

DOCUMENT RESUME

ED 044 828

EA 003 190

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TITLE Projections of Educational Statistics to 1978-79.
1969 Edition.
INSTITUTION National Center for Educational Statistics
(DHEW/OE), Washington, D.C.
REPORT NO OE-10030-69
PUB DATE 70
NOTE 177p.
AVAILABLE FROM Superintendent of Documents, U.S. Government
Printing Office, Washington, D.C. 20402 (Catalog No.
HE 5.210:10030-69 \$1.50)

EDRS PRICE MF-\$0.75 HC Not Available from EDRS.
DESCRIPTORS Charts, Degrees (Titles), *Educational Finance,
*Enrollment Projections, Graphs, Higher Education,
High School Graduates, *School Statistics,
Statistical Data, Student Costs, *Tables (Data),
*Teacher Supply and Demand

ABSTRACT

This publication provides projections of statistics for elementary and secondary schools and institutions of higher education. Projections for the 10-year period from 1969 to 1979 are made for enrollments, graduates, teachers, and expenditures. Based mainly on 1958-59 to 1968-69 data, these projections assume that the past 10 years' trends in enrollment rates, retention rates, class sizes, and per pupil expenditures will continue through 1978-79. Numerous tables, charts, and graphs illustrate study findings.
(Author/LLR)

Highlights

If present trends continue, we can expect increases in—

- Enrollment in all regular public and private elementary and secondary day schools:
 - From 50.8 million in fall 1968 to 52.3 million in fall 1978.
- Degree-credit enrollment in institutions of higher education:
 - From 6.9 million in fall 1968 to 10.3 million in fall 1978.
- High school graduates from all public and private secondary day schools:
 - From 2.8 million in 1968-69 to 3.8 million in 1978-79.
- Bachelor's and first-professional degrees granted by institutions of higher education:
 - From 755,000 in 1968-69 to 1.1 million in 1978-79.
- Full-time and part-time classroom teachers in all regular public and private elementary and secondary day schools:
 - From 2.2 million in fall 1968 to 2.3 million in fall 1978.
- Full-time-equivalent instructional staff for resident degree-credit courses in institutions of higher education:
 - From 373,000 in 1968-69 to 512,000 in 1978-79.
- Total expenditures of all regular public and private elementary and secondary day schools:
 - From \$39.8 billion in 1968-69 to \$52.0 billion in 1978-79 (in 1968-69 dollars).
- Total expenditures of institutions of higher education:
 - From \$21.3 billion in 1968-69 to \$35.4 billion in 1978-79 (in 1968-69 dollars).

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OE-10030-69

PROJECTIONS OF EDUCATIONAL STATISTICS TO 1978-79

(1969 Edition)

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EA 003 190

Superintendent of Documents Catalog No. HE 5.210:10030-69

U.S. GOVERNMENT PRINTING OFFICE
WASHINGTON: 1970

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C. 20402 - Price \$1.50

Foreword

This publication provides projections of statistics for elementary and secondary schools and institutions of higher education. The statistics include enrollments, graduates, teachers, and expenditures. These projections supersede the ones shown in *Projections of Educational Statistics to 1977-78*, 1968 edition. They are based mainly on 1958-59 to 1968-69 Office of Education data, and they cover the period 1969-70 to 1978-79 for the United States. Many of these data are available by State for 1968-69 in the Office of Education publication, *Digest of Educational Statistics*, 1969 edition.

The projections shown here assume that the past 10 years' trends in enrollment rates, retention rates, class sizes, and per pupil expenditures will continue through 1978-79. Further information about projected changes and the assumptions on which these are based are shown in the main body of this report. Details of the methodology used in making these projections are given in the appendixes.

Dorothy M. Gilford,
*Assistant Commissioner
for Educational Statistics.*

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CHAPTER I

Introduction and Summary

This is the sixth in a series of annual projections of data on education revised each year in order to take account of current information and emerging trends.

This 1969 edition incorporates, for the first time since 1965, separate data for degree-credit and nondegree-credit enrollments. It also makes use of fall 1967 data on enrollments for advanced degrees from the first complete report giving this enrollment by sex. And it includes data for 2 later years of earned degrees than were available when the 1968 projections were made.

Although much of the new data did not change the projections significantly, those for degrees, especially at the master's and doctor's (except first-professional) levels, showed increases far beyond any foreseen from the 1957-58 to 1965-66 trends. The increase shown for master's degrees resulted partly from a change in Office of Education definitions in 1965-66. This change transferred a large number of degrees from the bachelor's and first-professional classification to master's, causing a large proportionate increase in master's degrees while affecting the larger numbers in the bachelor's and first-professional series only slightly.

New projections added this year include first-time degree-credit enrollment by attendance status, nondegree-credit enrollment by sex, and nondegree-credit enrollment in 4-year and 2-year institutions of higher education. These data, even though frequently requested, have not been included in the past because of difficulties in estimation. New data collected in fall 1968 made estimation possible for this 1969 edition.

The statistical universe from which the enrollments and other educational data shown in this report were drawn consists of (1) the public grade schools which report to their respective State departments of education, (2) the nonpublic grade schools included in the *Nonpublic School Directory* of the U.S. Office of Education,¹ and (3) the institutions of higher education meeting the requirements for inclusion in the *Higher Education Directory* of the U.S. Office of Education.² The coverage is the 50 States and the District of Columbia and excludes extension centers of U.S. educational institutions abroad.

The published sources of the data, usually taken from U.S. Office of Education surveys, are noted in each table. The tables are grouped by subject matter—together with detailed explanations of inclusions, exclusions, and descriptions of the data and projection methods—in separate chapters on enrollments, graduates, teachers, expenditures, and tuition and other charges.

Footnotes to the tables state the assumptions on which the projections are based, with references to tables and other data in the appendixes giving detailed technical explanations of estimation and projection methods. The appendixes also include selected details of classification changes, a glossary of terms, and a number of auxiliary tables.

The projections are based, essentially, on trends in enrollment rates of the population over the past 10 years and on the projected population groups from which enrollment will be drawn in the next 10 years. The increases or decreases of the enrollment and other rates are shown in appendix A, tables A-1 through A-4; and the projections of population of the typical age at each level of enrollment are shown in appendix B, tables B-1 and B-2. (The population data used are those projected by the U.S. Bureau of the Census and reported in its population series P-25.³)

¹U.S. Department of Health, Education, and Welfare, Office of Education, *Nonpublic School Directory, 1965-66: Elementary and Secondary Schools*, U.S. Government Printing Office, Washington, D.C., 1968.

²U.S. Department of Health, Education, and Welfare, Office of Education, *Education Directory, 1968-1969, Part 3: Higher Education*, U.S. Government Printing Office, Washington, D.C., 1968.

³U.S. Department of Commerce, Bureau of the Census, *Current Population Reports, Population Estimates: Summary of Demographic Projections, Series P-25, No. 388, March 14, 1968.*

The enrollment rates have been growing steadily over the past 10 years, but some population groups have been growing less rapidly or beginning to drop in size. The interaction of these two projection components determines, directly or indirectly, the numbers expected in the different areas of education. The numbers expected are shown graphically for the principal areas of education in figures 1 through 9 and, in more detail, with percentage increases from 1958 to 1968 and from 1968 to 1978, in table 1.

A summary of major trends past and projected, shown in this report, follows.

Major trends in education

- (1) Population is increasing less rapidly or declining.

	Percent change	
	1958 to 1968	1968 to 1978
Elementary school age	20	-5
Secondary school age	39	11
Higher education undergraduate age	59	18

- (2) The high school graduation rate is increasing.

	Graduates as percent of 18-year-olds
1958-59	64
1968-69	77
1978-79	88

- (3) The proportion of high school diplomas awarded to boys is increasing and is expected to exceed 50 percent before 1979.

	Boys as percent of all graduates
1958-59	48.2
1968-69	49.8
1978-79	50.6

- (4) Proportionately more people are earning college degrees.

	Bachelor's degrees as percent of graduation age population
1958-59	17.5
1968-69	22.0
1978-79	25.4

- (5) A larger proportion of degrees earned are advanced degrees.

	Master's as percent of total	Doctor's (except first-professional) as percent of total
1958-59	15.6	2.0
1968-69	19.4	2.7
1978-79	24.9	3.8

- (6) The proportion of bachelor's and first-professional degrees awarded to women is increasing.

	Women as percent of bachelor's and first-professional-degree recipients
1958-59	33.5
1968-69	42.5
1978-79	46.8

(7) Degree-credit enrollment in 2-year institutions is growing faster than in 4-year institutions.

Degree-credit students in 2-year institutions as percent of all degree-credit students

1958	11.9
1968	18.6
1978	21.1

(8) The ratio of public elementary and secondary students to classroom teachers is declining.

Ratio of students to classroom teachers

	<i>Total</i>	<i>Elementary</i>	<i>Secondary</i>
1958	26.1	28.7	21.7
1968	23.1	25.4	20.3
1978	22.4	24.5	20.2

(9) The cost of educating elementary and secondary students is increasing.

Current expenditure per pupil in average daily attendance (1968-69 dollars)

1958-59	\$440
1968-69	696
1978-79	885

(10) The cost of educating college students is increasing.

