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ABSTRACT

The Institute for Research on Educational Finance and Governance (IFG) has designed and implemented a major survey of public and private schools in the six-county San Francisco Bay Area which focuses on organizational dimensions in elementary and secondary schools. In this study, the first of three, the characteristics of schools included within the IFG sample are compared with those reported in various published national surveys, and the differences are discussed. Next, the sampling frame used for the Bay Area study is described and the differences between respondents and nonrespondents noted. Then differences and similarities between sampled private and public schools are reported with respect to school type (elementary, middle, and secondary), number of grades offered, enrollments, ethnic composition of students, inclusion within a larger administrative system, principal's decision making influence, accreditation, participation in selected public programs (such as compensatory education and nutrition programs), administrator-student and teacher-student ratios, and emphasis on various educational goals. Data are presented in tables throughout the report, and notes and references are included. (Author/TE)

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Institute for Research on Educational Finance and Governance

SCHOOL OF EDUCATION STANFORD UNIVERSITY

Project Report No. 84-A3

CHARACTERISTICS OF PUBLIC AND PRIVATE SCHOOLS IN THE SAN FRANCISCO BAY AREA: A DESCRIPTIVE REPORT

Edward M. Gilliland
and
Janice Radle

January 1984

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INSTITUTE FOR RESEARCH ON EDUCATIONAL
FINANCE AND GOVERNANCE

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The research activity of the institute is divided into the following program areas: Finance and Economics; Politics; Law; and Organizations. In addition, there are a number of other projects and programs in the finance and governance area that are sponsored by private foundations and government agencies which are outside of the special R&D Center relationship with NIE.

Abstract

The characteristics of schools included within the IFG sample of private and public schools in the San Francisco Bay Area are compared with those reported in various published national surveys and the differences discussed. Next the sampling frame utilized for the Bay Area study is described and the differences between respondents and nonrespondents noted. Then differences and similarities between sampled private and public schools are reported with respect to school type (elementary, middle, secondary), number of grades offered, enrollments, ethnic composition of students, inclusion within a larger administrative system, principal's decision-making influence, accreditation, participation in selected public programs (e.g., compensatory education, nutrition programs) administrator-student and teacher-student ratios, and emphasis on various educational goals.

Acknowledgment

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To investigate the organizational structures, the patterns of decision-making and resource allocation, and their policy implications in various types of schools, the Institute for Research on Educational Finance and Governance (IFG) has sponsored an interdisciplinary study of public and private schools (K-12) in the six counties in the San Francisco Bay Area.¹ Chambers and Lajoie (1983) provide a detailed description of the study and the four component projects. The four projects examine public versus private school variations in organizational structures, decision-making, and resource allocation in relation to variations in (1) the degree of competition, (2) the levels and types of funding and support, (3) the nature of governmental regulation and organizational control, (4) the structures of ownership, and (5) the types of students served.

The Scott and Meyer subproject examines the pattern of administrative complexity, coherence of educational policies and programs, and the degree of centralization or decentralization in American education. Since private schools tend to be less linked to the regulatory system than the public schools, we are able to explore the effects of government control on the administrative and decision-making structures of schools. Variations in administrative complexity are studied by looking at variations in the internal configurations of administrative resources and the external linkages to higher levels of authority. The coherence of policies is explored by assessing the existence and consistency of educational policies and goals at different levels (local/state/national) and in different types of schools (e.g.

public/private; urban/suburban; elementary/secondary; religious/nonreligious).

In this report we first review some previous descriptions of public and private schools in the United States and comment on the limitations of these data. We next compare the reported distribution of public and private schools in the U.S. with those in California and with those in our sample of schools from the San Francisco Bay Area. We also briefly compare the characteristics of those schools that responded to the survey (our sample) with those that are not in the sample. Finally, we describe some of the principal features of our sample of private and public schools in terms of distribution by type and grade levels, size and ethnic composition, extraorganizational linkages and participation in public programs, staffing patterns, and policy emphases.

Limitations of Data and Research

The current research and data on public and private schools present some problems. First, given the oftentimes visible competition between public and private schools, the significant number of students attending private schools, and the attention given to educational policy issues, the dearth of research on private schools is somewhat surprising. Erickson (1983) and Abramowitz *et al.* (1980) provide two recent examinations of private schools. Next, the availability and quality of data on private schools is problematic. Erickson (1983:2) points out that in 1976-77 "the quality of data concerning private schools was enhanced by...regular national surveys by NCES (National Center for Education Statistics)." Yet for several reasons even these surveys most

likely inadequately count the number and type of private schools: (1) Although most states require private schools to register and report their student enrollment, many private schools overlook this legal requirement. Hence, many states do not have a very complete picture of their private schools. (2) Although the major private school associations (e.g., the National Catholic Education Association, the National Association of Independent Schools) can provide fairly accurate statistics on their member schools, many private schools are not affiliated with such organizations. Some private schools are affiliated with more than one organization and are reported more than once. (3) Erickson (1983:2) contends that fundamentalist schools are particularly reluctant to release information about themselves due to fears of such data being misused. (4) The NCES surveys omitted schools with no grades above the first--a decision which excludes some fundamentalist schools (which tend to expand upward a grade at a time) and ungraded schools.

A third problem in current research arises from the relative scarcity of both comprehensive studies of either public or private schools and comparative studies of private and public schools. In their study of private schools Abramowitz et al. (1980) do not include elementary schools. Although Coleman, Hoffer, and Kilgore (1981a) broaden their research to contain both public and private schools, they examine neither a variety of non-Catholic private schools nor, like Abramowitz et al., any elementary schools. Sleeter (1982) discusses 16 current studies of public and private secondary education in the U.S. She concludes that the bulk of these studies are descriptive in

nature, and only a few have an explicit focus on comparison of public and private schools (She notes that one of the 16 studies focuses on comparisons of alternate and conventional schools.). Thus few comparative studies of elementary/secondary, public/private, or religious/nonreligious schools have been attempted.

Finally, from our perspective a most crucial gap in this literature is the weak and unsystematic treatment of organizational characteristics of both public and private schools. The Coleman and Abramowitz studies do not systematically address questions of administrative complexity, coherence of educational policies, fragmentation, etc. Erickson, Nault and Cooper (1978) also fail to consider rigorously these organizational and environmental dimensions of schools. Oates' (1981) description of America's private schools focuses almost exclusively on the demographic structure of the American educational system; he concludes (p. 15) that "independent school administration...(has) been ignored almost completely by the world of academic educational scholarship." As Erickson (1983:35) notes, "there is little systematic description of how various private schools actually operate." Kleinfeld's (1979) interesting ethnography of a Catholic school for Eskimos does include some organizational characteristics, but the scope of this study is quite limited. In her discussion of sixteen current studies on secondary education in the U.S., Sleeter (1982) notes that the bulk of these studies focus on effectiveness and educational reform. Potentially relevant variables receiving some attention in these studies include school goals, authority, decision-making, and the locus of authority. However, most of

these are characteristics of the individual participants (e.g., the principal) in the organization rather than of the organizations themselves. Thus, overall, the literature is characterized by a dearth of information on private schools, few systematic comparative studies of schools, and inattention to organizational factors. Our study of public and private schools was designed to begin to remedy these problems.

Characteristics of Schools Nationwide

We now briefly explore some characteristics of public and private schools nationwide. A word of explanation is necessary first. The reader is cautioned that studies can report the number of schools (public/Catholic, etc.; elementary/secondary) and/or the number of students enrolled in these schools. These statistics usually indicate similar, but not identical, overall patterns. For example, in Table 1 Catholic secondary schools accounted for 33% of private schools, but Catholic secondary students comprised 70% of private school students. Although our unit of analysis is the school or school district, we have included whichever type of data are available. Only by piecing together these figures are we able to obtain some picture of schools and enrollments in the U.S. as a whole.

To provide estimates of the national distribution of secondary schools and secondary school enrollments in the public and private sectors, Coleman, Hoffer and Kilgore (1981a:9) utilize the 1978 NORC School Universe data, which was developed from several different sources: (1) a school universe file for Fall 1978, created by the Curriculum Information Center; (2) a public school universe file for Fall 1978,

prepared by the National Center for Education Statistics from the Fall 1978 Survey of Public Schools; (3) a private school universe file for Fall 1978, created by the National Center for Education Statistics; and (4) a supplementary U.S. Civil Rights Commission file of a large sample of public schools for Fall 1976. Because the CIC file was the most complete file, grade spans and enrollments were used from it if the school was on that file. The other three files supplemented the CIC file. Using the NORC data, Coleman and his colleagues project the following data for secondary schools and student enrollments:

Table 1

National Figures for Number of Schools and
Estimated Enrollments in Grades 9-12^{a,b}

	<u>U.S. Total</u>	<u>Public Schools</u>	<u>Private Schools</u>			
			<u>Total</u>	<u>Catholic</u>	<u>Other Religious</u>	<u>Private Nonreligious</u>
<u>Secondary Schools:</u>						
Total Number ^c	24,132	17,822	6,310 ^d	1,861	1,552	2,296
% of Total Schools	100	76.1	23.6	7.7	6.4	9.5
% of Total Private Schools	---	---	100	33	27	40
<u>Student Enrollment:</u>						
Estimated Enrollment (000's)	14,866.4	13,508.4	1,359.0 ^d	900.8	168.6	223.8
% of Total Enrollment	100	90.0	9.1	6.1	1.1	1.5
% of Total Private School Enrollment	---	---	100	70	12	17

^aSchools with total enrollments of less than 25 students are excluded from all of the Coleman study's tabulations.

