

Policy Paper No. PP88-5-5
The Two Million Dollar School
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May 1988

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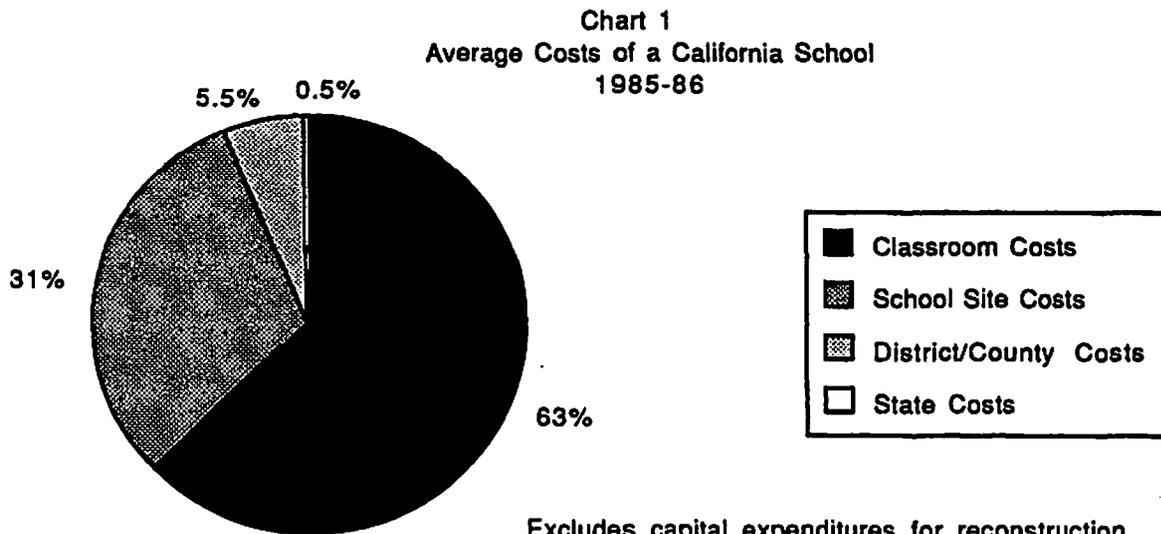
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The Two Million Dollar School

INTRODUCTION

In early November 1987, Superintendent of Public Instruction Bill Honig issued two pages of charts and accompanying narrative entitled *The Average Costs of a California School 1985-86*. This document presented a brief, composite picture of California school expenditures for fiscal year 1985-86 (the most recent year in which full fiscal information was available) in order to provide a "clearly understandable picture of California schools and how they spend their resources."

In summary form, this analysis divided school expenditures into four categories, or cost centers (Chart 1). The description of a hypothetical school and the division of a school district's budget into expenditures within classroom, school, district, and state cost centers is useful in providing an overall picture of school expenditure patterns.¹ The summary, however, was limited by the level of detail and often masked the incredible scope, diversity, and complexity of California's public school system.



¹ In November 1987, the auditor general released an audit report that examined expenditure patterns of 121 school districts in California for fiscal year 1985-86. Although there were some modest differences in the findings, primarily due to slight differences in what funds were to be included in various budget categories, the auditor general's findings were similar to those of the State Department of Education.

The purpose of this report is to review the department's initial analysis and to provide additional detail, to add a sense of reality to the notion of the hypothetical composite school, to provide information at the state level about the magnitude of various expenditures, and to serve as an analytical base for further exploration of issues surrounding school expenditures in California. Data were provided by State Department of Education staff, who worked closely with PACE in developing this report.

The report is divided into five major sections. Section 1 describes varying organizational patterns of California's local school *districts*, alternative ways of organizing schools structurally, and different means by which instruction is offered in typical *classrooms*.

Section 2 analyzes classroom-related expenditures in greater detail, focusing on personnel costs, which compose more than 90 percent of classroom expenditures.

Section 3 examines costs most clearly identified with school sites, almost two-thirds of which are associated with operations and maintenance.

Section 4 concentrates on those costs, primarily personnel related, most closely associated with school districts and county offices.

Section 5 reviews costs associated with the State Department of Education.

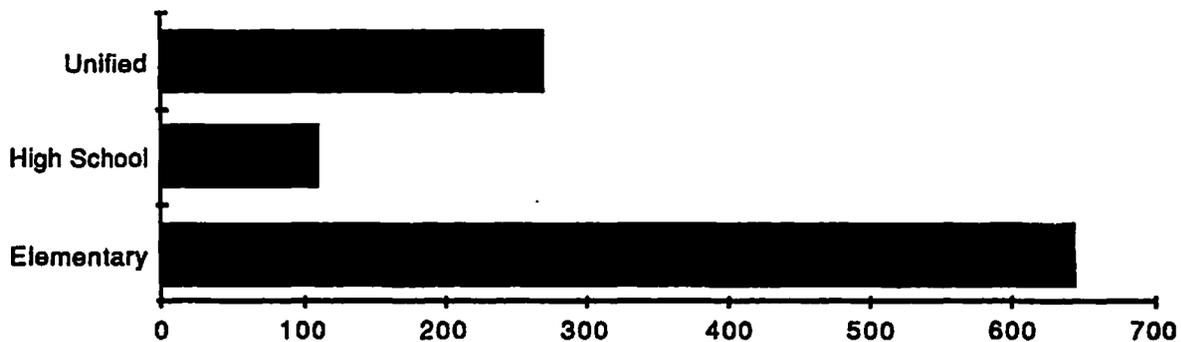
Section 1

SCHOOL AND DISTRICT ORGANIZATIONAL PATTERNS

Districts

In 1985-86, California's 4.25 million students attended school in 1,028 local school districts organized generally into three basic types: elementary, high school, and unified. Each of these districts was governed by a locally elected school board which was responsible for the overall administration of the district. There were 645 elementary districts, most of which served students in grades kindergarten through 8; 112 high school districts, which mainly served grades 9 through 12; and 271 unified districts, which served students in grades kindergarten through 12 (Chart 2).

Chart 2
California School Districts
by Type
1985-86



Although 1,028 is a large number of school districts, in 1940 there were almost 3,000. In a move intended to increase the economic efficiency and educational effectiveness of school services, the California legislature established a program featuring monetary incentives for elementary and high school districts to consolidate into unified school districts. Those incentives, or "unification bonuses," were successful in encouraging a massive reduction in the number of school districts over time, and, as a result, the vast majority of students now attend school in unified districts.

District enrollments vary enormously, ranging from six students to over half a million. The Los Angeles Unified School District, the largest in the state, educates more than one-

eighth of the state's public school students in over 600 schools. The 25 largest school districts (2.5 percent of the total) enroll over a third of California's entire public school student population. On the other hand, 385 of the 1,028 districts have enrollments of fewer than 500 students, and 119 have total enrollments of 100 or fewer.