Current expenditures per full-time-equivalent student for student education (1968-69 dollars)

	<i>Total</i>	<i>Publicly controlled institutions</i>	<i>Privately controlled institutions</i>
1958-59	\$1,355	\$1,350	\$1,361
1968-69	1,772	1,638	2,100
1978-79	2,089	1,865	2,833

Figure 1. Enrollment in grades K-12 of regular day schools: United States, fall 1958 to 1978

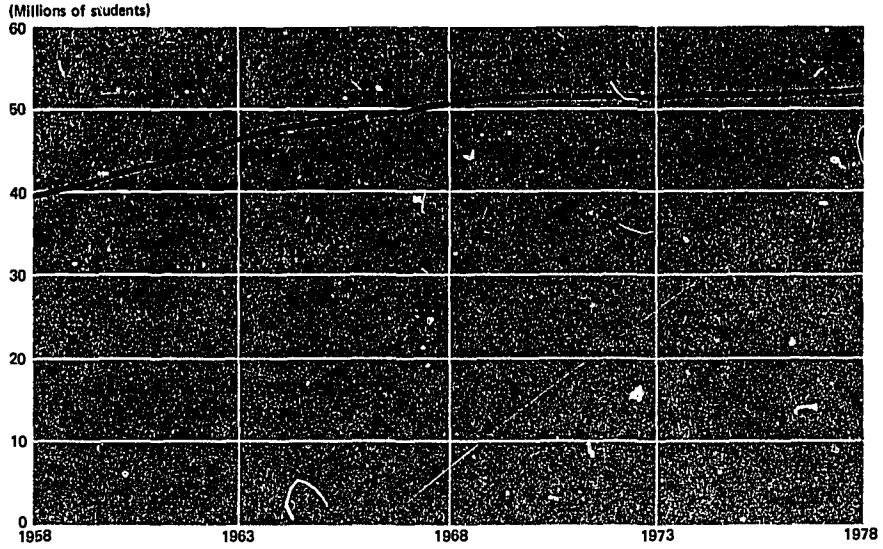


Figure 2. Total degree-credit enrollment in all institutions of higher education: United States, fall 1958 to 1978

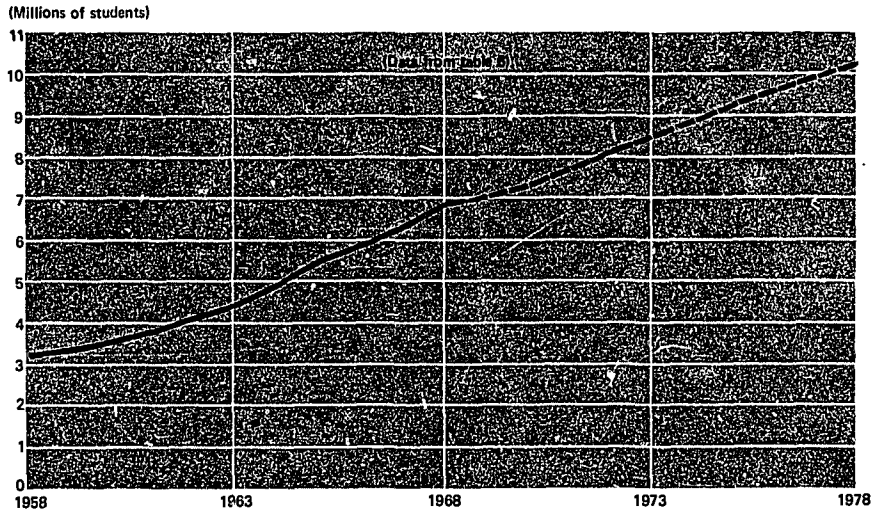


Figure 3. High school graduates: United States, 1958-59 to 1978-79

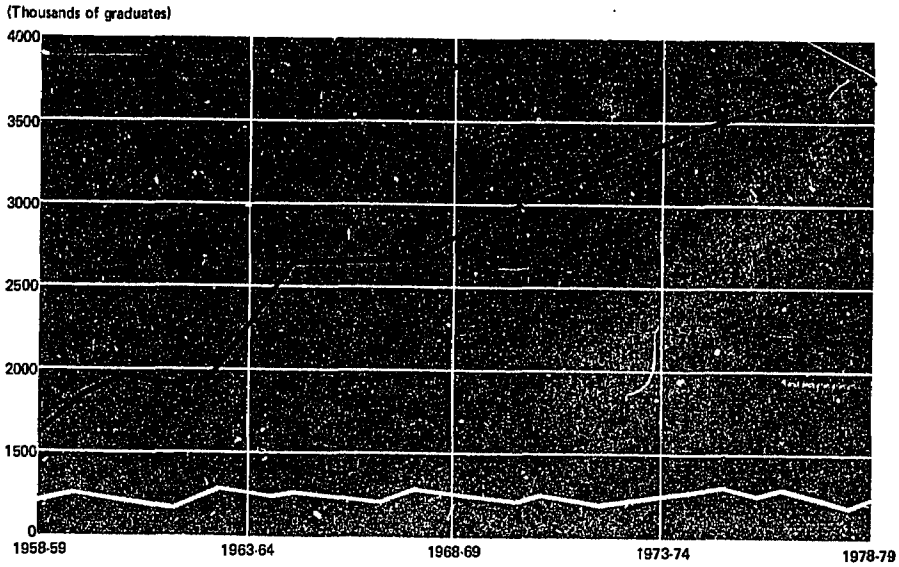


Figure 4. Earned degrees, by level: United States, 1958-59 to 1978-79

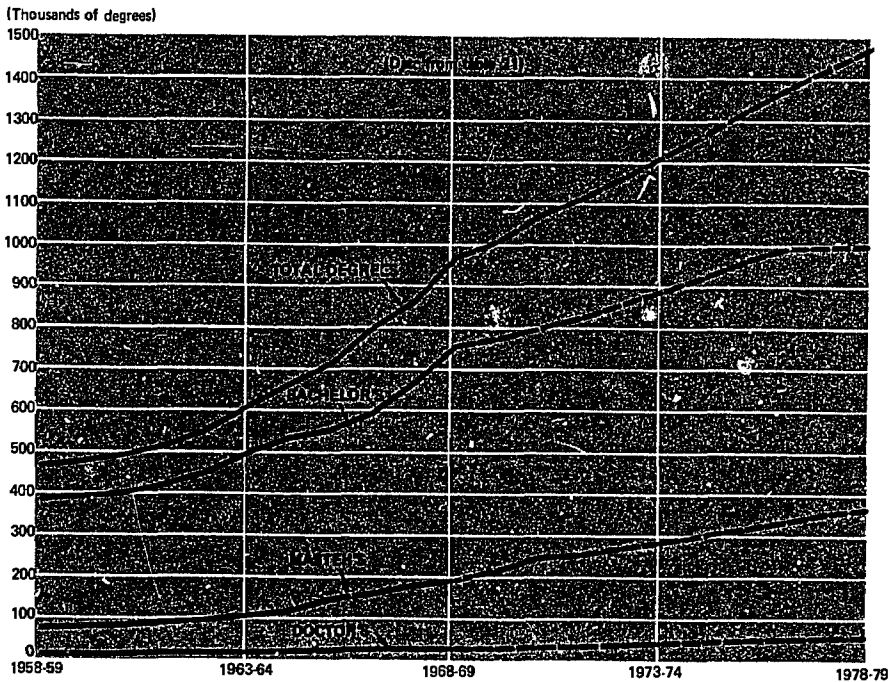


Figure 5. Classroom teachers in regular elementary and secondary day schools: United States, fall 1958 to 1978 (includes effect of Elementary and Secondary Education Act of 1965)

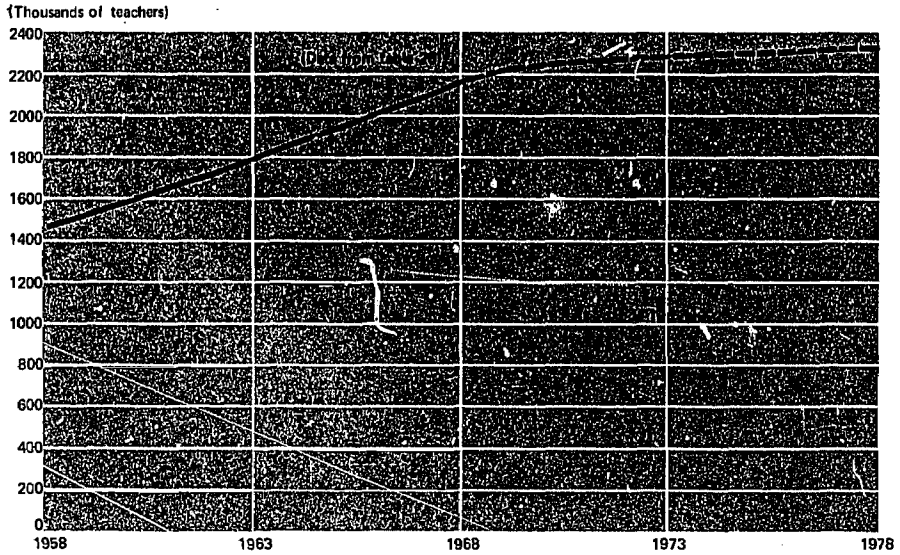


Figure 6. Total instructional staff for resident degree-credit courses in institutions of higher education: United States, first term, 1958-59 to 1978-79