^bPercentages may not add up to 100% because of rounding.

^cThe number of schools listed has not been corrected, on the basis of information obtained from the High School and Beyond Sample, to account for institutions that are not properly high schools having their own enrollment (such as area vocational schools which serve students from other schools). Elimination of the schools represented by these schools yields a revised estimate of the size of the school universe of 21,700. The Coleman study provides no information about the sectoral distribution of the eliminated schools.

^dThe total number of private secondary schools (N=6,310) and enrollment (N=1,359,000) include a category (not reported here) of private non-Catholic schools (N=601) and enrollments (64,800) included in the CIC universe file but not in the NCES file. Because no information about affiliation exists beyond the fact that they are not Catholic schools, these schools were excluded from the calculation of the percentages reported in this table.

From Table 1 one can see that the public and private secondary school proportions of the total number of Secondary schools are 76% and 24%, respectively. Catholic secondary schools account for approximately one-third of the total number of private secondary schools, other religious secondary schools somewhat fewer (27%), and private nonreligious secondary schools about two-fifths (40%). Of the secondary student enrollment nationwide, public school students constitute approximately 91% and all private school students 9%. The private students' share of this market has remained relatively stable for many years and has ranged from 9% to 14%. Of all private secondary enrollments, Catholic schools account for 70%, other religious schools 12%, and private nonreligious schools 17%.² If one matches up the Coleman study data on secondary school types with their respective number of secondary students, an interesting picture emerges involving size of secondary schools (number of students enrolled.) On the average, public secondary schools have 758 students; Catholic secondary schools, 484 students; other religious secondary schools, 108 students; and private nonreligious secondary schools, 97 students. It is unusual to have comparable data on both schools and enrollments. We present a discussion of school size by school type in our survey results, described later in this paper.

Since Catholic school comprise the largest segment of private schools and keep the most reliable statistics of any private school category, we first look there for possible patterns, then for comparisons with public and other private schools, and finally for any regional

variations with our own public/private sample. Estimates of Catholic enrollments from the National Catholic Education Association (1978) appear in Table 2.

Table 2
Catholic Schools & Enrollments
1965-66 and 1978-79^a

	<u>Elementary</u>		<u>Secondary</u>		<u>Total</u>	
	<u>Schools</u>	<u>Students (000)</u>	<u>Schools</u>	<u>Students (000)</u>	<u>Schools</u>	<u>Students (000's)</u>
1965-66	10,879	4,492.1	2,413	1,081.7	13,292	5,573.8
1978-79	8,134	2,371.0	1,461	853.0	9,595	3,224.0

^aThe 1978-79 figures are projected on the basis of the NCEA's previous counts.

Other estimates of Catholic enrollment are developed by the National Center for Educational Statistics (1980) and appear in Table 3.

Table 3
Total Catholic Schools & Enrollments

	<u>Number of Schools</u>	<u>% of Total Private Schools</u>	<u>Number of Students (000's)</u>	<u>% of Total Private School Enrollment</u>
1978-79	9,849	50	3,269.7	64

Although our purpose here is not to examine the history of Catholic schools,³ the 1965-66 figures are included in Table 2 to show the sharp decline of students and schools at the elementary and secondary levels.

According to the NCEA, total Catholic enrollment in 1978-79 was just 57% of the 1965-66 counts. In 1961-62 Catholic schools accounted for 73% of the total private school enrollment nationally (Erickson 1983:3-4). By 1978-79 the Catholic share of private school students decreased to 64% (Table 3). Note, however, that the Coleman report estimates that Catholic students comprised approximately 70% of private school students in 1978-79 (See Table 1). It is important to point out that Catholic elementary and secondary schools and enrollments waned more sharply than their public counterparts (Erickson 1983:9-10). Catholic elementary schools declined almost twice as much as Catholic secondary schools. And while private school enrollment as a proportion of national school enrollment dropped from 13.6% in 1959-60 to 11% in 1978-79 (Erickson 1983:3), these figures obscure the fact that the Catholic decline accounted for the vast bulk of the total private school enrollment drop. Indeed, private religious (non-Catholic) and private nonreligious schools have actually increased their proportions of private school enrollments (Erickson 1983:11-17). This decline in Catholic schools and growth of other private schools also involve a geographical shift. The Catholic decline has occurred primarily in the Northeast; the growth of other private school organizations has appeared predominantly in the West and Southwest. (This trend, of course, mirrors the general shift in U.S. population to the Sunbelt and the West.)

As noted in the above section, data on private schools are sketchy and somewhat unreliable. Of all private schools, Catholic schools maintain the most detailed and accurate statistics on their own enrollments, staffing, etc. For various reasons, many non-Catholic

private schools have been omitted from the national or state lists of private schools. Thus, due to these unreported non-Catholic private schools and to the fairly accurate data on Catholic schools, Erickson (1983:3-8) claims that the available data overestimate the Catholic schools' share and underestimate other private schools' share of the market. Hence, Catholic schools most likely have fewer than 64% of private school students (Table 1).

Because it is a nationwide study and contains the first systematic comparison of public and private schools and enrollments, the High School and Beyond survey (Coleman, Hoffer and Kilgore 1981a) is unique. However, criticism regarding the study's methodology and regarding subsequent interpretations of the data (Bryk 1981; Rossi and Wright 1982) points out some limitations of the Coleman study. The major criticisms include: (1) Descriptive statistics of the samples used in the various analyses as well as explicit definitions of the classification scheme were not included. (2) Sampling errors for statistics and a description of possible nonsampling errors were also not included. (3) A description of how the data were gathered--including an analysis of non-responses and missing data--was excluded. (4) Because of the small sample size for private schools, the study itself was not designed to contrast public and private schools. (5) Coleman, Hoffer and Kilgore (1981b:527) agree that "questions about this (the non-Catholic private sector) sample's representativeness of the total population of such schools are sufficiently great that little can be said from the study about this sector as a whole." Thus we use the Coleman data with caution.

Enrollment Characteristics in California Schools

Utilizing data from the NORC School Universe Tape for 1978, Coleman, Hoffer, and Kilgore (1981a:17) project enrollments of secondary school students for California (see Table 4).

Table 4

% Distribution of Students in Grades 9-12^a

	<u>Total Enrollment (000)^b</u>	<u>% Total</u>	<u>% Public</u>	<u>% Catholic</u>	<u>% Other Religious</u>	<u>% Private Nonreligious</u>
California	1425.	100	92.0	5.2	1.0	1.3
% Total Private School Enrollment		---	---	69.	13.	17.

^a Percentages may not add up to 100% because of rounding.

^b See note d from Table 1.

Here one can readily see that the percentage distribution of students nationwide and in California is quite similar. (See Table 1.) (The reader is reminded that the data from Tables 1 and 4 are from the same source: Coleman/NORC. The preceding section contains a discussion of the limitations of the Coleman data and a description of the NORC data.)

School Characteristics in the San Francisco Bay Area

Table 5 shows the number of public schools in the six-county San Francisco Bay Area; Table 6 lists the number of private schools. For now we are primarily interested in the representativeness of our sample to its respective school population in the Bay Area and nationwide. As explained in the following section, the figures for the private school Bay Area population and sample include only those schools whose

enrollment is greater than 50. This decision eliminated approximately 60% of the private schools; hence the number in the private school population is 370. Chambers and Lajoie (1983) provide the data for these tables.

Table 5

Number of Public Schools in S.F. Bay Area

	N
Total Public Schools	1202
High Schools	153
Junior High/Intermediate Schools	163
Elementary Schools	886

Table 6

Number of Private Schools in S.F. Bay Area

	<u>Total</u>	<u>Catholic^a</u>	<u>Other Religious</u>	<u>Private Nonreligious</u>
Elementary Schools	274	156	62	56
Secondary Schools ^b	61	36	8	17
Ungraded (K-12) Schools	35	---	16	19

^aTo make these data as comparable as possible to data presented earlier (Coleman, NCES, NCEA), our Catholic category includes both parochial and diocesan Catholic schools and independent Catholic schools. In all subsequent analyses of our data, independent Catholic schools are combined with other private religious schools. This rationale is elaborated upon in the next section.