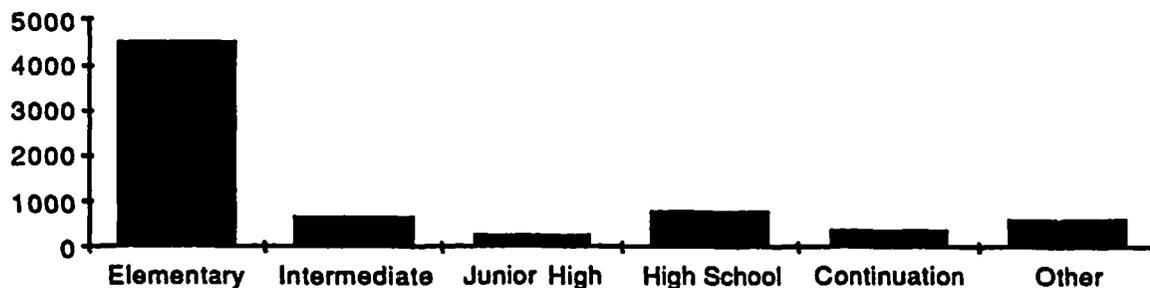
Schools

In 1985-86, there were 7,362 schools in California. California schools are structured in a variety of ways. The most common types of school organization are: elementary (4,533 schools—usually organized as either K-6, K-7 or K-8), intermediate (693 schools—usually 4-6, 4-8, 5-8 or 6-8), junior high (258 schools—usually 7-8 or 7-9), and high school (821 schools—usually 9-12 or 10-12). The most common structural configurations of schools within unified school districts and between elementary and high school districts include:

K-8, 9-12;
K-6, 7-8, 9-12;
K-6, 7-9, 10-12; and
K-5, 6-8, 9-12

There are over a thousand "other" schools in California. Continuation high schools (419 schools), county superintendent operated schools (frequently for special education), and so-called alternative schools, opportunity schools, and schools for pregnant minors (638 schools) compose the remainder (Chart 3).

Chart 3
California Schools
by Type
1985-86



Median enrollment for elementary schools in 1985-86 was approximately 450 pupils; for intermediate and high schools, approximately 650; and for high schools, approximately 1,500. However, just as for districts, these figures mask great variances, ranging from

one-room elementary schools in remote areas of the state, frequently enrolling 10 or even fewer students, to massive urban high schools with enrollments exceeding 4,000. Continuation high schools,² schools for pregnant minors, and other special schools typically enroll substantially fewer pupils.

Classes

There were 162,900 classes in California schools in 1985-86. The bulk (151,700) were regular classes³ and of essentially two types:

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

<u>Department</u>	<u>Number of Classes</u>
English	91,222
Mathematics	58,240
Social Science	56,710
Physical Education	49,558
Special Education	43,186
Science	41,664

² Continuation high schools are designed to offer students an alternative to a regular, comprehensive high school. Students are assigned to a continuation high school for a variety of reasons, which may include pregnancy, unruly behavior, or severe attendance problems. These schools feature programs of individualized instruction with intensive guidance services and emphasize occupation-oriented instruction and work study programs. Continuation schools offer a compressed program with a shorter school day.

³ The remainder were primarily special education classes, which will be discussed in Section 2.

There are literally hundreds of subject classes ranging from small, scattered-enrollment classes on topics such as archeology, Portuguese, hardware/building, and cinematography to classes with massive statewide student enrollment in such basic, required courses as Comprehensive English, United States History, and Algebra.

Class Size

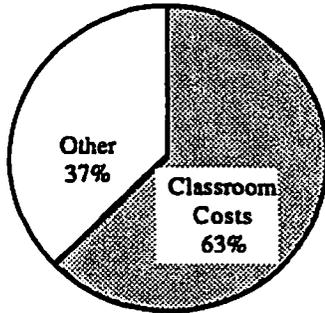
Average class sizes reported by all California teachers was 27.1 for elementary self-contained classes and 28.2 for subject matter/junior high and high school classes. There was only modest variation among different elementary grade levels with no grade differing from the average by more than one. There were, however, substantial differences in junior high and high school subject matter classes.

Citing only the average masks the magnitude of the variance. By departments, highest mean class sizes occurred in physical education (41) and music and dance (48). At the other end of the scale, special education classes averaged only 9.8. Within departments there is also a wide disparity. In foreign languages, science, and mathematics, advanced courses have significantly lower enrollments than first- or second-year classes (e.g., Spanish 1 and 2 averaged 31.5; advanced Spanish, 25.7; beginning algebra, 31.4; calculus, 22.3; biology, 30.2; advanced biology, 25.7; American literature, 30.5 and advanced placement English, 26.7). Class size is also affected by limitations of physical facilities (e.g., classes that require laboratory work are limited by the number of lab stations; laboratory science, chemistry, and physics classes have lower class sizes on average than biology or physical science, as do welding and machine shop classes in vocational education, which have smaller average class sizes than typing or word processing classes).

Because of statutory requirements, class sizes in special education day classes are small, varying by the nature of the handicap and its severity. Multiple handicapped, deaf/blind classes might only contain two or three students, while classes for less severely handicapped may range from 10 to 15.

California class sizes in 1985-86 were among the highest in the nation (exceeded only by the state of Utah), averaging about five students per class higher than the national average. Reducing class sizes to the national average is an expensive proposition, however, which would require an annual expenditure exceeding \$1 billion (excluding the costs of added classrooms, which in itself would be substantial).

Classroom Costs as Percentage of Total Costs



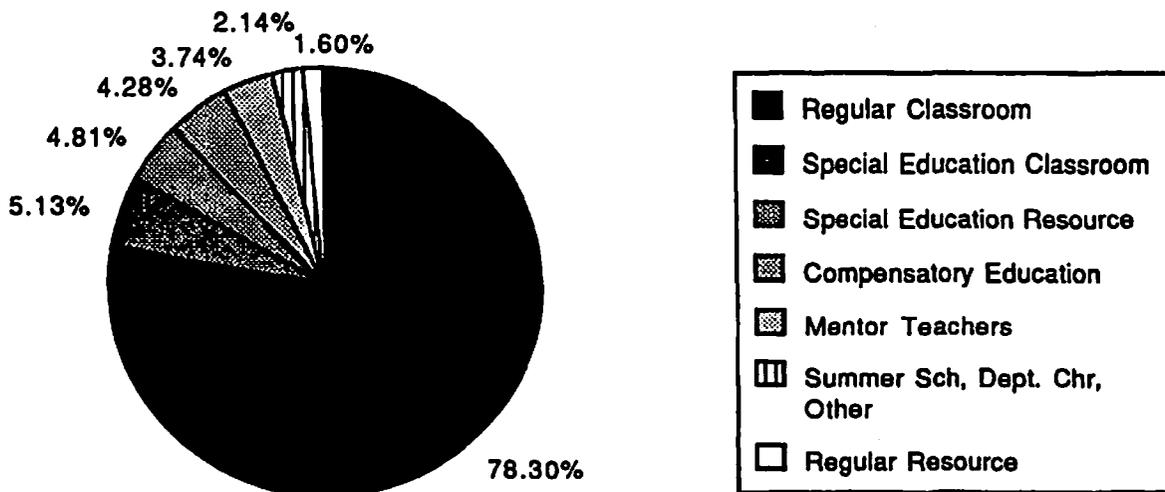
Components of Classroom Costs as Percentage of Total Costs	
Teachers	44%
Specialized Teachers	5%
Pupil Support Personnel	4%
Instructional Aides	5%
Books, Supplies, and Equipment	5%

