year incentives, 10th grade counseling, and secondary textbooks, represent a larger percentage of a low-expenditure district's revenue per ADA and do not reduce the range of expenditures per ADA, but do not, *ipso facto*, alter district distribution along the *Serrano* standard. Programs such as mentor teacher, CTIIP, and opportunity schools, are categorical programs excluded from the equity standard. The Minimum Teacher Salary Program had the potential to affect equity (since its revenues are folded into the revenue limit) if districts at either end of the continuum participated more systematically than districts at the other. If low-expenditure districts participated more frequently than did high-expenditure districts, for example, then equity would increase, and *vice versa*. Participation did not appear to be connected to former wealth status.

Although SB 813 enhanced finance equity, legal fiscal equity standards were not the center of the authors' reform agenda. By combining fiscal initiatives with desired education reforms, SB 813's authors sought to stimulate increased student performance. SB 813 contained three distinct types of fiscal initiatives to stimulate specific education reforms:

- Voluntary participation with incentive payments
- A funded mandate
- A mandated, but unfunded, requirement

REVENUES PER ADA: TOTAL (IN CURRENT AND CONSTANT DOLLARS) AND PERCENT EQUALIZED

FIGURE 19

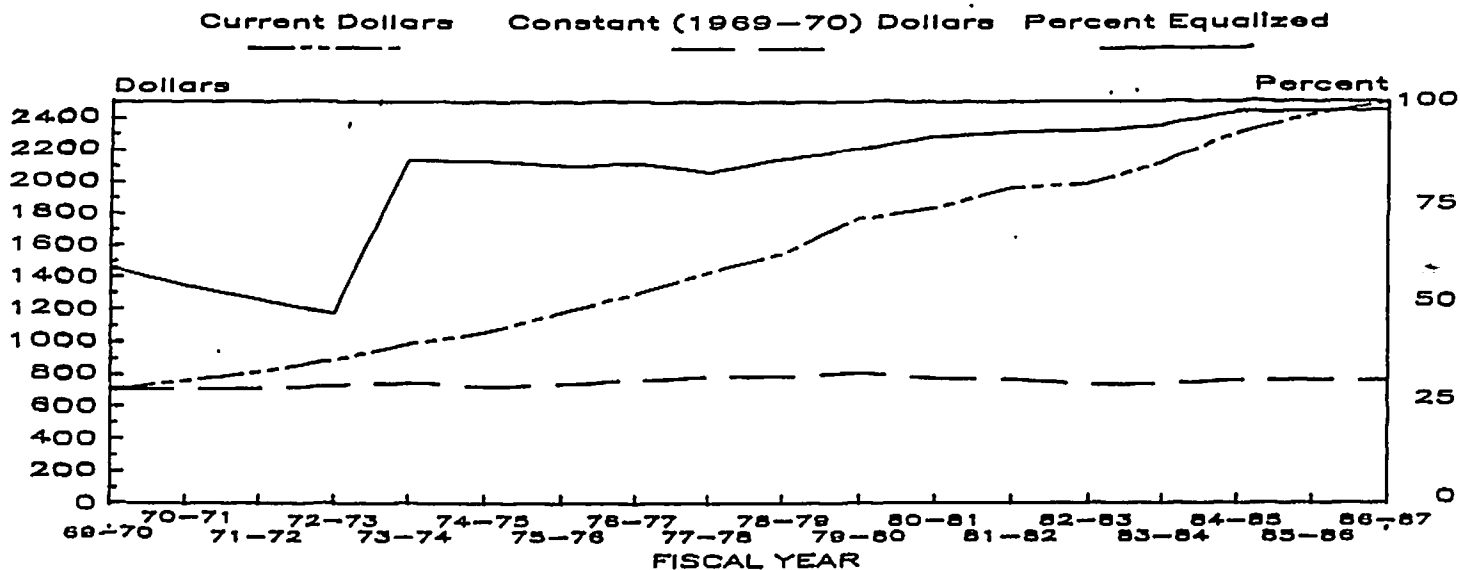


TABLE B

	<u>69-70</u>	<u>70-71</u>	<u>71-72</u>	<u>72-73</u>	<u>73-74</u>	<u>74-75</u>	<u>75-76</u>	<u>76-77</u>	<u>77-78</u>
Current Dollars	\$702.93	\$762.20	\$816.31	\$885.64	\$988.05	\$1,059.59	\$1,181.33	\$1,295.69	\$1,426.70
1969-70 Dollars	702.93	707.26	714.91	725.91	747.33	718.59	740.57	764.84	787.12
Percent Equalized	58.2%	53.8%	50.3%	46.5%	85.1%	84.9%	83.7%	84.4%	82.0%
	<u>78-79</u>	<u>79-80</u>	<u>80-81</u>	<u>81-82</u>	<u>82-83</u>	<u>83-84</u>	<u>84-85</u>	<u>85-86</u>	<u>86-87</u>
Current Dollars	\$1,543.99	\$1,758.35	\$1,831.05	\$1,955.07	\$1,982.03	\$2,116.18	\$2,299.03	\$2,418.51	\$2,496.46
1969-70 Dollars	785.42	808.15	767.67	762.23	727.97	741.29	763.38	763.66	762.15
Percent Equalized	85.6%	88.0%	91.3%	92.4%	92.7%	94.1%	97.4%	97.7%	97.9%

Each program in the first category (longer school day and year, summer school, opportunity classes, 10th grade counseling, mentor teachers, beginning teacher salaries, and the California Teacher Instructional Improvement Program) offered incentives for participation. Districts were encouraged to undertake improvements which researchers have identified as characteristic of more effective schools, i.e., increased instructional time, improved counseling, individual help for high-risk students, higher salaries to attract and retain better teachers, and the beginnings of a career ladder. The secondary textbook program, a funded mandate, provided new revenue with which districts could increase the variety of education resources. In contrast to the first two types of fiscal initiatives, the legislature required districts to increase graduation requirements but provided no additional revenue for implementation.

In general, SB 813 fiscal incentives seem to have established the desired direction of program and student performance change. With caveats appropriate to using cross-sectional student achievement data to measure school productivity over time, *Conditions of Education in California* (Guthrie, et al. 1987, 1988) reported increased test scores over the past five years, as well as improvement on other measures of student performance, such as increased enrollment in advanced courses and increased percentage of 11th graders graduating. Clearly those graduates will have completed the required course of study.