^bAgain for these comparative purposes, schools which are ungraded are reported in Table 6, but are excluded from other tabulations.

By combining parts of the data from Tables 5 and 6, we can construct Table 7 which is fairly comparable to the Coleman data in Table 1. In this manner we can very roughly compare secondary schools in the Bay Area to those nationwide. However, several caveats somewhat affect our examination and need to be noted:

1. The Coleman data are for 1978-79; the Bay Area figures are for 1980-81. However, see Note #2.
2. Coleman's secondary schools include grades 9-12 only. The Bay Area public school data reported in Table 7 include high schools only-- grades 10-12 or 9-12; public junior high schools contain grades 7-9 and are omitted from this table. (These junior high schools are an interesting phenomenon and are discussed in the next section).
3. We eliminated all private schools whose enrollment is 50 or less; the Coleman study excluded those schools with less than 25 students.
4. Most importantly, as others (for example, Bryk, 1981; Coleman, Hoffer and Kilgore, 1981b; Murnane 1981; and Rossi and Wright, 1982) have noted, there is some question regarding Coleman, Hoffer, and Kilgore's (1981a) nationwide data reported in Table 1. For example, their Catholic share of the private secondary school market (34%) is lower than other estimates. As we will show, our data is comparable with other public and private school figures. We use the Coleman report as a starting point because of the lack of other data.

The figures for the secondary schools are reported in Table 7.

Table 7

Bay Area Figures for Number of Secondary Schools

<u>Secondary Schools</u>	<u>Bay Area Total</u>	<u>Public Schools</u>	<u>Private Schools</u>			
			<u>Total</u>	<u>Catholic</u>	<u>Other Religious</u>	<u>Nonreligious</u>
Total Number:	214	153	61	36	8	17
% of Total Number:	100	74	26	15	4	7
% of Total Private Schools:	---	---	100	57	15	28

Some interesting results appear in comparing Tables 1 and 7. The percentage of public and private schools to the total number of schools is identical in the Bay Area and nationwide (74% and 26% respectively.) We find that the total number of elementary and secondary Catholic to private schools in the Bay Area is 56% (192/336 from Table 6) and nationwide 50% (from Table 3.) We are generally reassured that the Bay Area public and private schools present a picture similar to that nationwide. When examining the categories within private secondary schools, the comparisons differ. In the Bay Area, Catholic secondary schools comprise 57% of the total number of private schools; the Coleman nationwide figure is 33%. Other religious and private nonreligious secondary schools in the Bay Area have a smaller proportion of this market (15% and 28%, respectively, from Table 7) than their national counterparts (27% and 39%, respectively, from Table 1). As noted above, however, we believe these differences stem from the questionable accuracy of the Coleman data.

School Characteristics of the IFG Bay Area Sample

Following the classification used by Coleman, Hoffer, and Kilgore (1981a), we differentiate among four basic types of schools: public, Catholic, other private religious, and private nonreligious schools. For our preliminary analyses, we further combine the schools in the sample into public, Catholic, and private independent spheres. We use the term "Catholic" in a very restrictive sense to refer only to those Roman Catholic schools with direct ties to the local Catholic hierarchy, that is, parochial and diocesan schools. Independent Catholic schools were assigned to the private sphere, based on the assumption that they would be more similar to other independent schools than to schools which are part of the Catholic hierarchy. Our category of private independent schools includes independent Catholic, other private religious, and private nonreligious schools. Approximately half (49%) of the 57 independent private schools are affiliated with a religious organization. Of these, 6 are Catholic, 6 Lutheran, 4 Seventh-Day Adventist, 3 Episcopalian, and the remainder have some other Christian affiliation.

Other classification schemes are possible, of course. Erickson (1983:6) proposes the following "minimally adequate classification" scheme: Catholic; other "mainline" church-related; fundamentalist; high-tuition; and other special types of schools. Such data are simply not available. Chambers and Lajoie (1983) in their descriptive summary propose a classification scheme which, while quite similar to ours, is too fine-grained for our purposes: public; Catholic parochial; Catholic private; other religious private; and nonsectarian private schools.

Chambers and Lajoie (1983) provide a detailed description of the IFG study of public and private schools: the purpose, sample design and rationale, data sources, questionnaires, and summary. Our particular project utilizes the data on public school districts, public schools, and private schools; the remaining data are peripheral to our interests. Several key factors emerge from their report:

First, in order to better match school and district responses and to provide some insights into the operation of the schools, all public school districts were sampled (N=110.) The number responding was 49, a return rate of 45%.

Next, of the approximately 1200 public schools in the six county Bay Area, a total sample of over 500 schools was selected. To ensure that sufficient numbers of various types of schools were represented in the sample, a stratified sample was employed.

Because of the small number of secondary schools and of our interest in such schools, 100% of the public high schools, 50% of the intermediate schools, and 50% of the junior high schools were sampled. The high school sample guaranteed that all unified and high school districts would have at least one school in the school sample. Furthermore, the relatively high percentage of junior high and intermediate schools increased the likelihood that a relatively large portion of elementary districts would be represented by at least one school. And to increase the possibility that a number of schools from different public school districts would be in the sample, elementary schools were underrepresented in larger districts and overrepresented in smaller

districts. Sample percentages in the three larger elementary school size categories in Table 8 were selected to yield approximately equal numbers of schools from the districts in these categories. These three categories contain 17%, 12%, and 7%, respectively, of the total number of districts. Just over 50% of the districts are represented among the elementary schools in the smallest size category. (The remaining 14% of the districts are high school districts which contain no elementary schools.) Table 8 shows the sample and returns for public schools.

Table 8

Samples and Returns for Public Schools

<u>Type</u>	<u>Pop</u>	<u># Schools Sampled</u>	<u>% Schools Sampled</u>	<u>Number Schools Quest. Returned</u>	<u>% School Quest. Returned</u>
Total:	1232	563	46	129	23
High Schools	153	153	100	43	28
Junior High/ Intermediate Schools	163	82	50	19	23
1-6 Elem Schools	173	135	78	28	21
7-11 Elem Schools	172	52	30	18	35
12-20 Elem Schools	202	61	30	7	11
20 Elem Schools	339	51	15	8	16

Last, the private school sample consists of the entire private school population in the Bay Area with greater than 50 students enrolled. Chambers and Lajoie (1983:9) describe the rationale for this limit on enrollment. (The Coleman study excluded schools with less than 25

students enrolled.) Of the more than 1000 private school total, over 60% have 50 or fewer students and were subsequently eliminated from the private school population. Unlike public schools, no stratified sample was used here. Table 9 shows the sample percentages and returns for private schools.

Table 9
Samples and Returns for Private Schools^a

<u>Type</u>	<u>Number Schools Sampled^b</u>	<u>Number School Quest. Ret.</u>	<u>% School Quest. Ret.</u>
Total:	360	121	33
<u>Secondary:</u>			
Cath Parochial ^c	16	6	38
Cath Private ^c	20	4	20
Other Religious	8	2	25
Nonreligious	<u>17</u>	<u>9</u>	53
Total	61	21	33
<u>Elementary :</u>			
Cath Parochial ^c	151	69	48
Cath Private ^c	5	1	20
Other Religious	62	15	24
Nonreligious	<u>56</u>	<u>15</u>	28
Total	274	100	31

^aThe ten ungraded schools reported in Table 6 are excluded here.

^bFor private schools the number of schools sampled is the total number of schools in this population.

^cWe have reported Catholic parochial and Catholic private schools separately. We combine Catholic private with other private schools in later analyses, but for comparative purposes now, keep Catholic private schools separate from Catholic parochial schools. The reader is referred to Footnote a in Table 6.

To put the data from our sample (Tables 8 and 9) in a form more directly comparable to the nationwide and Bay Area school population data (Tables 1 and 7, respectively), we construct the following sample proportions for the number of schools:

Table 10
Sample Figures for the Number of Schools^{a,b}

	<u>Public</u>	<u>Private</u>			<u>Nonreligious</u>
		<u>Total</u>	<u>Catholic</u>	<u>Other Religious</u>	
<u>Secondary Schools:</u>					
% Total Returned	64	35	10	11	14
% Total Private School Returned	---	100	29	31	40
<u>Elementary Schools:</u>					
% Total Returned	37	63	44	10	10
% Total Private School Returned	---	100	69	15	15

^a Public junior high and intermediate schools are excluded from these data. See the discussion in the preceding section.

^b Percentages may not add up to 100% because of rounding.

What then can we conclude, if anything, from this onslaught of data? How representative are the Bay Area schools which returned questionnaires? Table 10 provides some interesting contrasts with the Bay Area (Table 7) and national (Table 1) secondary school data. Our initial discussion focuses on secondary schools only. These data show that the proportion of public secondary schools to private (all categories) is similar nationwide and in the Bay Area--approximately 74%

to 26%. Of those secondary schools returning questionnaires (henceforth, schools returning questionnaires are termed our "sample") the percentages are 64 and 35, respectively. The higher response rate among private schools (35% to 23% for public schools) gives us a somewhat larger proportion of private school organizations than exists either nationwide or in the Bay Area.