Section 2 THE CLASSROOM

Introduction

Of the roughly \$15.1 billion expended for daily operating expenses in California's public schools in 1985-86, \$9.47 billion (63%) was allocated for classroom-related costs. Education is a highly labor intensive enterprise. Eighty-five percent of total school costs were for personnel, and well over 90 percent of costs attributed to the classroom were for salaries and benefits of classroom teachers. Chart 4 displays the categories of classroom personnel involved in instruction or in regular, direct contact with students.

Chart 4
Types of Teachers
1985-86



Classroom Teachers

In 1985-86, California public schools employed 217,323 full- or part-time certificated (credentialed) employees of whom 179,000 (82.5%) were classroom teachers. These teachers provided direct instruction to students in a variety of subject matter areas and grade levels. Within the broad, generic category of classroom teacher there are several subgroups.

Regular

In elementary schools, a typical teacher instructs in a broad array of subjects in a self-contained classroom to a single grade or combination of grades for the full day. In junior high and high schools, teachers normally specialize in one of a wide range of academic subjects such as mathematics, science, history, music, foreign language, and English. A typical high school teacher offers instruction in subject matter areas in which he or she has a college major or minor, teaches five or six classes per day, averages somewhere between three or four individual subject matter preparations per day, and has a period per day allocated for preparation. He or she is also engaged in one or more extracurricular activities, such as coaching a sport, directing the school play, supervising the school yearbook, or sponsoring a club—some of which are paid. Most high schools require that teachers spend nonclassroom additional supervision time throughout the school year in activities such as supervising school dances, field trips, or athletic contests or collecting tickets and supervising at school plays, dances, or athletic contests. Elementary teachers are typically assigned to additional nonclassroom duties such as supervising lunchrooms or playgrounds. There were 151,700 regular classrooms in 1985-86.

Special Education Teachers

These teachers instruct students with physical, mental, and emotional impairments, such as students who are deaf, blind, or severely mentally retarded. The teachers are specially credentialed and require different sets of classroom skills than regular teachers. There were 9,600 special education classes in which teachers provide instruction in self-contained full-day classes for the most severely handicapped of these students.

Mentor Teachers

There were 6,891⁴ (approximately 3.5 percent of the total) teachers in 857 of the state's 1,028 school districts who participated in the Mentor Teacher Program. The Mentor Teacher Program enables teachers to earn extra money, about \$4,000 per year, for providing school-site instructional leadership in curriculum development and by assisting classroom teachers, particularly new teachers, in improving the quality of their instruction. An assessment of the Mentor Teacher Program by the State Department of Education revealed that a typical mentor spent 23 hours a month in addition to regular teaching duties and used between 8 and 15 days of released time per year to receive training or to assist other teachers.

Although the law permits mentor teachers to spend as little as 60 percent of their time teaching students, they actually spent closer to 90 percent of their time with students. The plurality of the remainder of mentor time (40%) was spent developing curriculum, instructional lesson plans, tests, and syllabi. The second largest use of mentor time (30%) was allocated to instructional methods, lesson delivery, student grouping, learning theory, and critical thinking. Mentors tended, on average, to assist individual teachers or small groups of teachers for approximately 19 percent of their time.

Summer School Teachers

There were about 1,600 full-time-equivalent "summer school teachers," the vast majority of whom taught part-time during the summer and who were otherwise employed as regular teachers during the normal school year.

Specialized Teachers

There were 17,006 other teachers who were not regular classroom teachers in 1985-86. Their responsibilities varied, but almost all could be classified into two categories: (1) regular specialized teachers and (2) special education specialized teachers.

⁴ This is a total headcount figure, which when converted to full time equivalents (FTE) equals 3,682. Not all mentors were classified as teachers: 3,411 out of 3,682 were teachers; the remainder were classified as "pupil support."

Regular Specialized Teachers

Regular, "specialized teachers" (7,978 statewide) are teachers who are engaged with students and teachers offering direct instruction to nonspecial-education pupils. This category can be broken down further into four subcategories:

1. *Compensatory Education*. These are programs designed to teach students who may need added assistance in overcoming classroom deficiencies. Teachers in this category include:
 - a. *Miller Unruh Reading Specialists*. These are specially trained reading teachers who focus on improving reading skills, usually instructing a few students at a time, either in a pull-out program or with small groups of students within a class. There were 1,805 such teachers at the elementary level.
 - b. *Bilingual Itinerant Teachers*. These are teachers cooperating with regular classroom teachers and with students, mainly within the classroom environment, in improving student proficiency in English and the child's home language. They often teach in more than one classroom or school during the regular school day. There were 151 such teachers, primarily at the elementary level.
 - c. *ECIA, Chapter 1 Teachers*. These teachers, funded by federal categorical aid dollars, target their efforts on improving the overall school performance of students from low-income families. This program may be a "pull-out program," that is, the student is removed from his or her regular classroom for a period of specialized instruction. However, frequently this is an in-class program with the specialist teacher assisting the regular teacher and economically disadvantaged students in small groups or individually. There were 1,262 such teachers in California schools, mainly at the elementary school level.
2. *Subject Matter Specialists*. There are about 939 such teachers particularly in art and music (both vocal and instrumental) who visit schools on a regular basis to provide instruction in their subject matter specialty to students in grades K-6. Teachers in this category are most often assigned to more than one grade or more than one school and provide a service not otherwise economically feasible in a single elementary school. In addition, this category includes 445 department chairs.

3. *Resource Specialists*. These are experienced instructors who assist teachers working with children in categorical programs (e.g., School Improvement, Miller-Unruh Reading, Gifted and Talented Education, Bilingual, Compensatory Education). They assist by cooperating directly with students or by helping teachers in identifying students with special needs and assessing and evaluating their performance. This category also includes Skills Center Specialists, who are engaged in such activities as running a computer lab or providing mathematics instruction. There were 2,945 resource specialists in 1985-86.
4. *Speech, Language and Hearing Specialists*. These are specialists (432) who instruct students who have speech, language, or hearing problems that interfere with their class work but who are not so severely handicapped as students who receive special education services. These specialists normally work with students in small groups and on an individualized, pull-out basis or with the teachers in the regular classroom. Again, they tend to provide services to more than one grade in more than one school.