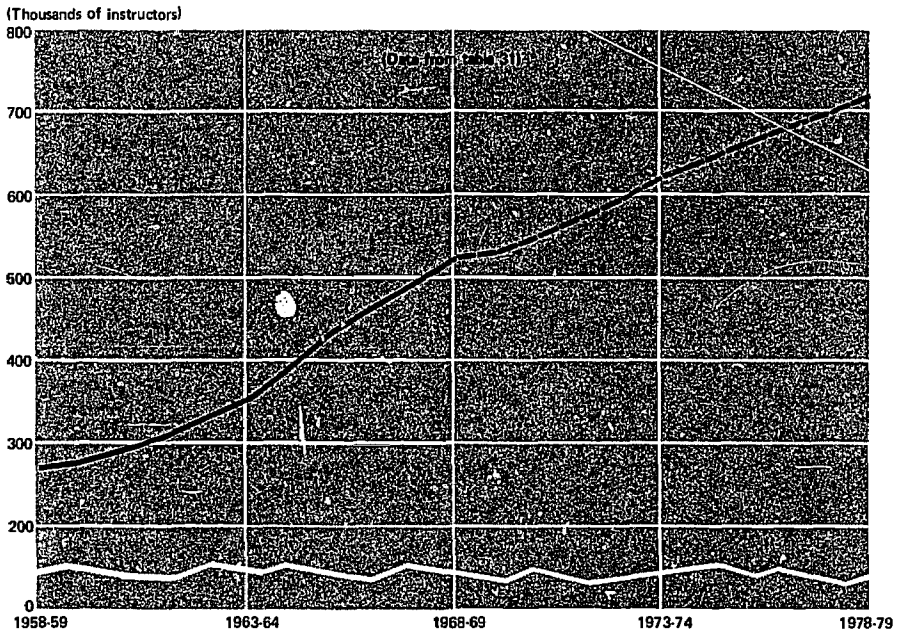


Figure 7. Total expenditures (1968-69 dollars), by regular elementary and secondary day schools: United States, 1958-59 to 1978-79

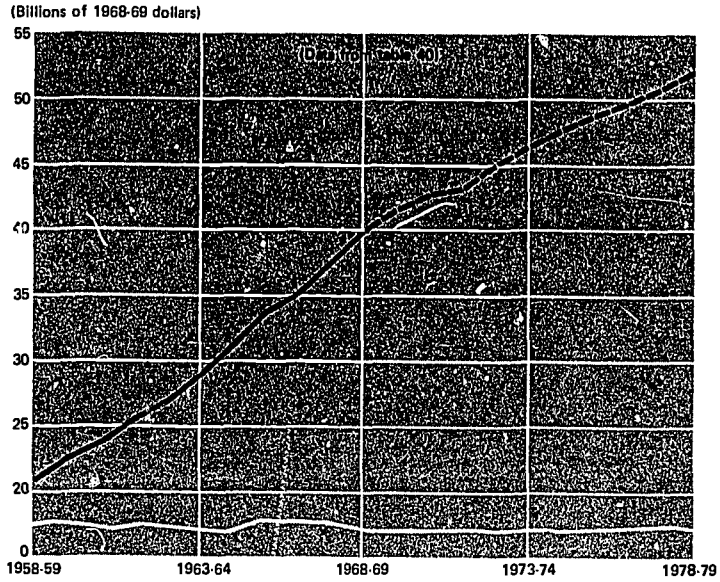


Figure 8. Total expenditures (1968-69 dollars), by institutions of higher education: United States, 1958-59 to 1978-79

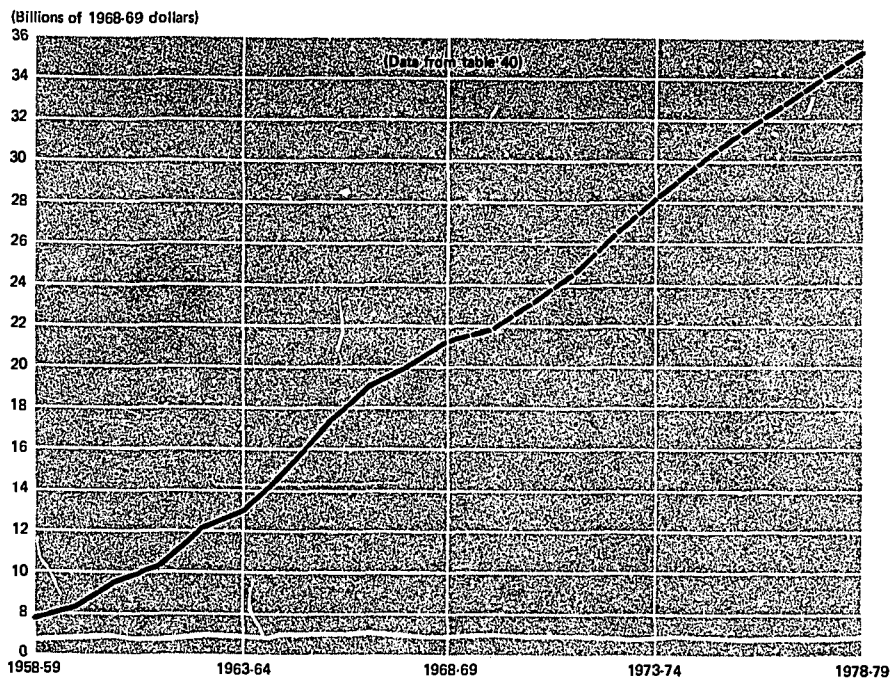
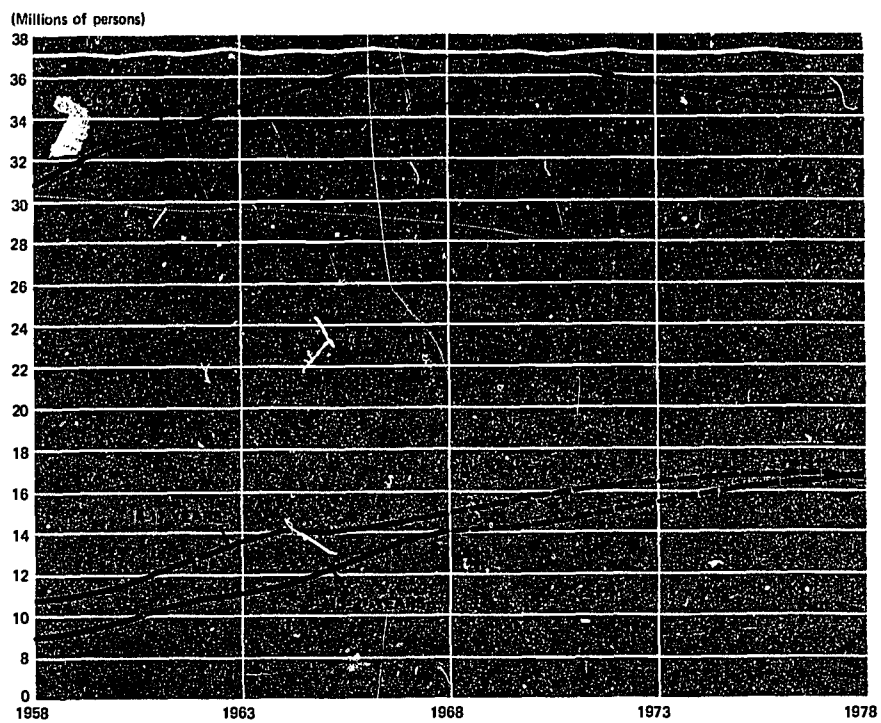


Figure 9. School-age population: United States, October 1958 to 1978



**Table 1.—Summary of trends in education:
United States, 1958, 1968, and 1978**

[Numbers of persons in thousands]

Item	Number, fall 1958	Number, fall 1968	Percent change, 1958 to 1968	Number, fall 1978	Percent change, 1968 to 1978
In population age groups (C series, appendix B)					
5-13	30,932	37,224	20	35,479	-5
14-17	10,867	15,135	39	16,789	11
18	2,398	3,580	49	4,280	20
18-21	8,979	14,321	59	16,861	18
Composite age group ¹	2,139	3,080	44	4,161	35
Enrollment in elementary and secondary schools (chapter II)					
Grades K-12	39,581	50,761	28	52,300	3
K-8	30,504	36,640	20	35,500	-3
9-12	9,077	14,121	56	16,800	19
Public	34,081	44,961	32	46,900	4
Nonpublic	5,500	5,800	5	5,400	-7
Enrollment in institutions of higher education (chapter II)					
Degree-credit	3,236	6,928	114	10,318	49
Men	2,098	4,119	96	5,818	41
Women	1,138	2,809	147	4,500	60
Full time	2,215	4,938	123	7,209	46
Full-time-equivalent	2,552	5,595	119	8,235	47
First time	775	1,630	110	2,539	56
Undergraduate ²	2,924	6,160	111	8,979	46
Graduate	312	768	146	1,339	74
4-year institutions	2,851	5,639	98	8,141	44
2-year institutions	386	1,289	234	2,176	69
Public control	1,894	4,892	158	7,892	61
Nonpublic control	1,343	2,036	52	2,426	19
Nondegree credit	184	585	218	1,007	72
Men	134	359	168	591	65
Women	50	226	352	415	84
Full time	73	273	274	467	71
Full-time equivalent	106	360	240	618	72
4-year institutions	44	82	86	108	32
2-year institutions	139	503	262	899	79
Public control	140	539	285	956	77
Nonpublic control	44	46	5	51	11
High school graduates (chapter III)					
Total graduates	1,639	2,839	73	3,773	33
Men	790	1,408	78	1,908	36
Women	849	1,431	69	1,865	31

See footnotes at end of table.