The percentage distributions among the three categories of private secondary schools (Catholic, other religious, and nonreligious) to total secondary schools is interesting. The Catholic proportions of secondary schools nationwide, in the Bay Area, and in our sample all are in a similar range (8% - 15%). The percentages of other religious private secondary schools in the nation, the Bay Area, and our sample are 6.4, 4, and 11, respectively. And the proportions of non-religious private secondary schools to the total number of secondary schools vary from 7% - 14% nationwide, in the Bay Area, and in our sample. Thus, among secondary schools, the data in the three tables present a roughly comparable picture.

Next, when comparing elementary and secondary schools in our sample with the total school population in the Bay Area, some patterns emerge more explicitly. (The reader is reminded that the figures for elementary schools are not available nationwide and further that a stratified sampling procedure was utilized on public elementary schools in the Bay Area--which naturally could skew their proportions.) Of the total school population in the Bay Area (N=1374, excluding junior high and intermediate schools), Catholic secondary schools represent 3% of the

total, other religious secondary 1%, and nonreligious secondary 1%; the comparable secondary proportions to the total sample (N=225) are Catholic 4%, other religious 1%, and nonreligious 4%. Here one can discern that nonreligious secondary schools are slightly overrepresented in our sample. Among the percentage distribution of elementary schools to the total Bay Area school population (N=1374), Catholic elementary schools represent 11% of that total, other religious elementary 5%, and nonreligious elementary 4%. The corresponding elementary figures for the sample returns (total N=225) are Catholic 31%, other religious 7%, and nonreligious 7%. It now becomes apparent that the number of Catholic elementary schools somewhat skews our sample. In addition, the overrepresentation of Catholic schools (elementary and secondary combined) in our sample becomes more visible when we examine the Catholic share of the total private school market (elementary and secondary schools): 50% in the nation (Table 3), 57% in the Bay Area (Table 9), and 66% in our sample (Table 10). The Catholic elementary schools contribute most of the bias in the 66% figure.

Selected Characteristic of Respondents vs. Nonrespondents

We turn briefly now to a comparison of respondent schools with nonrespondent schools.⁴ For our purpose here, respondents are defined as those schools in the San Francisco Bay Area that returned the questionnaire; hence, respondents represent our sample. Nonrespondents are defined as all public schools and as all private schools with more than 50 students in the Bay Area which are not part of the sample. Specialized schools within the public school system--e.g., continuation

schools, art schools, vocational centers--have been excluded from this analysis. District enrollment refers to the total number of students enrolled in public schools within the public school district in which the school (public or private) is located.

Table 11 presents data on selected characteristics of respondents and nonrespondents among public schools. Table 11 shows that among Bay Area public schools, respondents and nonrespondents are roughly equivalent in size at both the elementary and secondary level. Furthermore, respondent and nonrespondent public schools tend to come, on average, from school districts of approximately the same size. Table 12 presents a comparison of the same characteristics for responding and nonresponding Catholic (parochial and diocesan) schools (The reader is cautioned that there are very few Catholic secondary schools among both respondents and nonrespondents; hence, firm conclusions about differences in these secondary schools cannot be drawn.) Once again, respondents and nonrespondents are roughly comparable in size at both the elementary and secondary levels. And respondent and nonrespondent Catholic schools appear to be located, on average, in public school districts of approximately equal size.

Table 11

Selected Characteristics of
Respondents vs. Nonrespondents:
Public Schools

	<u>Respondents</u>		<u>Nonrespondents</u>	
	<u>Elementary</u>	<u>Secondary</u>	<u>Elementary</u>	<u>Secondary</u>
<u>School Enrollment:</u>				
Mean	394	1,630	404	1,415
N	62	41	775	101
<u>District Enrollment:</u>				
Mean	18,029	19,327	20,424	19,004
N	57	41	742	100

Table 12

Selected Characteristics of
Respondents vs. Nonrespondents:
Catholic Schools

	<u>Respondents</u>		<u>Nonrespondents</u>	
	<u>Elementary</u>	<u>Secondary</u>	<u>Elementary</u>	<u>Secondary</u>
<u>School Enrollment:</u>				
Mean	296	652	310	501
N	67	4	82	7
<u>District Enrollment:</u>				
Mean	25,932	41,879	29,575	36,409
N	64	4	80	7

Table 13 presents data on selected characteristics of respondent and nonrespondent independent private schools, which are further categorized into religious and nonreligious private schools. Among religious private schools, respondent and nonrespondent schools are approximately equal in size and appear to be located in public school districts of approximately

the same size (However, religious private secondary schools in our sample appear to be slightly smaller than their nonrespondent counterparts.). Among nonreligious private schools, however, the schools in our sample appear to be somewhat larger than their counterparts in the nonrespondent population.

Table 13

Selected Characteristics of
Respondents vs. Nonrespondents:
Private Schools

	<u>Respondents</u>				<u>Nonrespondents</u>			
	<u>Religious</u>		<u>Nonreligious</u>		<u>Religious</u>		<u>Nonreligious</u>	
	<u>Elem</u>	<u>Sec</u>	<u>Elem</u>	<u>Sec</u>	<u>Elem</u>	<u>Sec</u>	<u>Elem</u>	<u>Sec</u>
<u>School Enrollment:</u>								
Mean	139	369	217	287	173	565	127	142
N	14	9	18	8	81	22	65	10
<u>District Enrollment:</u>								
Mean	23,908	28,075	27,060	26,222	21,006	28,038	21,767	33,459
N	14	9	18	8	79	22	65	9

Our analysis has shown that our sample of schools differs from the population of nonresponding schools in only a few respects. Yet to the extent that these factors might affect the organizational characteristics of schools, it becomes important to remain aware of these differences. We now discuss the key differences between our sample and the populations to which we wish to generalize and how these differences might affect the variables of interest to us.

There is a slight overrepresentation of suburban public schools and urban Catholic schools in our sample. The reader is reminded that greater emphasis was placed on selection of public elementary schools from small (and predominantly suburban) school districts in the sampling procedure. (See previous section). Further, unreported analyses show a higher concentration of Catholic schools in urban areas in our sample than in the general population. To the extent that participation in selected public programs (e.g., compensatory education or bilingual education) is affected by either ethnicity or location, this could lead us to underestimate the degree of participation of public schools and to overestimate the degree of participation of Catholic schools in these programs. Thus, it becomes necessary to include controls for both ethnicity and location in our analysis of the effects of program participation on the organizational characteristics of schools.

The distribution of schools in our sample and in the Bay Area population is likely to have some effect on our ability to generalize to a national population. For instance, the lack of any truly rural schools in our sample, caused by the relative paucity of such schools in the Bay Area population, limits our discussion of the effects of location to a focus on urban/suburban distinctions. The relatively small number of nonpublic secondary schools in both our sample and the Bay Area population reduces the generalizability of our conclusions about school

differences at the secondary level. Finally, because the San Francisco Bay Area population includes a higher proportion of minorities than the population of the U.S. as a whole, our conclusions about the effects of ethnicity are tentative. With these limitations in mind, we now turn to a presentation of our survey results.

Public vs. Nonpublic Schools

We used the classification scheme described earlier to divide the schools in our sample into public, Catholic (parochial and diocesan), and independent private spheres. We further divided the sample according to the range of grades offered by the schools. Elementary schools are those which offer grades K-8 or any subset of grades K-8 other than middle school grade ranges. Middle schools are those schools offering grades 5-8, 6-8, 7-8, or 7-9. Secondary schools include both senior high schools (grades 9-12, 10-12, or 11-12) and combined junior and senior high schools (grades 6-12, 7-12, or 8-12). Finally, comprehensive schools are defined as those offering grades K-10, K-11, or K-12.

Table 14 shows the distribution of schools in the sample according to educational sphere and grade level. These results provide some striking insights into the organizational structure of education in California (and perhaps more generally in the United States). There are 60 public, 67 Catholic, and 31 private elementary schools and 49 public, 7 Catholic, and 16 private secondary schools. The extremely small number of Catholic secondary schools in the sample reflects the small number of Catholic secondary schools in the population surveyed (N=15), and suggests that Catholic elementary schools serve as feeders to independent high schools and public high schools as well as to parish- or diocesan-controlled high schools.