Specialized Teachers of Special Education

The second major grouping of "specialized" teachers occurs in special education (9,028). The bulk of these instructors can be assigned to four subcategories:

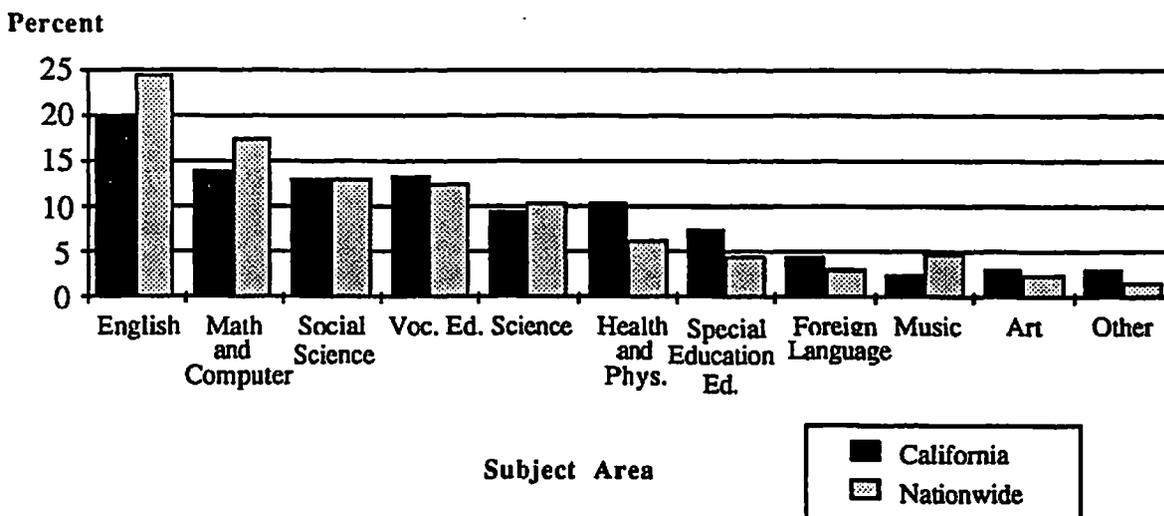
1. *Resource Specialists*. Of the 9,028 teachers in this category, the majority (5,255) are special education resource specialists. Resource specialists assist special education students in a variety of settings, ranging from a pull-out program with a small number of students who receive instruction for part of the day outside the regular classroom, to specialists who instruct in classrooms and provide special tutorial help to small groups of special education students and assist the regular teacher to integrate or "mainstream" the pupil into the activities of the regular class. The degree of mainstreaming that occurs is often determined by the nature and extent of the handicapping condition.
2. *Therapists*. The second largest group (2,262) of special education specialized teachers are speech pathology therapists, physical therapists, and vision and occupational therapists, who are trained to assist special education students addressing severe handicapping problems. These professionals are highly trained and often serve more than one school.

3. *Subject Matter Specialists.* The third special education specialized category is comprised of teachers (961) who instruct such courses as adaptive physical education, vocational education, and special driver training, and who offer mobility instruction for physically handicapped children.
4. *Itinerant Consulting Teachers.* These teachers (550) cooperate closely with special education teachers and students, primarily with students who have speech and hearing problems, and tend to be employed by large school districts or county superintendents of schools. Normally they serve several schools.

Teacher Assignment

On the whole, California allocates its junior high and high school teaching personnel in a manner consistent with schools in other states. That is, of the total pool of teachers, California assigns most of them to subject matter areas which mirror the national average. For example, approximately 12 percent of California high school teachers instruct in the social sciences. That figure is almost equal to the national average. However, in two crucial areas, English and mathematics, California ranks well below the national average, while in physical education and special education, California outpaces the national average (Chart 5).

Chart 5
Distribution of California Secondary Public School
Teachers and Teachers Nationwide by Subject
Area, 1985-86*



* Note: Data includes elementary teachers in departmentalized settings.

SOURCE: National data courtesy of National Education Association. California data from PACE analysis of California Basic Educational Data System (CBEDS) data.

Teacher-Related Costs

The costs associated with providing teachers for California schools in 1985-86 averaged \$41,300 per teacher. These costs occurred in the following categories: salary, benefits, costs related to hiring substitutes, and extra-duty compensation.

Salary

A major component of school expenditures is the level of teacher salary. On that dimension, California has historically ranked among the nation's leaders. The National Education Association reported that the 1985-86 national average teacher's salary was \$25,257. California teachers, at \$29,184, ranked fifth in the nation.⁵ High school teachers averaged slightly more than their elementary school colleagues, reflecting their slightly higher average experience and additional preparation (more college units).

Although average teacher salaries, corrected for inflation, have increased since 1983-84, actual purchasing power remains approximately five percent below the 1970 level. Some of the increase in teacher salaries can be attributed to the aging of the educator workforce. The only promotion teachers can earn in their careers as instructors (with the exception of the Mentor Teacher Programs, previously available to only 3.75 percent of California's teachers) consists of movement along a salary schedule that provides a small increase (averaging 2.5 percent) for each year of service (typically up to 8 to 13 years). Additional increases are awarded if teachers attain additional professional preparation beyond the minimum level required for initial employment. Estimates suggest that in 1985-86 California's teachers were between 3.4 and 6 years more experienced than in 1970. In addition, the longer school day and year provisions of SB 813 were translated into longer hours. Thus, it appears that teachers have gained back much of their lost purchasing power by having more education, by being more experienced, and by working more hours in the year.

Teacher Benefits

Teacher benefits, such as retirement and health care, account for an additional \$1.5 billion statewide, or \$8,400 per teacher per year on average (an additional 22 percent of

⁵ However, when California salaries are adjusted for the state's higher cost of living, the adjusted salary exceeds the national average by only \$500.

total salary and benefit costs⁶). There is evidence both in California and nationally that because of increasing costs of retirement plans and rapidly escalating costs of health care, this item in a district's budget is growing at a rate faster than any other personnel-related item. For example, in California in the period from 1981-82 to 1985-86, total benefits paid to all employees grew by 34 percent and increased as a percentage of total district expenditures from 11.64 percent in 1981-82 to 13.28 percent in 1985-86.

Substitutes and Extra Duty Compensation

Hiring substitutes when teachers are ill or paying for inservice education, along with extra compensation for supervising after-school activities such as athletics, drama, or band, adds an additional \$500 million statewide or \$3,916 per teacher (9%) to the costs of providing a teacher. This is a substantial sum, and unfortunately there is little statewide information now collected on this subject. It is clearly deserving of more attention.