Performance Standards, Permissive Programs, and Implementation

Graduation requirements defined a *measure* of minimum performance. While SB 813 created permissive programs which research had associated with effective schools, it did not define a *process* by which local districts should meet the minimum expectations. Practically, the distinction between mandated and permissive programs protected California from future mandated cost claims. Substantively, it incorporated education management research recommendations: it established a clear, defined expected outcome, i.e., increased graduation requirements, and delegated program design to those responsible for implementation (Boyd 1988).

Programs that deviated from this approach by defining implementation processes more explicitly confirmed the wisdom of stimulating reform in "loosely coupled" systems by defining expected outcomes and delegating program design. Fewer districts participated in the two programs with complex guidelines: minimum teacher's salary and opportunity classes. Organizational complexities delayed implementation of a third, the Mentor Teacher Program. In contrast, programs characterized by simplicity, familiarity, and consensus were more frequently and immediately implemented. Diverse local preferences ensured divergent education programs; more consistent implementation like that found in carefully defined compensatory programs could not be expected from an approach such as that taken

by SB 813. Thus, districts implemented the 10th grade counseling program in a variety of ways.

SB 813 expected permissive programs to catalyze a higher level of local effort beyond what might be expected from additional revenue or mandated programs alone. The authors expected that local efforts would produce gains in student achievement that neither additional revenue nor mandated programs could achieve. They sought to bring the benefits of entrepreneurship—energy and creativity—to school improvement. Quality was not to be measured just in additional revenue, in equalized revenue, or in new processes, but was to be measured in student achievement and educational outcomes. SB 813 seemed to reaffirm that *process* is neither a sufficient nor an acceptable productivity measure. Language in Section 2 of the bill suggests that the sponsors envisioned a higher performance standard than suggested by equal access, equal resources, or even compensatory funding.

The Legislature believes that our schools should: . . .

(e) Assure that pupils achieve academic proficiency in the essential areas of skill and knowledge.

Teachers should be prepared and expected to teach in a "variety of instructional styles" to meet the needs of students who learn in a variety of ways. The bill described students as "unique human being(s) destined to become responsible and contributing member(s) of society." It would be a cruel joke, indeed, to interpret these hopeful and challenging phrases as merely a screen for a perpetuation of a tiered education system in which excellence for some was to replace the goal of equity for all. Instead, SB 813 appears to espouse nearly, if not absolutely, equal *outcomes*, a nontrivial extension of previous policy. Senate Bill 813's important mandate, more rigorous high school graduation requirements, created a school productivity standard for *all* children.