Table 14 clearly demonstrates that two organizational forms are each virtually restricted to a single educational sphere. The comprehensive school, combining the elementary and secondary school in a single organizational structure, is limited to the private sphere. Nine of the

Table 14

Educational Sphere and Grade Level of Schools in the Sample^a

<u>Educational Sphere and Grade Level</u>	<u>Number of Schools</u>	<u>Mean Number of Grades Offered</u>
Public Elementary ^b	60	6.5
Catholic Elementary ^b	67	8.4
Private Elementary ^b	31	8.2
Public Middle ^c	20	2.7
Catholic Middle ^c	1	2.0
Private Middle ^c	1	2.0
Public Secondary ^d	49	4.0
(Senior High)	(48)	(3.9)
(Combined Junior and Senior High)	(1)	(6.0)
Catholic Secondary ^d	7	4.3
(Senior High)	(6)	(4.0)
(Combined Junior and Senior High)	(1)	(6.0)
Private Secondary	16	4.7
(Senior High)	(11)	(4.0)
(Combined Junior and Senior High)	(5)	(6.2)
Private Comprehensive ^e	9	12.8

^aSchools for which surveys were returned (n=261).

^bElementary schools include ungraded elementary schools and all schools offering grades K-8 or any subset thereof, except for middle schools.

^cMiddle schools are defined as those schools offering grades 5-8, 6-8, 7-8, or 7-9.

^dSecondary schools are defined as those schools offering grades 9-12 or any subset thereof (Senior High), or grades 6-12, 7-12, or 8-12 (Combined Junior and Senior High).

^eComprehensive schools are those offering grades K-10, K-11, or K-12. The sample contains no public or Catholic comprehensive schools.

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private schools in our sample (16%) are comprehensive schools, while none of the public or Catholic schools adopt this organizational form. Private schools are also slightly more likely to combine the junior and senior high school into a single organizational structure (9% of the private schools do so, compared to only 1% of both public and Catholic schools). In a national survey of nonpublic secondary schools, Abramowitz et al. (1980) found that comprehensive schools constituted 11% of private secondary schools, while combined junior and senior high schools account for 12.8% of the private secondary schools. The differences in our results most likely stem from regional differences in the distribution of school forms, from the differences in our classification of nonpublic schools (Catholic and independent private schools are treated separately), and from our exclusion of small schools from the sample (which are less likely to be comprehensive schools).

The middle school, or junior high school, is clearly a phenomenon of the public sphere. Whereas 20 of the public schools in the sample are middle or junior high schools, only one Catholic school and one private school adopt this organizational form. The differences in organizational structure between the public and nonpublic spheres are further demonstrated by a comparison of the mean number of grades offered at the elementary level. Public elementary schools offer an average of 6.5 grades, compared to an average of more than 8 among nonpublic schools. These results appear to reflect the trends in organizational structure among the general population of schools in the Bay Area.

For purposes of facilitating comparison among groups, the Catholic and private middle schools and the private comprehensive schools are

excluded from the analyses reported in this section.⁵ Public middle schools were retained in a separate category because they are likely to differ in significant ways not only from nonpublic schools but also from both public elementary and public secondary schools. The secondary school category includes both senior high schools and combined junior and senior high schools.

Size and Ethnicity

Table 15 reveals clear and consistent differences in the size of schools, as measured by enrollment, across both educational sphere and grade level. In general, public schools are larger than Catholic schools, which are larger than private schools; this holds across grade levels. Within each sphere, secondary schools are larger than elementary schools. The average enrollment of public elementary schools is 386; among Catholic elementary schools, 296; and among private elementary schools, 185. The average number of students in public secondary schools is 1,446; in Catholic schools, 715; and in private secondary schools, 325. Coleman, Hoffer, and Kilgore (1981a) report a similar pattern among secondary schools in the NORC School Universe sample.⁶ Public middle schools have an average enrollment of 784. School size is clearly linked to both grade level and educational sphere.

The ethnic distribution of enrollment differs markedly among the three educational spheres. Table 16 reports the average proportion of black and Hispanic students among the schools in the sample, categorized by educational sphere and grade level. As Table 13 demonstrates, Catholic schools at both the elementary and secondary level have, on the average, a somewhat higher percentage of black and Hispanic students than

Table 15

School Enrollment, by Educational Sphere and Grade Level^a

Percent of Schools with Enrollments of:	<u>Educational Sphere and Grade Level</u>						
	<u>Public Elementary</u>	<u>Catholic Elementary</u>	<u>Private Elementary</u>	<u>Public Middle</u>	<u>Public Secondary</u>	<u>Catholic Secondary</u>	<u>Private Secondary</u>
50 ^b -249	15.0%	25.8%	85.2%	0 %	13.0%	11.5%	50.0%
250-499	68.3	68.2	11.1	10.5	2.2	28.6	43.8
500-749	15.0	6.1	3.7	36.8	0	14.3	0
750-999	1.7	0	0	36.8	4.3	57.1	0
1,000-1,499	0	0	0	15.8	26.1	0	6.2
1,500 or more	0	0	0	0	54.3	0	0
Mean Enrollment	386	296	185	784	1446	715	325
(N)	(60)	(66)	(27)	(19)	(46)	(7)	(16)

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^aExcluding Catholic and private middle schools (n=2) and private comprehensive schools (n=9). See text for a discussion of the manner in which educational sphere and grade level categories were assigned.
^bSchools with fewer than 50 students were excluded from the population to which surveys were mailed.

Table 16

Mean Percentage of Black and Hispanic Students,
by Educational Sphere and Grade Level^a

	<u>Educational Sphere and Grade Level</u>						
	<u>Public Elementary</u>	<u>Catholic Elementary</u>	<u>Private Elementary</u>	<u>Public Middle</u>	<u>Public Secondary</u>	<u>Catholic Secondary</u>	<u>Private Secondary</u>
Mean % of Students Black and/or Hispanic ^b	19.1%	37.2%	29.1%	28.5%	22.0%	31.5%	14.1%
(N)	(60)	(66)	(27)	(19)	(46)	(7)	(16)

^aExcluding Catholic and private middle schools (n=2) and private comprehensive schools (n=9). See text for a discussion of the manner in which educational sphere and grade level categories were assigned.

^bFormula for the % of students black and/or Hispanic: [(N of black students + N of Hispanic students)/ Total Enrollment] x 100.

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the average public or private school. These results undoubtedly reflect the urban concentration of Catholic schools in our sample and in the Bay Area, and the slight overrepresentation of suburban public schools in the sample for which surveys were returned. Abramowitz et al. (1980) report a lower proportion of black and Hispanic students in nonpublic (including Catholic) secondary schools (a mean of 14%); their figures, however, are based on a national sample, while our figures reflect the ethnic configuration of the San Francisco Bay Area population.

The proportion of black and Hispanic students in private elementary schools also seems rather high: as can be seen in Table 16, the average private elementary school reports that 29% of its students are black and/or Hispanic. We believe that this figure is inflated by the failure to distinguish between religious and nonreligious private schools. A separate analysis (not reported here) supports this hypothesis; religious private schools have, on average, more than twice as high a proportion of black and Hispanic students than nonreligious private schools.

Table 17, which reports the ethnicity of the overall population of students enrolled in the schools in our sample, provides further evidence of these differences among the three spheres. While 67% of the students enrolled in both public elementary and private elementary schools are white, only 52% of the students enrolled in Catholic elementary schools are white. At the secondary level, 59% of the Catholic school enrollment is white, compared to 63% of the public school enrollment and 74% of the private school population.

These data present a striking contrast to the ethnic distribution in the Coleman study's (1981a) national sample of secondary school students.

Table 17

Ethnic Distribution of Aggregate Enrollment,
by Educational Sphere and Grade Level^a

	<u>Educational Sphere and Grade Level</u>						
	<u>Public Elementary</u>	<u>Catholic Elementary</u>	<u>Private Elementary</u>	<u>Public Middle</u>	<u>Public Secondary</u>	<u>Catholic Secondary</u>	<u>Private Secondary</u>
N of schools	60	66	27	19	46	7	16
Total Enrollment ^b	23,176	19,561	5,007	14,901	66,527	5,004	5,204
% of Students Black	7.7%	18.2%	16.6%	17.9%	8.9%	13.3%	4.9%
% of Students Hispanic	14.1%	19.0%	6.3%	12.3%	12.3%	15.3%	9.8%
% of Students White	67.1%	52.1%	67.1%	51.0%	62.8%	59.2%	73.7%
% of Students Other Minority ^c	11.1%	10.8%	10.1%	18.8%	16.0%	12.2%	11.5%

^aExcluding Catholic and private middle schools (n=2) and private comprehensive schools (n=9). See text for a discussion of the manner in which educational sphere and grade level categories were assigned.

^bThe sum of the enrollments of all the schools in a particular category.

^cAlaskan Native, Asian or Pacific Islander, Filipino, or Native American.

The Coleman group reports that 76% of the students in the public sphere, 85% of the students in the Catholic sphere, and 89% of the students in the (other) private sphere are white. The proportion of black and Hispanic students in the Coleman sample is 21% in the public sphere, 13% in the Catholic sphere, and 8% in the private sphere; the comparable figures for our sample are 21%, 29%, and 15%, respectively.