Instructional Aides

Statewide in 1985-86 there were over 50,000 paraprofessional instructional aides who provided supplementary assistance to teachers and students. The vast majority of aides serve students with special needs in elementary schools. Of the 50,000 aides, almost one-half (23,000) assisted special education students, 13,400 assisted students in compensatory education programs, and the remaining 13,500 assisted reading specialists and regular classroom teachers in meeting the needs of individual students. These paraprofessionals tend to be employed part-time and earn substantially less than do fully credentialled teachers. In many cases, aides are not eligible for the full array of benefits accorded other school staff.

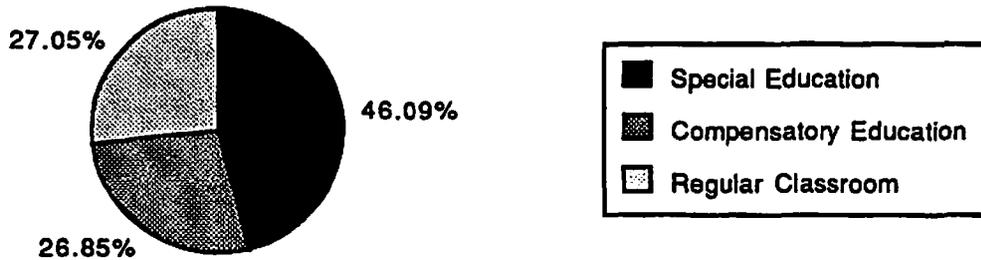
Aides typically provide assistance under the direct supervision of a classroom teacher in instructing individual students or with small groups, especially those with language, reading, or mathematics problems. They also assist teachers in keeping attendance, grading papers, maintaining order, organizing classroom materials, and such mundane, but time consuming, activities as duplicating printed materials.

California's ratio of instructional aides to students is among the highest in the nation. Some argue that these aides substantially mitigate possible negative effects of California's high average class sizes. However, most of these aides are utilized in settings, such as

⁶ The Bureau of Labor Statistics reported that in March of 1987, private-sector benefit costs accounted for more than one-fourth of compensation.

special education, with already low class sizes. Only about a quarter of these aides are utilized by regular classroom teachers (Chart 6).

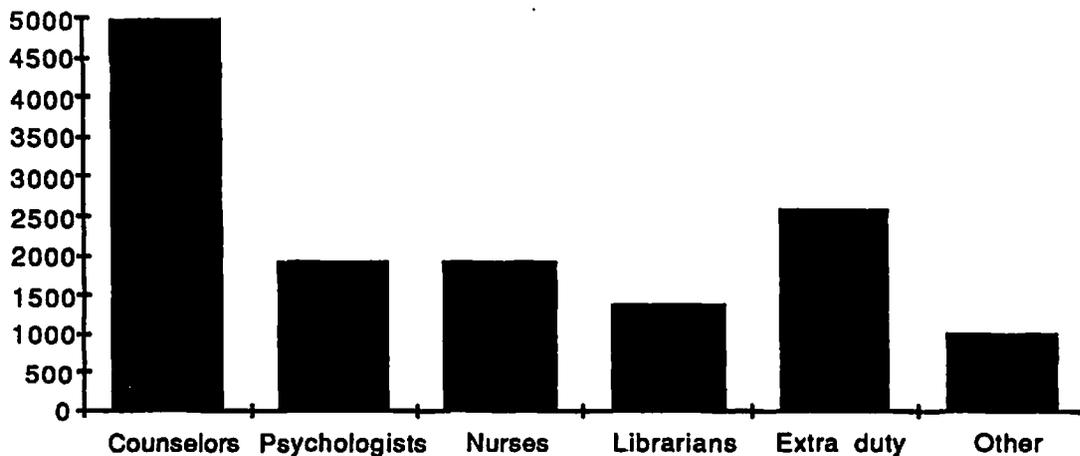
Chart 6
Instructional Aides
by Assignment
1985-86



Pupil Support Personnel

Statewide in 1985-86 there were about 14,000 pupil support personnel, including approximately 5,000 school guidance counselors, 2,000 psychologists, 2,000 nurses, 1,300 librarians, and 3,500 teachers with other pupil-support-related duties (Chart 7).

Chart 7
Pupil Support Personnel
by Category
1985-86



Guidance Counselors

The bulk of guidance counselors serve at high school and junior high school levels. Few elementary schools have counselors. Counselors serve a variety of functions, including student academic advisement and personal counseling. Costs of guidance counselors typically exceed average teacher costs because counselors normally work a longer year, have greater experience on average, and require additional coursework to obtain a counseling credential.

Librarians

Librarians also are found disproportionately at the high school level. High school librarians are on average slightly more experienced and have taken additional coursework in order to qualify for their credential. They therefore cost, on average, more than a typical teacher.

Nurses

Because of school size limitations, nurses in elementary schools tend to provide services only on a part-time basis, if at all. Most high schools of adequate size have a registered nurse who most frequently does not possess a teaching or pupil personnel credential and is therefore generally compensated less than teachers, counselors, and librarians.

Other Instructional Duties

This catchall category includes other duties of teachers, which encompass time spent by classroom teachers in class preparation and supervision of study halls. These costs are disproportionately borne by high schools, because most high school teachers have one class period per day for preparation, while most elementary teachers have substantially less, sometimes none at all.

Books, Supplies, and Equipment

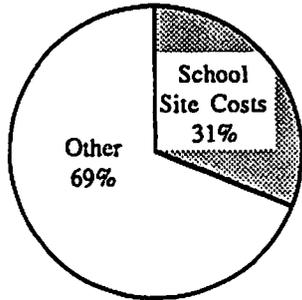
In 1985-86, California schools expended approximately \$675 million for books, materials, supplies, and equipment, or about four percent of the total education budget for

that year. Of this amount, well over half was expended for books, supplies, and materials. These funds provided students with textbooks in core curriculum areas such as mathematics, science, reading, English, social science, and health, and in other subject areas like art, music, and foreign language. These books are normally expected to serve for a six-year cycle.

Also included in this category is the purchase of supplementary classroom materials such as maps, globes, workbooks, and computer software, and instructional materials that benefit the entire school, such as library books, magazines, and audiovisual materials. Approximately \$86 is spent per student for books and supplies. In 1985-86, from the Instructional Materials fund, elementary schools received \$23.17 per ADA for textbook purchases, and high schools received \$16.20 per pupil. According to a national association of textbook publishers, California ranks forty-first among all states in amounts expended per student per year on textbooks.

In addition, statewide instructionally related equipment expenditures totalled \$120 million for projectors, television sets, computers, and the like. The remainder was expended for rentals, leases, and instructional equipment maintenance contracts.