In answer to those who feared that renewed emphasis on "excellence" would detract from equity, the bill provided additional support to assist students to meet the challenge—summer school, 10th grade counseling, and opportunity classes—as well as programs to boost teachers to the new standard—mentor teacher, minimum teacher salary, and CTIIP—and exhortations to both groups to do better.

In 1976-77, when California spent \$1,834 per pupil, 65 percent of the state's students were white, 15 percent lived in homes with below-poverty incomes, and about 6 percent were described as limited-English-proficient. California's population was much more homogenous. In 1986-87, California spent \$2,076 per pupil (in 1977 dollars), an increase of 13.2 percent. Yet, in 1987, 51 percent of students were white, 20 percent lived in poverty, and approximately 13 percent (600,000) of students were limited-English-proficient, with twice as many living in homes in which English was not the first language.

It is unlikely that an additional \$242 per pupil is enough to assure the desired level of student achievement.

Additional Instructional Time and School Revival

Senate Bill 813 was not just about state-determined goals and locally developed process, however. It was also a practical bill intended to revive secondary schools after a period of financial hardship. Thus, it provided additional revenue to lengthen the school day and year, but it set a standard which most districts could achieve relatively easily. Longer school day and year provisions enabled students, in districts that had previously reduced the length of the school day, to obtain a more complete education program. Most districts, however, had only to lengthen periods or passing time and increase the number of instructional days to meet the stipulated guidelines.

Additional instructional time is a popular education reform measure but not one from which education improvement automatically follows. By itself, additional seat time benefits some students; it may be necessary, but it is not sufficient, to obtain higher levels of teacher and student productivity. Only teachers and students who use instructional time effectively benefit from having more of it. Hence, unless districts simultaneously implement instructional and curricular improvements, additional time may extend the achievement gap, a decidedly unintended consequence. More students benefit from improved curriculum and instructional practices than benefit from additional time alone. That leads to the central fiscal and organizational issues of professional improvement.

Improving Teaching Quality and Teacher Supply

Improving teaching is complex and expensive. Research indicates that both school level reorganization and new kinds of preservice and inservice training are required. The literature suggests that structural changes that transform schools from hierarchical to collegial organizations precede or accompany implementation of effective staff development programs (Howey and Vaughn 1983; Schlechty and Whitford 1983; Little, *et al.* 1987). Effective staff development is realized in schools in which teachers make most decisions, guided and stimulated by fellow teachers or effective principals. Structural changes take time and require conceptual vision and a willingness to risk failure, qualities which require a long-term fiscal and management focus. In these as other structural and substantive changes, instant success cannot be expected, but constant effort should be required.

SB 813 contained several provisions—the Mentor Teacher Program, Minimum Teacher Salary Program, and CTIIP were provisions with fiscal implications¹—to set the stage for structural reform. The Mentor Teacher Program was widely adopted. Mentors by subject field are approximately proportional statewide to teachers by field, although corresponding school-level proportionality is unlikely. However, the mentor program has yet to be both fully funded and fully focused on training and retraining teachers.² Mentors' full potential as agents of change has yet to be realized.

In contrast to the enthusiasm for the longer school day and year, mentor teachers, and 10th grade counseling, fewer than 50 percent of districts sought additional revenue under the Minimum Teacher Salary Program. Program guidelines would compact salary schedules, a disincentive to teacher retention, as Goldfinger (1985) demonstrated. Future education finance legislation will necessarily address these issues more directly than did the Minimum Teacher Salary Program. This is an opportune time to address these issues since most districts will replace nearly half their current teachers within the next five years.

A concentrated investment in recruitment of minority teachers, preservice training, induction, and intensive inservice training for new teachers would yield many years of benefits.³ Improved preservice and induction programs might also reduce the total demand for teachers,⁴ allowing districts to be more selective.

Despite the long decline in real teacher salaries, teachers apparently did not receive a disproportionate share of SB 813's large infusion of new revenue, as persistent education critics might have predicted. In real terms, the average teacher's daily salary was lower in 1986 than any year in the previous 10.⁵ Nevertheless, as Figure 11 indicated, salaries (corrected for level of experience) may have at least stopped declining. Their recent improvement notwithstanding, teacher salaries, especially for those trained in math and science, may be too low still to ensure an adequate supply of certificated teachers in all areas of the state.⁶ Implicit in these structural changes is the notion that good teachers value constructive supervision and evaluation, are equipped to incorporate new ideas into their teaching, and demonstrate a willingness to do so. Salaries sufficiently high to attract a

¹ Several provisions having no direct fiscal implications were not discussed in this report.