A number of factors account for the discrepancy between these samples. First, while Coleman's sample consists of schools and students across the nation, our sample is limited to the San Francisco Bay Area. The Bay Area population is more ethnically heterogeneous than the population of the country as a whole, and the proportional representation of minorities is higher in the Bay Area than in the nation as a whole. Secondly, we have previously alluded to the proportional overrepresentation of suburban public schools in our sample; this may explain why the proportion of blacks and Hispanics in public secondary schools is virtually the same in the two samples. Finally, the relatively high proportion of black and Hispanic students in Catholic schools in our sample can be attributed, at least in part, to the concentration of Bay Area Catholic schools in urban areas. This is consistent with the findings of earlier studies (Greeley et al., 1976; Erickson, Nault, and Cooper, 1978; Abramowitz et al., 1980; Oates, 1981) that Catholic schools around the nation tend to be concentrated in urban areas. Coleman and his colleagues, in contrast, found that the Catholic schools in their sample tend to be concentrated in suburban areas.⁷

These results also suggest that there is a fairly broad range of variation in student ethnicity among private elementary schools. While

the "average" private elementary school has a student population which is 29% black and Hispanic, the overall student population served by private elementary schools in our sample is only 23% black and Hispanic. Results of a separate analysis (not reported here) indicate that there is a wide disparity in the ethnicity of students in religious and nonreligious private schools.

Extraorganizational Links and Public Program Participation

Our data display some startling differences in both the degree and the form of external linkages among schools in the three educational spheres (see Table 18), and suggest that, in many respects, there is not a clear distinction between public and nonpublic schools. In particular, we find that Catholic schools often behave more like public schools than like other private schools.

As Table 18 demonstrates, nearly all of the secondary schools in the sample are accredited by at least one accrediting agency. Furthermore, secondary schools are much more likely to be accredited than elementary and middle schools. This reflects the more recent development of elementary school accreditation. For instance, the Western Association of Schools and Colleges, which has been accrediting secondary schools in California since its inception in 1962, did not extend its accreditation program to include elementary schools until 1976 (Siverson, Swenson, and Andersen, 1977). Regional differences in the composition and practices of accrediting agencies (Telford, 1977; Stoughton, 1981), however, suggest that elementary/secondary differences in accreditation cannot be generalized to the national population.

Table 18

External Linkages of Schooling Organizations,
by Educational Sphere and Grade Level^a

	<u>Educational Sphere and Grade Level</u>						
	<u>Public Elementary</u>	<u>Catholic Elementary</u>	<u>Private Elementary</u>	<u>Public Middle</u>	<u>Public Secondary</u>	<u>Catholic Secondary</u>	<u>Private Secondary</u>
% of Schools Accredited ^b	4.3 (n=47)	79.4 (n=63)	51.7 (n=29)	28.6 (n=14)	95.9 (n=49)	100 (n=6)	100 (n=15)
% of Schools Belonging to Larger Administrative System	100 (n=60)	100 (n=67)	29.6 (n=27)	100 (n=20)	100 (n=49)	100 (n=7)	18.2 (n=11)
% of Schools in which Outside Agencies Conduct Onsite Inspection of Public Programs	76.7 (n=43)	72.1 (n=43)	29.0 (n=15)	76.9 (n=13)	81.2 (n=32)	66.7 (n=3)	33.3 (n=6)
Mean % of Decision-Making Influence Accounted for by Principal or Head ^c	31.5 (n=60)	36.2 (n=66)	41.4 (n=31)	35.6 (n=18)	35.1 (n=49)	39.0 (n=6)	43.6 (n=16)

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^a Excluding Catholic and private middle schools (n=2) and private comprehensive schools (n=9). See text for a discussion of the manner in which educational sphere and grade level categories were assigned.

^b By any accrediting agency (e.g., Western Association of Schools and Colleges, Western Catholic Education Association, California Association of Independent Schools).

^c Calculated on the basis of an influence matrix in which respondents were asked to assess the degree of influence (on a 5-point scale) exercised by six positions or groups (e.g., school board or governing board, principal or head, faculty) over five decision-making areas (e.g., teacher hiring, teacher dismissal, major changes in curriculum, definition of school budget). The variable was constructed by dividing the sum of the principal's influence (in all five decision areas) by the sum of the influence scores of all groups, multiplied by 100.

At the elementary level, nonpublic schools are much more likely to be accredited than public schools: whereas 79% of the Catholic elementary schools and 52% of the private elementary schools are accredited, only 4% of the public elementary schools are accredited. This difference can be attributed to two factors. First, nonpublic schools have a wider range of accrediting agencies available to them than public schools. California nonpublic schools can be accredited by the California Association of Independent Schools, the Western Catholic Education Association, or the General Conference of Seventh-Day Adventists, in addition to the Western Association of Schools and Colleges; public schools, on the other hand, are accredited only by the WASC. The difference in the proportion of public and nonpublic elementary schools accredited by the WASC is not as pronounced as the one reported here. Secondly, since school accreditation is voluntary (Telford, 1977:368), our results indicate that nonpublic elementary schools are more likely to seek accreditation than are public elementary schools.⁸ Thus, accreditation appears to be more important to the public image of nonpublic schools than of public schools.

Relatively few of the private schools in our sample belong to a larger (regional or national) administrative system.⁹ For public and Catholic schools, on the other hand, belonging to a larger administrative system is a critical feature of their identification as public or Catholic schools; thus, all of the public and Catholic schools in the sample belong to such administrative systems. This may have important implications for the organizational structure of schools in the three

spheres, and suggests that the autonomy of individual schools is higher in the private sphere than in either the public or Catholic sphere.

Variation in the relative influence in decision-making exercised by the principal or head further attests to the relatively greater degree of school autonomy in the private sphere. This measure provides a very crude indicator of the degree of freedom from external influences in the decision-making arena. While the variation among the three spheres is relatively small, Table 18 does reveal a clear pattern: the principal's relative influence is lowest in the public sphere and highest in the private sphere, with Catholic schools falling in the middle. Of course, the principal's relative influence in decision-making may vary significantly across educational spheres for specific issues; further analysis of the structure of decision-making in the three spheres is clearly required.

Table 18 also demonstrates that public and Catholic schools are more likely than private schools to have direct contacts with outside agencies concerning the administration of public programs. While outside agencies conduct onsite inspections of public programs in nearly three-fourths of both the public and Catholic elementary schools, onsite inspections are conducted in only one-fifth of the private elementary schools in the sample. The relatively high proportion of Catholic elementary schools in which onsite inspections are conducted reflects the higher degree of participation in public programs among Catholic schools than among private schools (see Table 19 and the following discussion). This is, at least in part, a function of the urban concentration (and thus, the higher minority enrollments) of the Catholic schools in our sample. The

pattern of on site inspection is similar among secondary schools; in this and in other analyses reported here, however, the number of secondary schools in each sphere (and particularly in each of the nonpublic spheres) is too small to permit anything but tentative conclusions. The problem of small numbers is particularly acute for this variable because of a relatively high rate of nonresponse to this question.

Table 19 shows the degree of participation in selected public programs, by educational sphere and grade level. With very few exceptions, participation in public programs is extremely low among nonpublic schools. Only one of the nonpublic schools in our sample (a Catholic elementary school) participates in the federal bilingual education (ESEA Title VII) program, compared to 23% of the public elementary schools, 55% of the public middle schools, and 33% of the public secondary schools. Coleman, Hoffer, and Kilgore (1981a) and Abramowitz et al. (1980) also report low rates of participation in bilingual education programs among nonpublic secondary schools.¹⁰ Approximately half the public schools at each grade level participate in the federal handicapped education (PL 94-142) program; only 6% of the Catholic elementary schools and no other nonpublic schools participate in this program.