**School Site Costs
as Percentage of Total Costs**



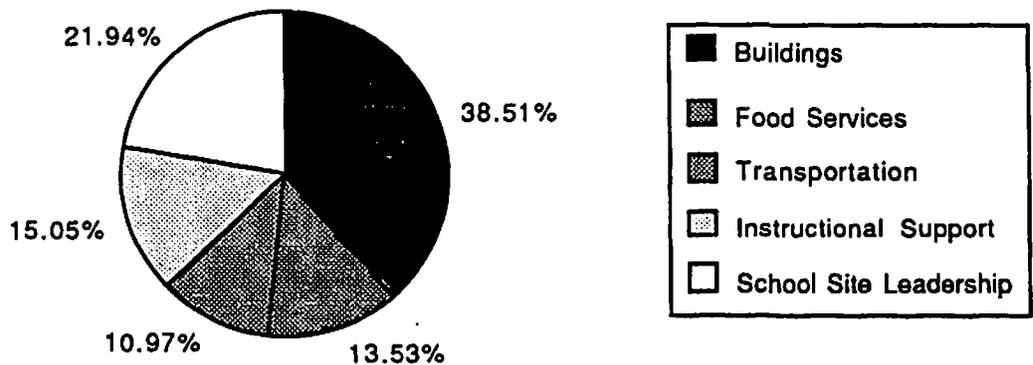
Components of School Site Costs as Percentage of Total Costs	
Buildings	12%
Food	4%
Transportation	3%
Instructional Support	5%
School Site Leadership	7%

Section 3 THE SCHOOL SITE

Introduction

Of the approximately \$15.1 billion expended for daily operating expenses in California public schools in 1985-86, school site costs accounted for \$4.66 billion (31%) and reflected expenditures that were essential to the daily operations of schools, including building operations and maintenance, food services, transportation, and school site leadership (Chart 8). In addition to these amounts, the costs of instructional support staff (those staff engaged in curricular related matters), whether they were housed at the district or the school site, were attributed to the school site since their activities directly affected the classroom by assisting teachers in improving instruction and curriculum.

Chart 8
School Site Costs
by Function
1985-86



Maintenance and Operations

Buildings

In 1985-86, California had 1,028 school districts, comprised of approximately 7,000 school sites, 50,000 buildings, 160,000 classrooms, and 425 million square feet of space on over 100,000 acres. All these facilities represent a replacement value of over \$50 billion. Fifty-five percent of California's public school facilities were constructed between 1949 and 1964. Over one-third are 30 years of age or older. Rehabilitation costs for these schools are estimated to be approximately \$1.5 billion. Although for purposes of this analysis, which deals with operating expenses, the approximately \$1 billion spent in 1985-86 for reconstruction, modernization, and new construction of school buildings is excluded, it is important to understand the scope of the issues surrounding facilities.

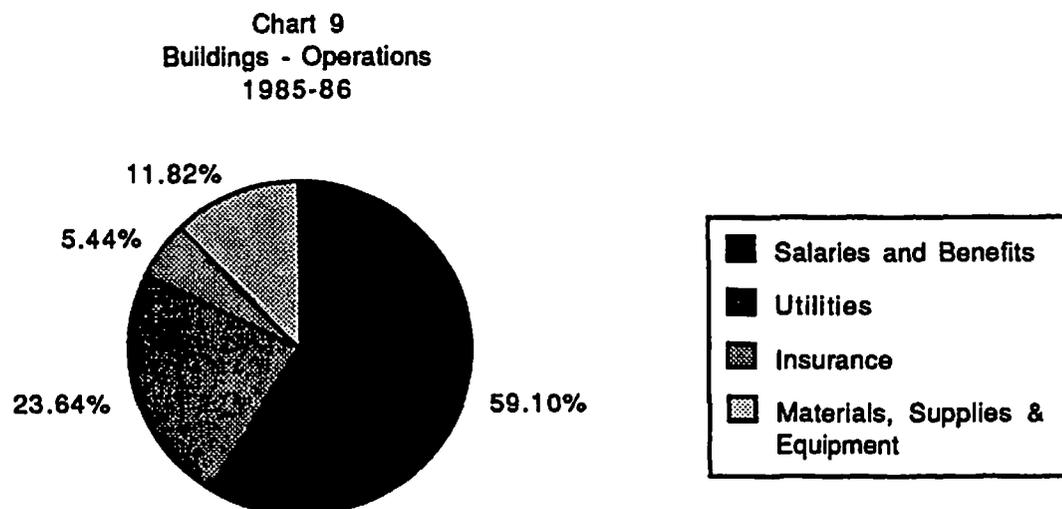
In addition, California's school age population is growing rapidly, at an average of over 140,000 students each year through 1996. To meet this statewide enrollment growth, California will need an additional 2,100 new schools with 42,000 new classes by 1996. It costs approximately \$10,000 per seat to build a new school, but the actual costs vary appreciably, largely dependent upon land costs. Site acquisition costs in low land-cost areas of the state average \$2,000 per student; in high land-cost areas (urban districts), average site-acquisition costs often exceed \$12,000. Consequently, the total per-seat cost in these districts is often \$20,000 or more.

Put differently, if amortized over a 40-year period, an average classroom would cost about \$.26 per square foot per month for depreciation of the construction costs and about \$.40 per square foot per month to maintain. This total, \$.66 per square foot per month, to own, operate, and maintain school facilities compares favorably with leases of comparable private facilities, which normally fall within a \$.90 to \$1.50 monthly per square foot rate.

Finally, California's space standards per student are among the lowest in the nation. Among the 10 states with state standards, California provides 38 percent less space per student. Obviously, if California were to adopt more generous space standards, costs for new construction would grow apace.

Of course, like classroom costs, the major costs associated with buildings are personnel. In 1985-86, nearly 42,000 employees worked on school buildings at a cost in salaries and benefits of \$1.1 billion. These employees included workers with a variety of skills, such as custodians, painters, gardeners, maintenance workers, electricians, and plumbers.

Other costs associated with school buildings included utilities (gas, electricity, and water), which equaled \$400 million or about \$200 per month per class; insurance, which cost districts a total of \$92 million, and supplies, materials, and equipment, which totaled approximately \$202 million (Chart 9).



Food Service

Statewide costs for food services totaled \$629 million in 1985-86 (4.2 percent of total operating costs). Food services in schools provided 2.5 million meals a day at an average cost of \$1.50-\$1.65 per meal. The bulk of the meals served are for school lunches and breakfasts of which about 64 percent are free, 6 percent are reduced price, and 30 percent are full cost.

Generally speaking, the costs of labor and the costs of food are about equal. Food service staff purchase, clean, prepare, and serve meals to students. Occasionally there might be a certificated person who provides a special nutrition education program to the students in the classrooms, but this occurs rarely and only in some of the larger districts.