² Bird 1985, in Little, et al. (1987), Legislative Analyst Report (1985), Business Manager Survey (1987)

³ Cagampang, Greenspan, Garms, and Guthrie (1986).

⁴ In one study, 15 percent of teachers left the profession during the first year. By the third year, 35 percent had left (Schlechty and Vance 1983). Also, see Heyns (1988).

⁵ Salaries in general appear to have declined during the 1970s, a result of a larger educated labor supply (Dresch 1986, Berger 1985, and Welsh 1979). Teachers salaries might have declined even more rapidly since it only slightly overstates the general perception to say that one college graduate is an equivalent and adequate substitute for any other in the teacher labor market (Barro 1986).

⁶ Rumberger (1987) found this disparity to be less important in predicting shortages of math and science teachers in California than in other sections of the United States where salaries for those trained in math and science also exceeded teacher salaries.

large pool of qualified individuals must accompany this extra dimension of responsibility and expectation.

Several factors, in addition to low salaries, affect the outcomes of the reform agenda SB 813 initiated. These are related to changing student and teacher demographics which characterize the entire nation but which are intensified in California. Schools cannot hope to retain experienced, capable teachers, and attract the large number of new, well qualified teachers needed for growing enrollment, under the following conditions:

1. Affirmative action and lessening discrimination have increased opportunities for women and minorities in nontraditional occupations, thus freeing a formerly "captive" labor supply.
2. Women's fertility decisions no longer significantly limit their labor-market participation, thus lessening the benefits of the shorter work day, summers off, and flexible entry/exit that characterize the teacher labor market.
3. The cohort leaving college is smaller and contains fewer members of ethnic minority groups, even though the proportion of ethnic minority students has increased dramatically. Although more white individuals are entering teaching, the increasing disparity between student and teacher backgrounds is generally thought to be detrimental to both adequate teacher supply and minority student achievement.

In addition to demographic issues in the teacher labor market, several factors related to working conditions make it difficult for districts to obtain a sufficient number of well qualified teachers. These include the largest classes in the nation, extremely crowded schools, long commutes,⁷ low salaries in relation to housing costs, and high concentrations of students perceived to be difficult to teach. Because of these changes in the teacher labor market, citizens and policy makers may soon find it advantageous and necessary to pay more for the same product, rather than risk settling for much less.

Management and Accountability Issues

It is probably impossible for schools and districts to undertake the kind of professional infrastructure development described here because program mix and funding levels fluctuate substantially from year to year. One business manager described the importance of fiscal and programmatic stability as follows:

⁷ One teacher with whom we discussed this issue, moved from California to Texas to teach low income, minority students at half the salary, rather than face the daily commute in Los Angeles.

Budgeting is reactionary due to the lack of a long-range financial commitment from the state. Improvements are funded for one-to-two years, then seem to disappear from state budget allocations only to be replaced with something different. It is imperative that districts be able to have a five-year plan of sound financial commitment from the state.

Twenty percent of additional education appropriations in the last 10 years funded a jump in cost of benefits. Only 80 percent of the additional revenue, therefore, was available for education, facilities, and management improvements. This may be an area for further study and joint action on the part of teachers' associations, districts, and taxpayers.

More detailed analysis of the effects of school-level fiscal reforms require school-level accounting and reporting systems, which do not yet exist in California. Florida, among other states, has had such a system for many years. Adoption of a similar system in California, although costly, would likely enhance education accountability and improve policy making. Such a reporting system would be especially effective if coordinated with existing education data bases.

District officials "greatly appreciated" the large amounts of additional revenue from the longer school day and year programs (Odden and Marsh 1987). District business managers who responded to the survey unanimously agreed to two propositions: districts require additional revenue to sustain reforms, and a simplified finance system would greatly enhance effective fiscal management. Without additional funding, districts would soon be forced to look for ways to reduce program costs again, thus endangering reform. A more straightforward finance system would help districts achieve effective fiscal management and education accountability. In today's economy and with today's student population, more revenue will be needed to educate California's children. Additional revenue will be needed to implement education reforms and to create structures to sustain them. At the same time, looming revenue ceilings will force increased productivity and accountability in all sectors just as increased international competition is forcing new levels of efficiency and productivity in private firms. Streamlined management and finance systems are essential to improve overall efficiency and accountability.