Very few private schools participate in federal nutrition programs, compared to almost three-fourths of the public schools (Data on Catholic school participation in these programs were not widely available). Abramowitz et al. (1980), on the other hand, report that 36.3% of private and Catholic secondary schools participate in free or reduced-price lunch programs. We suspect that this may indicate a

Table 19

Participation in Selected Public Programs,
by Educational Sphere and Grade Level^a

	<u>Educational Sphere and Grade Level</u>						
	<u>Public Elementary</u>	<u>Catholic Elementary</u>	<u>Private Elementary</u>	<u>Public Middle</u>	<u>Public Secondary</u>	<u>Catholic Secondary</u>	<u>Private Secondary</u>
<u>% of Schools Participating:</u>							
<u>Federal Programs:</u>							
Compensatory Educ. ^b	33.3% (n=60)	59.7% (n=67)	6.5% (n=31)	35.0% (n=20)	32.7% (n=49)	14.3% (n=7)	6.2% (n=16)
Library Resources ^c	65.0% (n=60)	N.A. ^g	80.0% (n=20)	45.0% (n=20)	65.3% (n=49)	N.A. ^g	71.4% (n=7)
Bilingual Education ^d	23.3% (n=60)	1.5% (n=67)	0 (n=31)	55.0% (n=20)	32.7% (n=49)	0 (n=7)	0 (n=16)
Vocational Education ^e	0 (n=60)	0 (n=67)	0 (n=31)	15.0% (n=20)	67.3% (n=49)	28.6% (n=7)	6.2% (n=16)
Nutrition Programs	75.0% (n=60)	N.A. ^g	16.7% (n=18)	60.0% (n=20)	71.4% (n=49)	N.A. ^g	12.5% (n=8)
Handicapped Education ^f	55.0% (n=60)	6.0% (n=67)	0 (n=31)	55.0% (n=20)	49.0% (n=49)	0 (n=7)	0 (n=16)
<u>Local Programs:</u>							
Transportation Services	N.A. ^g	1.5% (n=67)	0 (n=31)	N.A. ^g	N.A. ^g	14.3% (n=7)	0 (n=16)

^aExcluding Catholic and private middle schools (n=2) and private comprehensive schools (n=9). See text for a discussion of the manner in which educational sphere and grade level categories were assigned.
^bESEA Title I. ^cESEA Title IV-B. ^dESEA Title VII. ^ePL 50-576. ^fPL 94-142. ^gNot Available.

very high rate of participation in nutrition programs among Catholic schools.

While more than two-thirds of the public secondary schools participate in vocational education (PL 50-576) programs, only two of the seven Catholic secondary schools and one of the 16 private secondary schools participate in these programs. This is consistent with the finding of Abramowitz et al. (1980) that only 8.8% of the private and Catholic secondary schools in a nationwide sample participate in vocational education programs. On the local level, extremely few nonpublic schools make use of district transportation services. Abramowitz et al., on the other hand, report that 36.3% of the private and Catholic schools in a national sample use local transportation services. The discrepancy between these findings may be due to greater population density in the San Francisco Bay Area than in the nation as a whole.

The exceptions to the rule are the compensatory education (ESEA Title I) and library resources (ESEA Title IV-B) programs. Nearly 60% of the Catholic elementary schools in our sample participate in the federal compensatory education program, compared to only one third of the public elementary schools and a negligible number of private elementary schools. This probably reflects the urban concentration, and thus, the greater minority enrollments, of the Catholic schools in our sample. Extremely few private or Catholic secondary schools, on the other hand, participate in the compensatory education program, although the small number of schools in these categories prevents generalization to the larger

population. Approximately one-third of the public secondary schools participate in the compensatory education program.

Coleman, Hoffer, and Kilgore (1981a) present a surprisingly different picture of participation in the federal compensatory education program. They report that 69% of public secondary schools, 24% of Catholic secondary schools, and only 1% of other private secondary schools participate in this program. The lower participation rate of public schools in our sample may be due in part to the slight overrepresentation of suburban public schools. Abramowitz et al. (1980) report that 26% of private and Catholic secondary schools participate in the federal compensatory education program.

Participation in the library resources (ESEA Title IV-B) program is quite high in both the public and private spheres; we suspect that a fairly large proportion of Catholic schools also participate in this program (these data, however, were not available to us). The Coleman study and Abramowitz et al. report similarly high rates of participation among secondary schools in national samples, and the Coleman project found that participation in this program is substantially higher among Catholic secondary schools (99%) than among either public (65%) or private (43%) secondary schools.

Table 20 shows the reporting requirements of schools in the three educational spheres and provides further evidence of the differences in external linkages concerning public programs. While public schools are far more likely than either Catholic or private schools to be required by public agencies to collect various kinds of information, data collection

Table 20

Reporting Requirements of Schooling Organizations,
by Educational Sphere and Grade Level^a

	<u>Educational Sphere and Grade Level</u>						
	<u>Public Elementary</u>	<u>Catholic Elementary</u>	<u>Private Elementary</u>	<u>Public Middle</u>	<u>Public Secondary</u>	<u>Catholic Secondary</u>	<u>Private Secondary</u>
<u>Number of Types of Data Required by Public Agencies (Per- cent of Schools)</u>							
None	30.0%	50.7%	87.1%	15.0%	22.4%	71.4%	81.2%
1-2	38.3	22.4	9.7	30.0	51.0	14.3	18.8
3 or more	31.7	26.9	3.2	55.0	26.5	14.3	0
<u>Mean Number of Types of Data Required</u>	1.75	1.34	0.19	2.50	1.78	0.86	0.38
<u>(N)</u>	(60)	(67)	(31)	(20)	(49)	(7)	(16)

^aExcluding Catholic and private middle schools (n=2) and private comprehensive schools (n=9). See text for a discussion of the manner in which educational sphere and grade level categories were assigned.

^bRespondents were asked whether the school collected data, and whether such data collection was required by a public agency, in nine categories: Student Achievement Test Scores, Student Placement, Student Attitudes, Parent Attitudes, Teacher Performance, Teacher Qualifications, Student Awards and Scholarships, and two "Other" categories for types of information not covered by the list supplied. The number of types of data which schools reported were required ranged from 0 to 6.

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is more likely to be required by public agencies in Catholic schools than in private schools.

Staffing Patterns in Schools

Table 21 shows the average number of students per administrator and the average number of students per (nonadministrative) professional¹¹ categorized by both educational sphere and grade level. It is important to bear in mind that the figures reported here reflect the staffing patterns of individual schools. This may underestimate the staff intensity of schools which are part of a larger administrative system, in which some organizational slack can be absorbed by higher levels. These data reveal some striking patterns in staff intensity among the three educational spheres.

Our results show a clear and consistent pattern in administrative intensity across the three educational spheres at each grade level. Private schools have the greatest administrative intensity, that is, the fewest number of students per administrator; public schools have the largest number of students per administrator (the lowest administrative intensity). The number of students per administrator decreases slightly with grade level among schools in all three educational spheres, suggesting that secondary schools are slightly more administratively complex than elementary schools. While we suspect that these differences would narrow considerably if we were to control for the size of the schools, these results do point to at least one area for further analysis. The rather low administrative intensity in public schools leads us to believe that in the public sphere, administrative elaboration tends to occur not at the level of the school but rather at the district

Table 21

Students per Administrator and Students per Professional,
by Educational Sphere and Grade Level^a

	<u>Educational Sphere and Grade Level</u>						
	<u>Public Elementary</u>	<u>Catholic Elementary</u>	<u>Private Elementary</u>	<u>Public Middle</u>	<u>Public Secondary</u>	<u>Catholic Secondary</u>	<u>Private Secondary</u>
Mean Number of Students per Administrator ^b	358	204	129	320	326	194	92
Mean Number of Students per Professional ^c	23	31	16	19	24	21	12
Mean Enrollment	386	296	185	784	1,446	715	325
(N)	(60)	(66)	(27)	(19)	(46)	(7)	(16)

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^aExcluding Catholic and private middle schools (n=2) and private comprehensive schools (n=9). See text for a discussion of the manner in which educational sphere and grade level categories were assigned.

^bEnrollment divided by the size of the administrative staff (calculated as the number of fulltime administrators plus half the number of part-time administrators). The category of administrators included principals or heads, assistant administrators or vice-principals, instructional or program administrators, business administrators, and general administrators.

^cEnrollment divided by the size of the nonadministrative professional staff (calculated as the number of full-time professionals plus half the number of part-time professionals). The category of professionals includes teachers, counselors and psychologists, social workers, librarians, nurses, chaplains, resource specialists, and other student support services professionals.

level. Differences among public school districts will be the focus of some of our subsequent analyses.

The results of our analysis of professional intensity are somewhat puzzling. Catholic elementary schools have the highest number of students per professional (lowest professional intensity), with an average of 31. While this may be related to the high proportion of urban Catholic elementary schools in our sample, it seems equally plausible that Catholic elementary schools may simply be more likely than either private or public elementary schools to operate with a skeletal staff (with very few nonteaching professionals); further investigation of this finding is required.

Private schools again have the fewest number of students per professional at both the elementary and secondary level; combined with our findings on administrative intensity, this suggests that independent private schools are the most staff-intensive schooling organizations. Catholic secondary schools are more similar to public secondary schools in terms of professional intensity than to other private secondary schools; Coleman, Hoffer, and Kilgore (1981a) report a similar pattern in both students per professional and students per teacher. In the nonpublic sphere, professional intensity increases (that is, the number of students per professional decreases) slightly with grade level, while public schools have a nearly equal number of students per professional at the elementary and secondary level. Professional intensity is somewhat higher in public middle schools than in both their elementary and secondary counterparts.