Transportation

In 1985-86, school districts expended about \$512 million for home-to-school transportation (3.4 percent of total operating costs), of which the state, through a complex funding mechanism, reimbursed \$286 million. About 95 percent of all districts are engaged in offering school transportation services, and they transported approximately 910,000 students per day to and from school in 15,000 buses (each driven an average of

18,000 miles per year), a total of 215 million miles per year. In addition, school buses were driven 4.4 million miles during field trips and school activity trips.

The transportation program costs approximately \$.06 per mile per student⁷ (\$.20 for special education students transported in smaller, specially equipped buses and \$.04 for regular students). Almost all these cost were borne by a combination of federal, state, and local funds; parent fees provided only 1.5 percent of the total.

A little over half the costs were for personnel—bus drivers, mechanics, and clerks. California school bus drivers receive 40 hours of bus driver training, 20 in class and 20 behind the wheel, and annually receive an additional 10 hours of inservice education.

Instructional Support

Instructional support was provided by a variety of employees focusing on curriculum and supervision. In 1985-86, California expended \$702 million (4.6 percent of total operating costs), over 90 percent of which was expended for salaries and benefits for curriculum specialists, curriculum supervisors, library aides, media technicians, and clerical support for teachers.

Curriculum Specialists

This category included 7,400 certificated employees, primarily teachers and subject matter specialists in areas such as science, mathematics, and history, who were attempting to improve curriculum and instruction. It also included teacher's time for home room, study hall, preparation periods, other student support services, and other nonteaching assignments.

Curriculum Supervisors

This category included approximately 3,000 certificated administrators of whom about 2,500 were program administrators assigned to special education, compensatory education, bilingual education, or subject matter supervision such as art, music, homemaking, and the like. The remaining 500 were engaged in general instruction and curriculum and pupil personnel service supervision.

⁷ Based on the assumption that school buses are half full.

Library Aides, Media Technicians, and Clerical Support for Teachers

Statewide, this category included 6,368 classified personnel, such as library and media aides, machine and computer operators, and clerks and secretaries who directly assisted teachers. Almost 50 percent of the costs attributed to this category are allocated for personnel salaries and benefits.

School Site Administrative Leadership

School site administrative leadership was provided by 5,900 principals and 2,700 vice principals and other administrators. In 1985-86, school districts expended approximately \$1 billion for these services (6.6 percent of total operating costs).

Most elementary schools have a single administrator: the principal. Small, isolated schools may share a principal with one or more other elementary schools, or the principal may be an administrator only part-time, with the rest of the school day devoted to teaching. In some cases, in one-school districts, an administrator may serve as both the superintendent of the district and the principal of the school. A typical urban or suburban high school, on the other hand, may have a principal, and one, two, or even three vice principals.

School site administrators typically cost more than their teacher or pupil personnel service colleagues, because of required extra coursework to obtain an administrative credential, additional years of experience (usually at least five years), and the fact that they typically work a longer school year. In 1985-86, the average salary for an elementary principal was \$44,007, and for a high school principal, \$47,582.

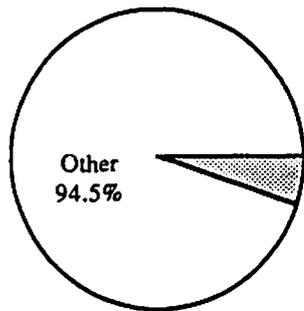
Classified Employees

Over 18,000 clerks and secretaries assisted in keeping attendance, typing, receiving the public, and other office duties.

Office Equipment and Supplies

Office equipment and supplies totaled about \$24 million statewide or about \$3,300 per school.

**District/County Costs as
Percentage of Total Costs**



District/
County
Costs
5.5%

**Components of District/County
Costs as Percentage of Total Costs**

Personnel	4%
Equipment and Supplies	1.5%

Section 4 DISTRICT/COUNTY ADMINISTRATION

Introduction

Of the \$15.1 billion expended for daily operating expenses in California's public schools in 1985-86, \$841 million (5.5%) reflected the services provided to schools by district and county administrative offices.

Administration

Personnel costs for district and county administration (both certificated and classified) approximate \$616 million annually, which is about 73 percent of the total expenditures for district and county administration.

There were about 6,300 superintendents and deputy, associate, and assistant superintendents who were responsible for working with the general public and local school boards and for providing leadership, policy direction, and legal, personnel, and financial services to the schools. There are small districts which frequently have one administrator who may perform the entire array of district functions, including, in very small districts, some teaching responsibilities. Larger districts tend to have administrators for each of the central district functions.

Very large districts may have area administrators with administrative responsibility over regions within the district. Frequently, large districts have administrators for elementary and secondary education.

Costs for salaries for district administrators averaged between \$51,000 and \$59,000 per year, depending on the assignment and the size and type of district.

California statutes limit the proportion of administrators to teachers to 9:100 for elementary; 8:100 for unified; and 7:100 for high school districts. Much has been written recently about administrative ratios. About five percent of all California school personnel are classified as administrators (both school site and district and county offices); this compares with the national average of 6.6 percent for public schools, according to the Bureau of Labor Statistics.

Elementary and secondary education ranks 28 out of 35 occupations, far below other industries and occupations listed by the Bureau of Labor Statistics, in the proportion of personnel allocated to administrative duties. Education ranks below accounting, auditing, and bookkeeping services, which heads the list with a work force that is 62.7 percent administrative. Education also ranks lower than banking (30 percent administrative), real estate (24.1 %), computer and data processing services (19.2 %), construction (11.8 %), food manufacturing industries (9.9 %) and coal mining (7.8 %). Even in comparison with other education-related fields, elementary and secondary schools rank low in the proportion of administrators to total workers. Almost 19 percent of all employees of business, trade and vocational schools are administrators. For colleges and universities, administrators totaled 12.2 percent; for job training and rehabilitation services, 11.9 percent; and for child day care services, 10.3 percent.

Industries or occupations that rank the same as or lower than schools in the proportion of administrators to other employees include motor vehicle manufactures (6.6 %) bus service and urban transit (5.5 %), hospitals (5.0 %), and livestock production (2.6 %).