Table 1--(Continued)

[Numbers of persons in thousands]

Item	Number, fall 1958	Number, fall 1968	Percent change, 1958 to 1968	Number, fall 1978	Percent change, 1968 to 1978
High school graduates (chapter III)--Con.					
Public control	1,447	2,529	75	3,453	37
Nonpublic control	192	310	61	320	3
Earned degrees (chapter III)					
Total degrees	462.0	969.7	110	1,481.4	53
Men	308.8	578.4	87	852.5	47
Women	152.2	391.3	157	628.9	61
Bachelor's and first-professional	380	755	99	1,056	40
Men	253	434	72	562	29
Women	127	321	153	494	54
Master's	72.5	188.6	160	368.4	95
Men	48.4	121.6	151	240.3	98
Women	24.2	67.0	177	128.1	91
Doctor's (except first-professional)	9.4	26.1	178	57.0	118
Men	8.4	22.8	171	50.2	120
Women	1.0	3.3	230	6.8	106
Instructional staff in elementary and secondary schools (chapter IV)³					
Classroom teachers	1,475	2,178	48	2,334	7
Elementary	931	1,231	32	1,218	1
Secondary	544	947	74	1,116	18
Public control	1,306	1,943	49	2,096	8
Nonpublic control	169	235	39	238	1
Other instructional staff	102	216	112	300	39
Professional staff in institutions of higher education (chapter IV)					
For instruction	327	636	94	884	39
4-year institutions	296	538	82	723	34
2-year institutions	32.2	97.9	204	160.9	64
Public control	184	431	134	649	51
Nonpublic control	144.2	204.9	42	234.9	15
For administration and services	41	84	105	113	34
For organized research	35	73	109	101	38

See footnotes at end of table.

Table 1—(Continued)

Item	Amount, fall 1958	Amount, fall 1968	Percent change, 1958 to 1968	Amount, fall 1978	Percent change, 1968 to 1978
Expenditures by elementary and secondary schools, in billions of constant 1968-69 dollars (chapter V)					
Total expenditures	\$20.7	\$39.8	92	\$52.0	31
Public control	18.1	35.5	96	46.7	32
Nonpublic control	2.6	4.3	65	5.3	23
Expenditures by institutions of higher education in billions of constant 1968-69 dollars (chapter V)					
Total expenditures	\$7.8	\$21.3	173	\$35.4	66
Public control	4.4	13.6	209	22.8	68
Nonpublic control	3.4	7.7	126	12.6	64
Average charge by institutions of higher education to full-time undergraduate students in constant 1968-69 dollars (chapter VI)					
Public control	\$977	\$1,143	17	\$1,323	16
Nonpublic control	1,767	2,433	38	3,122	28

¹ For content of this age group, see "Estimation Methods," in appendix A and footnote 2 of table B-2, appendix B.

² Undergraduate enrollment includes first-time enrollment.

³ Other instructional staff includes principals, supervisors, librarians, and guidance and psychological personnel.

NOTE: Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

CHAPTER II

Enrollment

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All levels (table 2)

Total fall enrollment (elementary, secondary, and higher education) increased from 43 million in 1958 to 58 million in 1968 and is expected to be 64 million in 1978. These totals include daytime enrollment in all regular public and nonpublic (parochial and nonsectarian) elementary and secondary schools; the degree-credit enrollment in publicly and privately controlled institutions of higher education in programs leading to a bachelor's or higher degree; and nondegree-credit enrollment in programs that extend not more than 3 years beyond high school and are designed to prepare for a technical, semiprofessional, or craftsman-clerical position.

Excluded from the enrollments in institutions of higher education are adult education courses of regular length, short courses of any kind, and correspondence, television, or radio courses, some of which are degree-credit courses. Excluded from the enrollments in elementary and secondary schools are: (1) those in public and nonpublic subcollegiate, vocational, technical, and trade schools, unless these are a part of the regular school system; (2) enrollment in evening classes in regular public schools; and (3) enrollment in elementary and secondary grades in public and nonpublic residential schools for exceptional children, Federal schools for Indians, schools on Federal installations, and subcollegiate departments of public and nonpublic institutions of higher education. These enrollments also exclude children aged 3 to 6 years enrolled in independent public and nonpublic nursery schools and kindergartens (exclusively preprimary schools). However, estimates of the latter enrollment are shown in table 2 as a separate item.

The projection of fall enrollments shown in table 2 is based on the following assumptions: (1) The percentage of school-age persons enrolling in school and the retention rates of those already in school will continue the 1958-68 trends, and (2) the school-age populations on which the projections are based will remain through 1978 substantially as now estimated and projected by the Bureau of the Census. These population bases are shown in appendix B, tables B-1 and B-2.

Elementary and secondary day schools (tables 3, 4)

Fall enrollment in regular elementary and secondary day schools (table 3) increased from 40 million in 1958 to 51 million in 1968, and is expected to be 52 million in 1978. The 1968 enrollment excludes an estimated total of 0.3 million enrolled in public and nonpublic schools such as residential schools for exceptional children, subcollegiate departments of public and nonpublic institutions of higher education, Federal schools for Indians, and schools on Federal installations. It also excludes an estimated 1.3 million between the ages of 3 and 6 enrolled in independent nursery schools and kindergartens and an estimated 1.5 million in "special" (business and trade) schools.¹

Increases in the next decade will be at the high school level because children born in the high-birth years before 1960 will be progressing through high school in those years, and because

¹ U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, Series P-20, No. 190, "School Enrollment: October 1968 and 1967," U.S. Government Printing Office, Washington, D.C.

enrollment rates of persons of high school age are continuing to increase. Total enrollment in grades 9 through 12 rose from 9 million in 1958 to 14 million in 1968 and is expected to be 17 million in 1978.

Enrollment in kindergarten and grades through B is expected to increase in 1969 and then decrease as the smaller birth cohorts of the 1960's affect the numbers attending. Even if fertility rates (the number of children born per 1,000 women between the ages of 15 and 45 years) should continue to decline, it is likely that the number of births, which have now leveled off, will rise moderately in the 1970's. This is because the number of young mothers in the population is expected to be increasing in this period, thus offsetting the drop in fertility rates. The proportion of children of elementary school age who are enrolled in school is already so high (about 99 percent, if 5-year-olds are excluded) that any increase in enrollment rates for this age group will be minimal. Enrollment in kindergarten through grade 8 increased from 31 million in 1958 to 37 million in 1968 and is expected to be between 35 and 36 million in 1978.

Enrollment in schools organized as secondary (see footnote 1, table 4, for definition of elementary and secondary schools) increased from 12 million in 1958 to 19 million in 1968 and is expected to be 22 million in 1978. The enrollment in secondary schools is larger than the enrollment in grades 9 through 12 as shown in tables 2 and 3, because it includes all of the grade 9 through 12 enrollment as well as the enrollment in grades 7 and 8 in junior high schools. It may be even higher than it appears to be in table 4 because some State departments of education report only by grade even though some of their schools are organized on an elementary and secondary basis.

The reported enrollment in elementary schools is smaller than that in kindergarten through grade 8 (tables 2 and 3) because it excludes enrollment in grades 7 and 8 in junior high schools. The reported enrollment in elementary schools increased from 28 million in 1958 to 32 million in 1968 but is expected to be only 30 million in 1978.

Public school enrollment (tables 3, 4)

Projections of enrollment in regular public day schools are shown in table 3 by grade group and in table 4 by organizational level.

The public school enrollment by grade was projected for each grade separately and then summed to obtain the projections by grade group. The projections by grade were derived (1) by applying projected age-specific enrollment rates to 5-, 6-, and 7-year-olds (Bureau of the Census population series C) and (2) by applying projected grade-retention rates to children in grades 2 through 11.

It should be noted that children entering kindergarten through fall 1972, first grade through fall 1973, and second grade through fall 1974 are already born; and thus the number is not dependent on assumed fertility rates. By 1978, the last year shown in the tables, projections of kindergarten through grade 6 depend on assumed fertility rates. For an explanation of the fertility rates used by the Bureau of the Census for projecting series C population, see appendix B, table B-1 footnotes.

The enrollment in regular public day schools by organizational level was derived by assuming that the percentages of the 7th- and 8th-grade enrollment organized as secondary school enrollment will continue to increase as it has in the past 10 years.

For a more detailed description of the assumptions and methods used in projecting public school enrollment, see footnotes to table 3 and 4 and in appendix A, table A-1.

Nonpublic school enrollment (tables 3, 4)

About 10 percent of regular day grade school enrollment is now in nonpublic schools, mostly (about 90 percent) in the parochial schools. Because of the current fiscal difficulties of these schools, the projection of nonpublic school enrollment by conventional trend methods is not

feasible. The projections by grade group included in table 3 are, therefore, estimates based on the scanty information available to the Office of Education at this time. (Enrollments lost to the nonpublic schools will be shifted to the public schools, so the projected total public and nonpublic enrollment should not be affected.)

The enrollments in nonpublic schools by organizational level shown in table 4 are the same as those by grade group shown in table 3 because almost all the nonpublic school 7th and 8th graders in the past have been in the elementary schools.

Institutions of higher education (table 5)

Fall enrollment in both 4-year and 2-year institutions of higher education includes resident and extension, day and evening, full-time and part-time students who are (1) taking work creditable toward a bachelor's or higher degree or (2) in occupational or general studies programs not chiefly creditable toward a bachelor's degree but preparing for a technical, semiprofessional, or craftsman-clerical position. The total enrollment (table 5) increased from an estimated 3.4 million in 1958 to 7.5 million in 1968 and is expected to be over 11.3 million in 1978, of which 8.9 percent are expected to be in occupational or general studies.

Degree-credit enrollment (tables 6-8, 13)

Opening fall enrollment in courses creditable toward a bachelor's or higher degree increased from 3.2 million in 1958 to 6.9 million in 1968 and is expected to climb to 10.3 million by 1978. These figures include graduate, undergraduate, and first-professional enrollment in degree-credit courses in both 4-year and 2-year institutions.

Of the 10.3 million students expected to be taking work toward a bachelor's or higher degree in 1978, 1.3 million, or 13 percent, are expected to be taking graduate work beyond the bachelor's or first-professional level. Of the 9.0 million taking work creditable toward undergraduate or first-professional degrees, about one-fourth will be entering college for the first time. (See p. 16 and table 13.)