Future Fiscal Needs

Conditions of Education in California 1988 (Guthrie et al. 1988) described Commission on State Finance projections of revenue needed to maintain today's education program, the "stay even" fiscal level. Revenue for education doubled in the last 10 years. It will need to double again in the next 10, an increase of \$20.6 billion dollars, just to maintain the same level of services. In fact, with the changing demographics of the student population, additional revenue will be needed to maintain today's service levels for the new population. The school system they need to maintain economic competitiveness will ensure that

California taxpayers insist on greater productivity at the same time they provide additional revenue.

Summary of Policy Implications

1. Senate Bill 813's fiscal measures enhanced local choice and relied minimally on mandates. As a result, its outcomes are diverse. Program implementation varied and was presumably aligned with locally perceived education needs and conditions. This approach was adopted for two reasons: experience and research indicate that delegating decisions about implementation improves program management, and widespread consensus existed about needed remedies. Had desired remedies been more controversial, the legislature might have relied more heavily on mandates, a finding also identified in the research on effective intervention.

2. Senate Bill 813 embodied California's political consensus to rescue public education: it conveyed resources, improved morale, catalyzed increased performance, and minimized damage to schools and children. It affirmed the belief that "business as usual" was no longer acceptable in California schools. A more revolutionary and comprehensive set of reforms, imposed from above on a weakened school system, might well have harmed rather than helped education.

3. Senate Bill 813 embodied an education and fiscal policy shift from equal and compensatory resources toward equal accomplishments—from ex ante to post hoc equity—a substantive, nontrivial, and potentially costly change. This shift in focus should occasion a careful rethinking of curriculum structure and content, instructional organization and practice, and fiscal and governance policy. Just as "business as usual" was no longer politically acceptable, curriculum and instruction "as usual" are inappropriate in this changing education context.

4. The changing demographics of the student population suggest that appreciable differences in curriculum and instruction will be needed if California is to meet SB 813's standard that "pupils should attain academic proficiency in the essential areas of skill and knowledge."

5. Changing demographics may also compound the problem of obtaining enough qualified teachers. In the immediate past, the number of ethnic and racial minority individuals entering teaching declined, yet within two years, more than 50 percent of California's student population will be members of racial and ethnic minority groups. Programs to identify and train ethnic and racial minority group teachers should be intensified. Teacher training programs should also emphasize effective teaching methods for multicultural settings, including thorough treatment of culturally divergent patterns of

socialization and language acquisition. The acute shortage of minority group teachers indicates that additional remedies are needed.

6. School districts that encounter a large supply of qualified teachers have the flexibility to improve hiring decisions, evaluation, supervision, and student achievement. (For example, additional graduation requirements are of doubtful benefit if qualified teachers are not available to teach them.) Larger supplies of qualified teachers are available in areas with higher salaries (Lawton 1985). At the same time that higher salaries stimulate larger supply, they can also be linked to increased professionalism, accountability, and student performance, followed by political support for additional improvements. SB 813's combination of permissive programs, defined performance expectations, and exhortation provides a useful model for future combinations of incentives.

7. Greatly increased costs for benefits do not translate into education improvement. More cost-effective approaches should be adopted in order to retain funding increases for education programs. Jointly, teachers' associations, districts, and the legislature should be able to devise cost-effective remedies.

8. School-level accounting and reporting systems in California would enhance education accountability and improve policy making. Such a reporting system would be especially effective if it could be easily coordinated with existing education data bases. A comprehensive system would help schools identify areas of greatest effectiveness, and areas in which improvement is indicated. This level of analysis will be essential to meet productivity challenges in the coming years.

9. Collapsing the current plethora of funding sources, while stabilizing funding, would increase fiscal efficiency, although perhaps at some cost to services for targeted populations.

10. Additional revenue for education is an inescapable requirement, if California is to maintain and strengthen its school system.

11. Several of the permissive programs incorporated research findings about effective schools, a positive use of expanding "technology" of teaching. Systematic longitudinal evaluation of the programs' implementation and effects would enhance both program outcomes and policy formation. Such evaluation should be a standard component of reform programs.

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