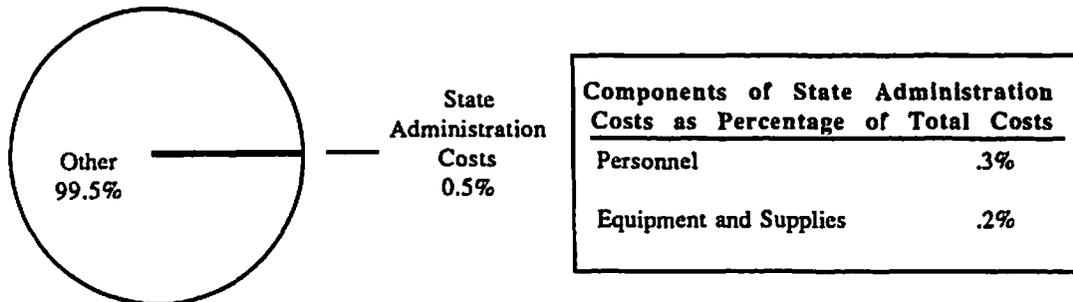
Classified Staff

There were 14,000 secretarial and clerical staff who provided support services for other district personnel.

Supplies, Materials, Equipment, Contract Services, and Travel

In 1985-86, schools spent approximately \$225 million on materials, supplies, equipment, personal services contracts, and travel.

**State Administration Costs as
Percentage of Total Costs**



Section 5 STATE ADMINISTRATION

Introduction

In 1985-86, the California State Department of Education expended approximately \$80 million (0.5 percent of total school district operating expenditures) on services directly related to school operations. These expenditures excluded state special schools and the State Library operated by the department, and expenditures related to the state administration of adult education, private proprietary schools, and child care.

State Operations

State operations affecting California school districts are conducted by the State Department of Education under the leadership of the State Board of Education and the superintendent of public instruction. Major department functions are summarized below within the 15 program areas of the department.

Departmentwide Management encompasses executive management and other special services, including the office of the superintendent of public instruction, his deputies and assistants, and a centralized staff assigned to public information and press relations, legal services, and assistance to the State Board of Education. Leadership, policy direction, and support services in the management of available resources for California public schools are included here as well.

Public and Governmental Policy Formulation encompasses special services consisting of the offices of external affairs, governmental and legislative affairs, and

federal/congressional liaison; centralized assistance and staff support for governmental affairs, coordination with business and community, support for department advisory committees and commissions, and activities for agencies outside the department.

Program Compliance and Audit Review encompasses efficient and quality assessment of school district compliance, including development of a coordinated compliance monitoring review process; coordination of compliance field reviews; streamlining of categorical program applications, state board approved waivers, complaint processes, and Title 5 regulations; centralized processing of waivers and consolidated applications; performance of consolidated programs complaint investigations; and centralized coordination of external audits and audit reviews.

Department Administrative Services encompasses internal operations support to the department to ensure the delivery of responsive and accountable educational services to students in California. It also includes personnel management and business services, media services and publications, and data processing management and services.

School District and Department Fiscal Services encompasses internal fiscal functions of the department, including budgeting, cost accounting, maintaining expenditure controls, and issuance and monitoring of contracts. Also included are field-related fiscal functions, including provision of financial data for external agencies and apportionment of funds to all levels of local education agencies in accordance with state and federal regulations, policies, and statutes.

Categorical Program Support encompasses administration of activities such as assistance and training, program review, policy development, and coordination in support of the following programs: Migrant Education—to meet the needs of California's migrant children through the provision of various support services in addition to the basic educational program; American Indian Education—to increase academic achievement and the self-concepts of American Indian students; Compensatory Education (ECIA Chapter 1)—to coordinate ECIA Chapter 1 with the delivery of services provided by other related state and federal programs; Economic Impact Aid (EIA)—to supplement educational services to educationally disadvantaged and limited- and non-English-speaking students; and special bilingual programs, including Bilingual/Bicultural Education, Transition Program for Refugee Children, and National Origin Desegregation Assistance.

Curriculum Instruction and Assessment encompasses assistance to school districts and other agencies in improving the quality of educational instruction through the following major components: Mathematics and Science Education—to support development of effective mathematics programs and improve the amount and quality of science teaching; Educational Technology—to improve the effective use of computers and video technology in instruction; Social Science and Humanities Education—to upgrade the quality of curriculum and course content in history and social science. This also includes

administration of the California Assessment Program, a set of achievement tests which is a comprehensive method for assessing the performance of the state's public school system.

Instructional Support Services encompasses special instructional programs including Gifted and Talented Education and the University and College Opportunity Program; health and physical education and environmental/energy education; programs for improving school effectiveness such as school climate—to assist school districts in providing a learning environment that encourages effective academic achievement; school improvement—to improve the instructional program for elementary and secondary schools through the development of a school-level plan; parental involvement; and staff development—to provide assistance and leadership in the areas of staff development, training, and retraining. This also includes Intergroup Relations' oversight, evaluation, and assistance to school districts.

Program Evaluation encompasses evaluation of all state and federal education programs, special evaluation studies of selected education programs conducted at the request of the legislature, and assistance in evaluation and research to department and local and regional resources.

Regional Services encompasses development and support of a statewide delivery system focusing on efficiency and maximum utilization of local and regional resources.

Special Education encompasses programs to meet the individual needs of exceptional pupils, including one-on-one or small group instruction, full-time special classes, and indirect services, such as specialized facilities, equipment, and learning materials provided through public school districts.

Vocational Education encompasses job/career guidance, awareness, exploration, selection, common core competencies, and job-specific skills necessary for entry-level jobs, job advancement, and preparation for more advanced training.

Employment Preparation encompasses facilitation of coordination and promotion of linkages among school districts and administrative entities in service delivery areas to improve or develop occupational training programs that increase the employment opportunities for economically disadvantaged youth and adults.

Child Nutrition and Food Distribution encompasses assistance to participating school districts and private, nonprofit agencies in providing nutritious meals and nutrition education to children through the following programs: State-Mandated Child Nutrition Program, National School Lunch Program, School Breakfast Program, Child Care Food Program, and Special Milk Program. Part of this responsibility involves the acquisition and efficient distribution of federally donated commodities (surplus food) to all eligible agencies.

Field Management Services encompasses leadership, guidance, and technical expertise to school districts to manage operations consistent with all requirements in the areas of attendance accounting, district governance and organization, transportation, insurance, accounting/budgeting, maintenance and operations, other areas of planning and administration, and the conduct of management reviews covering a broad range of business services operations and organizational concerns.

Major program functions and related expenditures are outlined in Chart 10.

Chart 10
Functions and Expenditures Related to State Administration

Major Programs and Functions	Expenditures (millions)
Department Management	\$7.7
Public and Governmental Policy Formulation	\$1.1
Program Compliance and Audit Review	\$4.4
Department Administrative Services	\$3.5
Local Education Agency and Department Fiscal Services	\$1.5
Categorical Program Support	\$5.1
Curriculum, Instruction, and Assessment	\$10.7
Instructional Support Services	\$7.1
Program Evaluation	\$4.3
Regional Services	\$1.2
Special Education	\$6.3
Vocational Education	\$6.4
Employment Preparation	\$2.0
Child Nutrition and Food Distribution	\$15.2
Field Management Services	\$2.2
TOTAL	\$78.7