Policy Emphases

Table 22 gives the percentage of schools in each educational sphere and grade level which place an emphasis on various educational goals. Not surprisingly, emphasis on a number of goals differs markedly with grade level. Emphasis on college preparation is much higher among secondary schools than among elementary schools; at the elementary level, however, private schools are most likely to emphasize college prep. Emphasis on vocational preparation is also higher at the secondary level than at the elementary level; as expected, public schools are much more likely than nonpublic schools to emphasize vocational preparation. (In a similar vein, Abramowitz et al. (1980) found that preparing students for the labor market was less likely to be viewed as very important by private high school principals than a number of other goals.) Development of basic skills is emphasized to a greater extent among elementary schools than among secondary schools; at the secondary level, however, emphasis on basic skills development is more prevalent among public schools than among nonpublic schools. Elementary schools are also more likely than secondary schools to emphasize the development of self-esteem, instilling respect for authority, and social development. Thus, basic socialization appears to be one of the most important functions of elementary schools, while secondary schools tend to offer a more specialized form of training.

Catholic schools differ markedly in several respects from both public schools and independent private schools. For instance, Catholic schools are much more likely than either public or private schools to place an emphasis on instilling respect for authority; this difference

Table 22

Goal Emphases of Educational Organizations,
by Educational Sphere and Grade Level^a

	<u>Educational Sphere and Grade Level</u>						
	<u>Public Elementary</u>	<u>Catholic Elementary</u>	<u>Private Elementary</u>	<u>Public Middle</u>	<u>Public Secondary</u>	<u>Catholic Secondary</u>	<u>Private Secondary</u>
<u>% of Schools Emphasizing^b:</u>							
College Preparation	10.0%	19.4%	35.5%	50.0%	85.7%	85.7%	100%
Basic Skills Orientation	98.3	97.0	90.3	95.0	89.8	71.4	62.5
Stimulation of Critical Thinking	61.7	76.1	90.3	65.0	38.8	85.7	81.2
Instilling Respect for Authority	66.7	92.5	64.5	70.0	38.8	85.7	50.0
Vocational Preparation	1.7	11.9	6.5	5.0	53.1	28.6	18.8
Social Development	55.0	71.6	74.2	65.0	40.8	71.4	37.5
Development of Self-Esteem	88.3	95.5	96.8	75.0	57.1	85.7	50.0
Religious, Ethical Values	3.3	97.0	48.4	0	2.0	100	50.0
Other	5.0	4.5	16.1	5.0	8.2	0	0
Mean No. of Goals Emphasized	3.9	5.7	5.2	4.3	4.1	6.1	4.5
(N)	(60)	(67)	(31)	(20)	(49)	(7)	(16)

^aExcluding Catholic and private middle schools (n=2) and private comprehensive schools (n=9). See text for a discussion of the manner in which educational sphere and grade level categories were assigned.

^bThe question read, "Indicate the area(s) that receive particular emphasis at your school," and the above list was provided. Since respondents were asked to check as many areas as were applicable, the percentages reported in the table do not add to 100.

appears at both the elementary and secondary level, although the difference is more pronounced among secondary schools. Catholic secondary schools are much more likely to emphasize social development than both public and private secondary schools. While public and private secondary schools are less likely than their elementary counterparts to emphasize this goal, roughly equal emphasis is placed on social development in Catholic elementary and secondary schools. Catholic secondary schools also place a greater emphasis on the development of self-esteem than either public or private secondary schools; once again, the differences between secondary and elementary schools are greater among public and private schools than among Catholic schools. Thus, parochial and diocesan Catholic schools appear to be more likely to attempt to provide a total atmosphere for their students and emphasize socialization and the complete development of the individual longer than public and private schools. These inferences, however, are made cautiously because of the small number of Catholic secondary schools in our sample.

Emphasis on the stimulation of critical thinking is alarmingly low among public secondary schools; only 39% of the public secondary schools place an emphasis on critical thinking, compared to more than 60% of the schools in every other category (including public elementary and middle schools). Finally, emphasis on religious or ethical values follow a predictable pattern: virtually all of the Catholic schools emphasize such values, virtually none of the public schools emphasize them, and approximately half the private schools do so (which corresponds to the proportion of religious schools among the private schools in our sample).

Summary and Discussion

In this report, we set out to describe some of the organizational characteristics of elementary and secondary schools in the public, Catholic, and independent private spheres. We found that the existing body of literature on public and private schools offers little guidance in this area. First, very little research has been conducted on private schools; the data which have been gathered on private schools are of questionable reliability. Secondly, there have been few comprehensive studies of public or private schools (that is, studies of both elementary and secondary schools), and even fewer comparative studies of public and private schools. The flood of public attention following the release of the Coleman (HSB) report may have been as much a result of the fact that it is one of the first large-scale comparisons of public and private schools as of the boldness of its conclusions. Finally, the existing literature on schools almost completely ignores the organizational characteristics of both public and private schools. We attempted to remedy some of these weaknesses through a comparative analysis of the organizational characteristics of public and nonpublic elementary and secondary schools in the San Francisco Bay Area.

We found a great deal of similarity in the distribution of schools and enrollments among the public and private spheres within the entire United States, the state of California, and the San Francisco Bay Area. Approximately three-fourths of the secondary schools in the nation and in the Bay Area are public schools, and more than 90% of secondary school students in the nation and in California are enrolled in public schools. While Catholic schools constitute only about one-third of all private

schools, they account for approximately two-thirds of the students enrolled in private schools. We found that our sample of schools differs from the schools in the Bay Area that did not respond to our survey in only a few critical respects. For instance, Catholic elementary schools, many located in urban areas, are slightly overrepresented in our sample, as are public elementary schools from suburban areas.

The results of our analysis clearly demonstrate that it is misleading to assume that the critical distinction in educational research is between public and nonpublic schools; we have demonstrated that organizational differences among schools do not form such a dichotomy. We found clear differences between public and nonpublic schools in only a few areas, most notably in participation in publicly-funded programs and in emphasis on vocational preparation. For characteristics such as size (enrollment), the degree of influence exercised by the principal, the number of reporting requirements, and the number of students per administrator, we found that the three educational spheres formed a continuum of sorts. For instance, Catholic schools tend to be substantially larger than independent private schools, but substantially smaller than public schools.

We found that a public/nonpublic distinction was completely inadequate for an explanation of some differences in the organizational characteristics of schools. In the areas of membership in a larger administrative system, onsite inspection of public programs, and the number of students per professional, public and Catholic schools are more

similar to one another than either is to independent private schools. And finally, in terms of emphasis on various educational goals, Catholic schools differ markedly from both public schools and independent private schools.

These results suggest that, for a number of analytic purposes, a categorical distinction between public and nonpublic schools is neither critical nor even necessarily relevant. This distinction is clearly not enough to explain the differences in the organizational characteristics and environmental linkages of schools which we have described here. In our future analyses, we will attempt to develop more sensitive measures (e.g., degree of participation in publicly-funded programs) for assessing the relative public involvement of schools in the different educational spheres; we will also focus on the effects of links to the "public" environment on both the organizational structure and goal elaboration of schools. The analyses reported here suggest that greater attention should be focused on the organizational environment within which the school operates. Future analyses will therefore also focus on the degree to which the effects of linkages to the environment are mediated or absorbed at higher levels (e.g., the district or diocesan office) of the system within which the school is located.

NOTES

1. The six counties include Alameda, Contra Costa, Marin, San Francisco, San Mateo, and Santa Clara, which together comprise the San Francisco-Oakland and San Jose Standard Metropolitan Statistical Areas (SMSAs).

2. These trends and proportions have basically continued from 1978-79 to the present day; more recent figures, however, are not readily available.

3. For accounts of the historical development of Catholic education in the United States, see McCluskey, 1964; Buetow, 1970; and Gabert, 1973. For an analysis of recent trends in American Catholic Education, see Greeley, McCreedy, and McCourt, 1976, and Greeley, 1982.

4. The data for this analysis were provided by Joan Talbert and her assistant, Kendyll Stansbury.

5. The Catholic and private middle schools were excluded because of the extremely small number of cases in each of these categories, and the private comprehensive schools were excluded both because of the small number of such schools and because of the lack of comparability with other educational spheres. In most respects, private comprehensive schools mirror their secondary counterparts.

6. The average enrollments reported by the Coleman group, however, are consistently lower than our figures. This is most likely a result of the difference in the minimum size of schools in the two samples.

7. For discussions of the possible sources of bias in the High School and Beyond sample, see Bryk, 1981; and Rossi and Wright, 1982.

8. In a recent newsletter, the Western Association of Schools and Colleges (1983: 1) states that its 1982-83 increase in membership is "primarily in church-related elementary schools."

9. Results of a separate analysis (not reported here) show that religious private schools are more likely than nonreligious private schools to belong to a larger administrative system.

10. The Coleman study (1981a) also reports a lower rate of participation in bilingual education programs for public schools; this is consistent with differences in the racial and ethnic composition of the population between California and the entire nation.

11. Because of the nature of our data and considerations of cost, we were unable to separate the category of teachers from the category of student support services professionals for the public schools, and were therefore forced to combine these categories for all schools for purposes of comparison. We believe that this measure does serve as a rough indicator of student-teacher ratios.

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