Projected totals of opening fall degree-credit enrollment by sex and attendance status and by control of institution attended are shown in table 6; for 4-year institutions, in table 7; and for 2-year institutions, in table 8. The projections were made separately for men and women by type and control of institution attended and summed to get the totals shown in the tables. The projections are based on the assumption that the percentage of college-age people enrolled in college in each of the above enrollment categories will continue to increase from 1968 to 1978 as it did from 1958 to 1968. Attendance status was projected by holding constant, through 1978, the 1968 percentage of full-time enrollment in each enrollment category. The wide differences in these percentages by enrollment category can be seen in appendix A, table A-1. This table also shows the estimating equations for each enrollment category.

Nondegree-credit enrollment (tables 9-11)

Opening fall enrollment in nondegree-credit courses (occupational or general studies programs) in all institutions of higher education rose from an estimated 184,000 in 1958 to 585,000 in 1968 and is expected to be 1.0 million in 1978. Over 90 percent of this enrollment was in publicly controlled institutions in 1968. Less than half of it was full-time, and about 85 percent was in 2-year institutions. These enrollments are shown for 4-year and 2-year institutions separately for the first time in this report series.

The projection of nondegree-credit enrollment is based on the assumption that, within the categories of sex of student and control and type of institution, nondegree-credit enrollment expressed as a percentage of the population 18-21 years of age will follow the 1958 through

1968 trends. Full-time attendance status was projected by holding constant to 1978 the percentage of nondegree-credit enrollment that was reported to be full time in 1968.

Full-time-equivalent enrollment (table 12)

Estimated full-time-equivalent opening fall enrollment in degree-credit and nondegree-credit courses increased from 2.7 million in 1958 to 6.0 million in 1968 and is expected to be 8.9 million in 1978. Of this enrollment, 71 percent was in publicly controlled institutions in 1968, and 77 percent is expected to be in publicly controlled institutions in 1978. Ninety-three percent of the 1978 full-time-equivalent enrollment is expected to be in degree-credit courses.

The estimate of full-time-equivalent degree-credit enrollment is based on 33 percent of part-time degree-credit enrollment plus full-time degree-credit enrollment. Full-time-equivalent nondegree-credit enrollment is based on 28 percent of part-time nondegree-credit enrollment plus full-time nondegree-credit enrollment. These percentages for converting part-time enrollment to full-time enrollment were taken from the 1964 sample survey of full-time-equivalent enrollment and credit hours.

Degree-credit enrollment by level (table 13)

Degree-credit enrollment data are available for three levels either directly from reports or by supplemental estimates. Those levels are first-time enrollment (first time enrolled in any institution of higher education), undergraduate and first-professional enrollment combined, and graduate enrollment. (First-time enrollment, shown separately in tables 14, 15, and 16, is also included with undergraduate and first-professional enrollment, tables 18 and 19, and with enrollment in 2-year institutions, table 8.) Table 13 summarizes the relationships by type of institution of the different levels of degree-credit enrollment.

First-time degree-credit enrollment (tables 14, 15, 16)

First-time opening fall enrollment in degree-credit courses increased from 0.8 million in 1958 to 1.6 million in 1968, and is expected to be 2.5 million in 1978. Almost 75 percent of this enrollment was in publicly controlled institutions in 1968, compared to about 60 percent in 1958. First-time enrollment by attendance status is included for the first time in this report. Four-fifths of first-time enrollment in 1968 was full time.

Projected first-time degree-credit enrollment in all institutions of higher education is shown in table 14. It is based on the assumption that first-time enrollment by sex and by control and type of institution, as a percentage of the population averaging 18 years of age, will continue the 1958-68 trends. The projections are shown separately for 4-year and 2-year institutions in tables 15 and 16.

Resident graduate enrollment (table 17)

Estimated resident graduate enrollment increased from 312,000 in 1958 to 758,000 in 1968 and is expected to be 1.3 million in 1978. These estimates and projections are confined to resident graduate students because we have no separate data on extension graduate students. (Extension graduate students are included with resident and extension undergraduate and first-professional students in tables 18 and 19.) The estimates of resident graduate enrollment were derived from several sources. The principal sources were the comprehensive surveys of 1957, 1959, and 1961; the migration survey of 1963; and the opening fall enrollment surveys of 1967 and 1968. The full-time and part-time attendance status estimates for 1967 and 1968 were based on the 1967 survey of enrollment for advanced degrees and on advance data from the

same survey for 1968. For a detailed statement of the methods used in estimating graduate enrollment, see appendix A under "Estimation Methods."

The projection of graduate enrollment was based on the assumption that the trends shown from 1958 to 1968 for estimated resident graduate enrollment as a percentage of all degree-credit enrollment in 4-year institutions will continue to 1978. It is assumed that full-time graduate enrollment as a percentage of all graduate enrollment will remain approximately constant to 1978 at the 1968 level.

Undergraduate and first-professional enrollment (tables 8, 18, 19)

Undergraduate and first-professional enrollment in 4-year institutions was estimated by subtracting estimated resident graduate enrollment from the total of opening fall degree-credit resident and extension enrollment in these institutions. (For 2-year institutions, table 8, enrollment is the number reported, not estimated.)

Estimated undergraduate and first-professional enrollment (table 19) in 4-year institutions rose from 2.5 million in 1958 to 4.9 million in 1968 and, on the basis of the 1958-68 trend, is expected to be 6.8 million in 1978. Undergraduate enrollment in 2-year institutions (table 8) tripled from 1958 to 1968 (0.4 million to 1.3 million), and is expected to reach 2.2 million by 1978.

**Table 2.—Summary of enrollment in educational institutions, by institutional level and control:
United States, fall 1958 to 1978**

[In thousands]

Year (fall)	Total enrollment (excluding independent nursery schools and kindergartens)			Regular elementary and secondary day schools ²						Estimated independent nursery schools and kindergartens ³		
	Total	Institutions of higher education ¹		Grades K-8		Grades 9-12		Public	Nonpublic	Public	Nonpublic	
		(2)	(3)	(4)	(5)	(6)	(7)					(8)	(9)	(10)	(11)	(12)
1958	43,001	36,115	6,886	2,034	1,386	26,004	4,500	8,077	1,000	.....	.....	.....
1959	44,354	37,316	7,038	2,134	1,438	26,911	4,600	8,271	1,000	.....	.....	.....
1960	45,969	38,557	7,412	2,276	1,512	27,692	4,800	8,589	1,100	.....	.....	.....
1961	47,411	39,933	7,478	2,469	1,578	28,095	4,800	9,369	1,100	.....	.....	.....
1962	49,253	41,502	7,751	2,753	1,651	28,637	4,900	10,112	1,200	.....	.....	.....
1963	51,253	43,253	8,000	3,066	1,700	29,304	5,000	10,883	1,300	.....	.....	.....
1964	52,996	44,884	8,112	3,468	1,812	30,025	5,000	11,391	1,300	236	649	.....
1965	54,394	46,143	8,251	3,970	1,951	30,563	4,900	11,610	1,400	305	799	.....
1966	55,729	47,388	8,341	4,349	2,041	31,145	4,900	11,894	1,400	374	842	.....
1967	56,803	48,707	8,096	4,816	2,096	31,641	4,600	12,250	1,400	467	897	.....
1968	58,274	50,392	7,882	5,431	2,082	32,240	4,400	12,721	1,400	437	908	.....
PROJECTED⁴												
1969	59,096	51,319	7,777	5,619	2,077	32,500	4,300	13,200	1,400	514	936	.....
1970	59,623	51,913	7,710	5,913	2,110	32,400	4,200	13,600	1,400	599	964	.....
1971	60,232	52,570	7,662	6,270	2,162	32,200	4,100	14,100	1,400	697	1,021	.....
1972	60,493	52,868	7,625	6,668	2,225	31,800	4,000	14,400	1,400	801	1,109	.....
1973	61,057	53,372	7,685	7,072	2,285	31,500	4,000	14,800	1,400	916	1,207	.....
1974	61,596	53,859	7,737	7,459	2,337	31,300	4,000	15,100	1,400	1,040	1,309	.....
1975	62,022	54,238	7,784	7,838	2,384	31,100	4,000	15,300	1,400	1,170	1,420	.....
1976	62,516	54,694	7,822	8,194	2,422	31,100	4,000	15,400	1,400	1,307	1,536	.....
1977	63,071	55,221	7,850	8,521	2,450	31,200	4,000	15,500	1,400	1,446	1,659	.....
1978	63,625	55,748	7,877	8,848	2,477	31,500	4,000	15,400	1,400	1,593	1,788	.....

¹ Degree-credit and nondegree-credit enrollments.

² Does not include independent nursery schools and kindergartens, residential schools for exceptional children, subcollegiate departments of institutions of higher education, Federal schools for Indians, and schools on Federal installations.

³ Estimates of independent nursery school and kindergarten enrollments are based on the difference between all nursery school and kindergarten enrollments of children aged 3, 4, 5, and 6 years, as reported by the Bureau of the Census, and nursery school and kindergarten enrollments reported by the regular public and private schools.

⁴ For assumptions on which projections of elementary, secondary, and higher education enrollments are based and for projection methods used, see footnotes to tables 3, 6, and 9, and methodology in appendix A, table A-1.

The projections of enrollments in independent nursery schools and kindergartens are based on the following assumptions: (1) Enrollments in all nursery schools and kindergartens of children aged 3, 4, 5, and 6 years will follow the 1964-68 trends of

enrollment in these schools at each age level as a percentage of the total population of that age; and (2) enrollments in independent nursery schools and kindergartens of children aged 3, 4, 5, and 6 years will be the difference between enrollment in all nursery schools and kindergartens, as reported by the Census Bureau, and enrollment in nursery schools and kindergartens reported by regular public and private schools.

For further methodological details, see appendix A, table A-1.

NOTE: Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Nursery school and kindergarten enrollment data are based on U.S. Department of Health, Education, and Welfare, Office of Education circulars: "Nursery-kindergarten Enrollment of Children under Six," October 1964 through 1968. Sources for enrollments in regular elementary and secondary schools and institutions of higher education are given on tables 3, 6, and 9.

Table 3.—Enrollment in grades K-8 and 9-12 of regular day schools, by institutional control: United States, fall 1958 to 1978¹

[In thousands]									
Year (fall)	Total public and nonpublic			Public			Nonpublic (estimated) ²		
	K-12	K-8	9-12	K-12	K-8 ³	9-12 ³	K-12	K-8	9-12
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1958 ..	39,581	30,504	9,077	34,081	26,004	3,077	5,500	4,500	1,000
1959 ..	40,782	31,511	9,271	35,182	26,911	8,271	5,600	4,600	1,000
1960 ..	42,181	32,492	9,689	36,281	27,692	8,589	5,900	4,800	⁴ 1,100
1961 ..	43,364	32,395	10,469	37,464	28,095	9,369	5,900	⁴ 4,800	⁴ 1,100
1962 ..	44,849	33,537	11,312	38,749	28,637	10,112	6,100	4,900	1,200
1963 ..	46,487	34,304	12,183	40,187	29,304	10,883	6,300	5,000	⁴ 1,300
1964 ..	47,716	35,025	12,691	41,416	30,025	11,391	6,300	5,000	⁴ 1,300
1965 ..	48,473	35,463	13,010	42,173	30,563	11,610	6,300	⁴ 4,900	⁴ 1,400
1966 ..	49,339	36,045	13,294	43,039	31,145	11,894	6,300	4,900	1,400
1967 ..	49,891	36,241	13,650	43,891	31,641	12,250	6,000	4,600	1,400
1968 ..	50,761	36,640	14,121	44,961	32,240	12,721	5,800	⁵ 4,400	⁵ 1,400
PROJECTED⁶									
1969 ..	51,300	36,800	14,600	45,600	32,500	13,200	5,700	4,300	1,400
1970 ..	51,600	36,600	15,000	46,000	32,400	13,600	5,600	4,200	1,400
1971 ..	51,700	36,300	15,500	46,200	32,200	14,100	5,500	4,100	1,400
1972 ..	51,700	35,800	15,800	46,300	31,800	14,400	5,400	4,000	1,400
1973 ..	51,700	35,500	16,200	46,300	31,500	14,800	5,400	4,000	1,400
1974 ..	51,800	35,300	16,500	46,400	31,300	15,100	5,400	4,000	1,400
1975 ..	51,800	35,100	16,700	46,400	31,100	15,300	5,400	4,000	1,400
1976 ..	51,900	35,100	16,800	46,500	31,100	15,400	5,400	4,000	1,400
1977 ..	52,100	35,200	16,900	46,700	31,200	15,500	5,400	4,000	1,400
1978 ..	52,300	35,500	16,800	46,900	31,500	15,400	5,400	4,000	1,400

¹ Does not include independent nursery schools and kindergartens, residential schools for exceptional children, subcollegiate departments of institutions of higher education, Federal schools for Indians, schools on Federal Installations, and other schools not in the regular school system.

² Estimates revised spring 1968 on basis of 1965 Office of Education survey.

³ Fall enrollment in public schools not reported by grade prior to 1962; grade breakdown for years 1958 through 1961 estimated from school year enrollment.

⁴ Actual data from Office of Education surveys.

⁵ Data from the 1968 survey of nonpublic schools were received too late for inclusion in this table.

⁶ The projection of fall enrollment in regular day schools is based on the following assumptions: (1) Enrollment rates of the 5-, 6-, and 7-year-old population in public school kindergarten and grades 1 and 2 will follow the 1958-68 trends; (2) the retention rate of public school grade 7 from grade 6 will remain constant at 104 percent from 1972 through 1978; (3) the retention rates of public school grade 9 from grade 8 will follow the 1958-68 trend with the restriction that the rate cannot exceed 105 percent; (4) the retention rates of all other public school grades will follow the 1958-68 trends with the restriction that they cannot exceed 100 percent; and (5) enrollment in grades K-8 in regular nonpublic day schools will decrease to 1972 and then remain constant to 1978; grades 9-12 will remain constant at the 1968 level.

NOTE: Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of Public Schools," fall 1964 through 1968; (2) "Enrollment, Teachers, and Schoolhousing," fall 1957 through 1963; (3) "Statistics of State School Systems," biennially, 1957-58 through 1961-62; (4) "Statistics of Nonpublic Elementary and Secondary Schools, 1965-66"; (5) "Nonpublic School Enrollment in Grades 9-12, Fall 1964, and Graduates, 1963-64"; (6) "Statistics of Nonpublic Elementary Schools, 1961-62"; and (7) "Statistics of Nonpublic Elementary Schools, 1960-61."

The population projections as of October 1, of 5-, 6-, and 7-year-olds on which the enrollment projections in kindergarten and grades 1 and 2 are based, are consistent with Series C population projections in U.S. Department of Commerce, Bureau of the Census, "Current Population Reports," Series P-25, No. 388, March 14, 1968. The B, C, and D population projections, together with definitions of each series, are shown in appendix B, table B-1.

For enrollment projections based on population projections, series B and series D, see appendix B, tables B-4 and B-5.

Table 4.—Enrollment in regular day schools, by institutional control and organizational level: United States, fall 1958 to 1978¹

[In thousands]

Year (fall)	Total public and nonpublic			Public			Nonpublic (estimated) ²		
	K-12	Elementary	Secondary	K-12	Elementary	Secondary	K-12	Elementary	Secondary
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1958 ..	39,581	27,915	11,666	34,081	23,415	10,666	5,500	4,500	1,000
1959 ..	40,782	28,506	12,276	35,182	23,906	11,276	5,600	4,600	1,000
1960 ..	42,181	29,150	13,031	36,281	24,350	11,931	5,900	4,800	³ 1,100
1961 ..	43,364	29,403	13,961	37,464	24,603	12,861	5,900	³ 4,800	³ 1,100
1962 ..	44,849	30,164	14,685	38,749	25,264	13,485	6,100	4,900	1,200
1963 ..	46,487	30,775	15,712	40,187	25,775	14,412	6,300	5,000	³ 1,300
1964 ..	47,716	31,221	16,495	41,416	26,221	15,195	6,300	5,000	³ 1,300
1965 ..	48,473	31,570	16,904	42,173	26,670	15,504	6,300	³ 4,900	³ 1,400
1966 ..	49,339	32,005	17,334	43,039	27,105	15,934	6,300	4,900	1,400
1967 ..	49,891	31,972	17,919	43,891	27,372	16,519	6,000	4,600	1,400
1968 ..	50,761	31,818	18,943	44,961	27,418	17,543	5,800	⁴ 4,400	⁴ 1,400
PROJECTED⁵									
1969 ..	51,300	31,700	19,600	45,600	27,400	18,200	5,700	4,300	1,400
1970 ..	51,600	31,400	20,200	46,000	27,200	18,800	5,600	4,200	1,400
1971 ..	51,700	30,900	20,800	46,200	26,800	19,400	5,500	4,100	1,400
1972 ..	51,700	30,400	21,300	46,300	26,400	19,900	5,400	4,000	1,400
1973 ..	51,700	29,900	21,800	46,300	25,900	20,400	5,400	4,000	1,400
1974 ..	51,800	29,600	22,100	46,400	25,600	20,700	5,400	4,000	1,400
1975 ..	51,800	29,500	22,300	46,400	25,500	20,900	5,400	4,000	1,400
1976 ..	51,900	29,400	22,500	46,500	25,400	21,100	5,400	4,000	1,400
1977 ..	52,100	29,700	22,400	46,700	25,700	21,000	5,400	4,000	1,400
1978 ..	52,300	30,100	22,100	46,900	26,100	20,700	5,400	4,000	1,400

¹ Does not include independent nursery schools and kindergartens, residential school for exceptional children, subcollegiate departments of institutions of higher education, Federal schools for Indians, and schools on Federal installations.

Schools included are classified either as "elementary" or "secondary" depending upon the way in which the school is organized rather than on a K-8 and 9-12 basis. An elementary school is one so classified by State and local practice and consists of any span of grades not above grade 8 (most commonly K-6 or K-8). Nursery schools are included with elementary. A secondary school comprises any span of grades beginning with the next grade following the elementary school and ending with or below grade 12, including junior high schools, the different types of academic high schools, and vocational or trade high schools. Grades 7 and 8 may fall into the elementary or secondary school classification depending upon the organization of the school of which they are a part.

² Estimates revised spring 1968 on basis of 1965 Office of Education survey.

³ Actual data from Office of Education surveys.

⁴ Data from the 1968 survey of nonpublic schools were received too late for inclusion in this table.

⁵ The projection of fall enrollment in regular public day schools by organizational level is based on the assumption that the percentage of enrollment in grades 7 and 8 that will be organized as elementary

and as secondary enrollment will follow the 1958-68 trend.

The projection of regular fall enrollment in nonpublic schools by organizational level is based on the assumption that substantially all nonpublic enrollment in grades 7 and 8 will continue as elementary enrollment.

For further methodological details, see appendix A, table A-1.

NOTE: Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of Public Schools," fall 1964 through 1968; (2) "Enrollment, Teachers, and Schoolhousing," fall 1958 through 1963; (3) "Statistics of Nonpublic Elementary and Secondary Schools, 1965-66"; (4) "Nonpublic School Enrollment in grades 9-12, Fall 1964, and Graduates, 1963-64"; (5) "Statistics of Nonpublic Elementary Schools, 1961-62"; and (6) "Statistics of Nonpublic Secondary Schools, 1960-61."

Table 5.—Summary of enrollment in all institutions of higher education, by degree-credit status and institutional type: United States, fall 1958 to 1978

[Resident and extension opening fall enrollment—in thousands]

Year (fall)	Total degree-credit and nondegree-credit enrollment	Degree-credit			Nondegree-credit		
		Total	4-year	2-year	Total	4-year	2-year
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1958	3,420	3,236	2,851	386	184	44	139
1959	3,571	3,377	2,968	410	194	41	153
1960	3,789	3,583	3,131	451	206	40	166
1961	4,047	3,861	3,343	518	186	38	148
1962	4,404	4,175	3,585	590	229	45	184
1963	4,766	4,495	3,870	625	271	52	220
1964	5,280	4,950	4,239	711	330	52	278
1965	5,921	5,526	4,685	841	395	63	332
1966 ¹	6,390	5,928	4,984	945	462	80	381
1967 ¹	6,912	6,392	5,316	1,075	520	83	437
1968	7,513	6,928	5,639	1,289	585	82	503
PROJECTED²							
1969	7,697	7,087	5,746	1,341	610	83	527
1970	8,023	7,377	5,960	1,417	646	85	561
1971	8,432	7,743	6,234	1,509	689	88	601
1972	8,893	8,156	6,546	1,611	737	92	645
1973	9,357	8,572	6,858	1,714	785	95	690
1974	9,796	8,963	7,150	1,814	833	98	734
1975	10,222	9,343	7,431	1,912	879	101	778
1976	10,617	9,693	7,688	2,005	924	104	820
1977	10,971	10,006	7,915	2,090	965	106	859
1978	11,325	10,318	8,141	2,176	1,007	108	899

¹The breakdown between degree-credit and nondegree-credit enrollment in 1966 and 1967 is estimated. See appendix A, "Estimation Methods."

²For assumptions underlying these projections and for methods of projecting, see footnotes to tables 6 and 9, and to table A-1 in appendix A.

NOTE: Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Opening (Fall) Enrollment in Higher Education," annually, 1958 through 1968; (2) data from "Resident and Extension Enrollment in Institutions of Higher Education," fall 1966 (unpublished); and (3) "Resident and Extension Enrollment in Institutions of Higher Education," biennially, first term 1957 through 1961.

Table 6.—Total degree-credit enrollment in all institutions of higher education, by sex, by attendance status, and by institutional control: United States, fall 1958 to 1978

[Resident and extension opening fall enrollment]

Year (fall)	Total degree-credit enrollment ¹	Sex		Attendance status ²		Control	
		Men	Women	Full-time	Part-time	Public	Private
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1958	3,236,414	2,098,164	1,138,250	2,215,000	1,022,000	1,893,843	1,342,571
1959	3,377,273	2,160,886	1,216,387	2,314,000	1,063,000	1,984,022	1,393,251
1960	3,582,726	2,266,877	1,325,849	2,466,000	1,117,000	2,115,893	1,466,833
1961	3,860,643	2,408,601	1,452,042	2,714,000	1,147,000	2,328,912	1,531,731
1962	4,174,936	2,587,291	1,587,645	2,902,101	1,272,835	2,573,720	1,601,216
1963	4,494,626	2,772,562	1,722,064	3,068,469	1,426,157	2,848,454	1,646,172
1964	4,950,173	3,032,992	1,917,181	3,417,796	1,532,377	3,179,527	1,770,646
1965	5,526,325	3,374,603	2,151,722	3,910,848	1,615,477	3,624,442	1,901,883
1966 ³	5,928,000	3,577,000	2,351,000	4,232,000	1,696,000	3,940,000	1,988,000
1967 ³	6,392,000	3,822,000	2,570,000	4,555,000	1,837,000	4,349,000	2,043,000
1968	6,928,115	4,119,002	2,809,113	4,937,848	1,990,267	4,891,743	2,036,372
PROJECTED⁴							
1969	7,087,000	4,187,000	2,899,000	5,040,000	2,046,000	5,055,000	2,032,000
1970	7,377,000	4,333,000	3,044,000	5,236,000	2,141,000	5,313,000	2,064,000
1971	7,743,000	4,520,000	3,223,000	5,484,000	2,259,000	5,627,000	2,116,000
1972	8,156,000	4,733,000	3,423,000	5,765,000	2,391,000	5,979,000	2,178,000
1973	8,572,000	4,949,000	3,623,000	6,047,000	2,525,000	6,334,000	2,238,000
1974	8,963,000	5,148,000	3,815,000	6,311,000	2,652,000	6,674,000	2,289,000
1975	9,343,000	5,340,000	4,003,000	6,566,000	2,778,000	7,007,000	2,336,000
1976	9,693,000	5,515,000	4,178,000	6,799,000	2,894,000	7,320,000	2,373,000
1977	10,006,000	5,665,000	4,341,000	7,005,000	3,001,000	7,606,000	2,400,000
1978	10,318,000	5,818,000	4,500,000	7,209,000	3,108,000	7,892,000	2,426,000

¹ Beginning in 1966, some students previously reported as nondegree-credit are included with degree-credit enrollment.

² Estimated, prior to 1962. See appendix A, "Estimation Methods."

³ The breakdown between degree-credit and non-degree-credit enrollment is estimated. See appendix A, "Estimation Methods."

The estimates for 1966 and 1967 differ from the estimates published in the 1968 edition of "Projections of Educational Statistics" because of revisions in the 1966 comprehensive data for 4-year institutions.

⁴ The projection of total degree-credit enrollment in all institutions by sex and institutional control is based on the assumption that enrollment in these institutions, expressed as a percentage of population aged 18-21 years, will follow the 1958-68 trend to 1978 in each enrollment category.

The projection of total degree-credit enrollment in all institutions by attendance status is based on the assumption that in each enrollment category the ratio of full-time enrollment to total enrollment reported in the 1968 opening fall enrollment

survey, with minor adjustments, will remain constant to 1978.

Veterans attending college through aid provided by the Veterans' Readjustment Benefits Act of 1966 are included in the trend projections.

For further methodological details, see appendix A, table A-1.

NOTE: Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education circulars: (1) "Opening (Fall) Enrollment in Higher Education," annually, 1958 through 1968; (2) data from "Resident and Extension Enrollment in Institutions of Higher Education," fall 1966 (unpublished); and (3) "Resident and Extension Enrollment in Institutions of Higher Education," biennially, first term 1957 through 1961.

Population on which projections are based is shown in appendix B, table B-2.

Table 7.—Total degree-credit enrollment in 4-year institutions of higher education, by sex, by attendance status, and by institutional control: United States, fall 1958 to 1978

[Resident and extension opening fall enrollment]

Year (fall)	Total degree-credit enrollment ¹	Sex		Attendance status ²		Control	
		Men	Women	Full-time	Part-time	Public	Private
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1958	2,850,805	1,850,124	1,000,681	2,000,000	851,000	1,562,962	1,287,843
1959	2,967,558	1,901,132	1,066,426	2,088,000	879,000	1,628,055	1,339,503
1960	3,131,393	1,974,722	1,156,671	2,219,000	912,000	1,723,583	1,407,810
1961	3,342,718	2,088,445	1,254,273	2,421,000	922,000	1,872,531	1,470,187
1962	3,585,407	2,221,667	1,363,740	2,584,908	1,000,499	2,054,463	1,530,944
1963	3,869,837	2,385,902	1,483,935	2,741,251	1,128,586	2,297,146	1,572,691
1964	4,239,305	2,593,483	1,645,822	3,021,411	1,217,894	2,558,668	1,680,637
1965	4,684,888	2,852,757	1,832,131	3,414,545	1,270,343	2,886,552	1,798,336
1966 ³	4,984,000	3,000,000	1,984,000	3,669,000	1,315,000	3,100,000	1,883,000
1967 ³	5,316,000	3,169,000	2,148,000	3,938,000	1,378,000	3,382,000	1,934,000
1968	5,638,616	3,336,709	2,301,907	4,199,141	1,439,475	3,722,602	1,916,014
PROJECTED⁴							
1969	5,746,000	3,375,000	2,371,000	4,273,000	1,473,000	3,839,000	1,907,000
1970	5,960,000	3,476,000	2,484,000	4,425,000	1,535,000	4,027,000	1,933,000
1971	6,234,000	3,610,000	2,625,000	4,621,000	1,613,000	4,258,000	1,977,000
1972	6,546,000	3,763,000	2,782,000	4,845,000	1,701,000	4,516,000	2,030,000
1973	6,858,000	3,918,000	2,939,000	5,068,000	1,790,000	4,777,000	2,081,000
1974	7,150,000	4,059,000	3,091,000	5,275,000	1,875,000	5,026,000	2,124,000
1975	7,431,000	4,193,000	3,238,000	5,474,000	1,958,000	5,269,000	2,162,000
1976	7,688,000	4,314,000	3,374,000	5,654,000	2,034,000	5,497,000	2,191,000
1977	7,915,000	4,415,000	3,501,000	5,811,000	2,104,000	5,705,000	2,211,000
1978	8,141,000	4,517,000	3,624,000	5,967,000	2,174,000	5,912,000	2,229,000

¹ Beginning in 1966, some students previously reported as nondegree-credit are included with degree-credit enrollment.

² Estimated prior to 1962. See appendix A, "Estimation Methods."

³ The breakdown between degree-credit and non-degree-credit enrollment is estimated. See appendix A, "Estimation Methods."

The estimates for 1966 and 1967 differ from the estimates published in the 1968 edition of "Projections of Educational Statistics" because of revisions in the 1966 comprehensive data for 4-year institutions.

⁴ The projection of total degree-credit enrollment in 4-year institutions by sex and institutional control is based on the assumption that enrollment in these institutions, expressed as a percentage of population aged 18-21 years, will follow the 1958-68 trend to 1978 in each enrollment category.

The projection of total degree-credit enrollment in 4-year institutions by attendance status is based on the assumption that in each enrollment category the ratio of full-time enrollment to total enrollment

reported in the 1968 opening fall enrollment survey, with minor adjustments, will remain constant to 1978.

Veterans attending college through aid provided by the Veterans' Readjustment Benefits Act of 1966 are included in the trend projections.

For further methodological details, see appendix A, table A-1.

NOTE: Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education circulars: (1) "Opening (Fall) Enrollment in Higher Education," annually, 1958 through 1968; (2) data from "Resident and Extension Enrollment in Institutions of Higher Education," fall 1966 (unpublished); and (3) "Resident and Extension Enrollment in Institutions of Higher Education," biennially, first term 1957 through 1961.

Table 8.—Total degree-credit enrollment in 2-year institutions of higher education, by sex, by attendance status, and by institutional control: United States, fall 1958 to 1978

[Resident and extension opening fall enrollment]²

Year (fall)	Total degree-credit enrollment ¹	Sex		Attendance status ²		Control	
		Men	Women	Full-time	Part-time	Public	Private
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1958	385,609	248,040	137,569	215,000	171,000	330,881	54,728
1959	409,715	259,754	149,961	226,000	184,000	355,967	53,748
1960	451,333	282,155	169,178	247,000	205,000	392,310	59,023
1961	517,925	320,156	197,769	293,000	225,000	456,381	61,544
1962	589,529	365,624	223,905	317,193	272,336	519,257	70,272
1963	624,789	386,660	238,129	327,218	297,571	551,308	73,481
1964	710,868	439,509	271,359	396,385	314,483	620,859	90,009
1965	841,237	521,846	319,591	495,454	345,983	737,890	103,547
1966 ³	945,000	577,000	367,000	563,000	381,000	840,000	105,000
1967 ³	1,075,000	653,000	422,000	617,000	459,000	967,000	109,000
1968	1,289,499	782,293	507,206	738,707	550,792	1,169,141	120,358
PROJECTED⁴							
1969	1,341,000	812,000	529,000	767,000	573,000	1,216,000	125,000
1970	1,417,000	857,000	561,000	811,000	606,000	1,286,000	131,000
1971	1,509,000	910,000	599,000	863,000	646,000	1,370,000	139,000
1972	1,611,000	970,000	641,000	921,000	690,000	1,463,000	148,000
1973	1,714,000	1,031,000	683,000	980,000	734,000	1,557,000	157,000
1974	1,814,000	1,089,000	725,000	1,036,000	778,000	1,648,000	166,000
1975	1,912,000	1,147,000	766,000	1,092,000	820,000	1,738,000	174,000
1976	2,005,000	1,201,000	804,000	1,145,000	860,000	1,823,000	182,000
1977	2,090,000	1,250,000	840,000	1,193,000	897,000	1,901,000	189,000
1978	2,176,000	1,301,000	876,000	1,242,000	934,000	1,979,000	197,000

¹ Beginning in 1966, some students previously reported as nondegree-credit are included with degree-credit enrollment.

² Estimated prior to 1962. See appendix A, "Estimation Methods."

³ The breakdown between degree-credit and non-degree-credit enrollment is estimated. See appendix A, "Estimation Methods."

⁴ The projection of total degree-credit enrollment in 2-year institutions by sex and institutional control is based on the assumption that enrollment in these institutions, expressed as a percentage of population aged 18-21 years, will follow the 1957-68 trend to 1978 in each enrollment category.

The projection of total degree-credit enrollment in 2-year institutions by attendance status is based on the assumption that in each enrollment category the ratio of full-time enrollment to total enrollment reported in the 1968 opening fall enrollment survey, with minor adjustments, will remain constant to 1978.

Veterans attending college through aid provided by the Veterans' Readjustment Benefits Act of 1966 are included in the trend projections.

For further methodological details, see appendix A, table A-1.

NOTE: Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education circulars: (1) "Opening (Fall) Enrollment in Higher Education," annually, 1958 through 1968; (2) data from "Resident and Extension Enrollment in Institutions of Higher Education," fall 1966 (unpublished); and (3) "Resident and Extension Enrollment in Institutions of Higher Education," biennially, first term 1957 through 1961.

Population on which projections are based is shown in appendix B, table B-2.

Table 9.—Nondegree-credit enrollment in all institutions of higher education, by sex, by attendance status, and by institutional control: United States, fall 1958 to 1978

[Resident and extension opening fall enrollment]

Year (fall)	Nondegree-credit enrollment ¹	Sex		Attendance status ²		Control	
		Men	Women	Full-time	Part-time	Public	Private
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1958	184,000	134,000	50,000	73,000	110,000	140,000	44,000
1959	194,200	136,915	57,285	78,000	116,000	149,459	44,701
1960	206,000	147,000	59,000	83,000	123,000	161,000	46,000
1961	186,483	128,363	58,120	76,000	111,000	140,579	45,904
1962	229,000	155,000	74,000	95,000	134,000	179,000	50,000
1963	271,241	182,655	88,588	115,000	156,000	217,393	53,847
1964	329,847	215,721	114,126	140,000	190,000	288,181	41,666
1965	394,539	255,417	139,122	172,000	222,000	345,154	49,385
1966 ³	462,000	279,000	183,000	207,000	255,000	409,000	53,000
1967 ³	520,000	311,000	209,000	238,000	282,000	467,000	53,000
1968	584,976	358,647	226,329	272,962	312,014	538,909	46,067
PROJECTED⁴							
1969	610,000	371,000	238,000	284,000	325,000	564,000	45,000
1970	646,000	391,000	254,000	301,000	345,000	600,000	46,000
1971	689,000	415,000	274,000	321,000	368,000	643,000	46,000
1972	737,000	442,000	295,000	343,000	394,000	690,000	47,000
1973	785,000	469,000	316,000	365,000	420,000	738,000	47,000
1974	833,000	495,000	337,000	387,000	446,000	785,000	48,000
1975	879,000	521,000	358,000	408,000	471,000	831,000	49,000
1976	924,000	546,000	378,000	429,000	495,000	874,000	49,000
1977	965,000	568,000	397,000	448,000	517,000	915,000	50,000
1978	1,007,000	591,000	415,000	467,000	540,000	956,000	51,000

¹ Beginning in 1966, some students previously reported as nondegree-credit are included with degree-credit enrollment.

² Estimated prior to 1968. See appendix A, "Estimation Methods."

³ The breakdown between degree-credit and nondegree-credit enrollment is estimated. See appendix A, "Estimation Methods."

The estimates for 1966 and 1967 differ from estimates published in the 1968 edition of "Projections of Educational Statistics" because of revisions in the 1966 comprehensive data for 4-year institutions.

⁴ The projection of total nondegree-credit enrollment in all institutions by sex and institutional control is based on the assumption that enrollment, expressed as a percentage of population aged 18-21 years, will follow the 1958-68 trend to 1978 in each enrollment category.

The projection of total nondegree-credit enrollment by attendance status is based on the assumption that in each enrollment category the ratio of full-time enrollment to total enrollment reported in

the 1968 opening fall enrollment survey, with minor adjustments, will remain constant to 1978.

Veterans attending college through aid provided by the Veterans' Readjustment Benefits Act of 1966 are included in the trend projections.

For further methodological details, see appendix A, table A-1.

NDTE: Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education circulars: (1) "Opening (Fall) Enrollment in Higher Education," annually, 1963 through 1968; (2) data from "Resident and Extension Enrollment in Institutions of Higher Education," fall 1966 (unpublished); and (3) "Resident and Extension Enrollment in Institutions of Higher Education," biennially, first term 1957 through 1961.

Population on which projections are based is shown in appendix B, table B-1.

Table 10.—Nondegree-credit enrollment in 4-year institutions of higher education, by sex, by attendance status, and by institutional control: United States, fall 1958 to 1978

[Resident and extension opening fall enrollment]

Year (fall)	Nondegree-credit enrollment ¹	Sex		Attendance status ²		Control	
		Men	Women	Full-time	Part-time	Public	Private
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1958	44,000	34,000	10,000	15,000	29,000	28,000	16,000
1959	41,427	29,977	11,450	15,000	27,000	27,561	13,866
1960	40,000	29,000	11,000	14,000	26,000	27,000	13,000
1961	38,002	28,136	9,866	13,000	25,000	25,400	12,602
1962	45,000	32,000	13,000	16,000	29,000	30,000	15,000
1963	51,518	36,492	15,026	19,000	32,000	33,673	17,845
1964	51,789	36,582	15,207	20,000	32,000	34,261	17,528
1965	63,024	43,624	19,400	25,000	38,000	41,780	21,244
1966 ³	80,000	47,000	33,000	33,000	47,000	59,000	21,000
1967 ³	83,000	49,000	33,000	35,000	48,000	62,000	21,000
1968	82,179	50,589	31,590	36,166	46,013	61,576	20,603
PROJECTED⁴							
1969	83,000	50,000	32,000	37,000	46,000	62,000	21,000
1970	85,000	51,000	34,000	38,000	47,000	64,000	21,000
1971	88,000	52,000	36,000	39,000	49,000	66,000	22,000
1972	92,000	54,000	38,000	41,000	51,000	69,000	22,000
1973	95,000	55,000	40,000	42,000	53,000	72,000	23,000
1974	98,000	56,000	42,000	44,000	54,000	75,000	24,000
1975	101,000	57,000	44,000	45,000	56,000	77,000	24,000
1976	104,000	58,000	45,000	46,000	57,000	79,000	25,000
1977	106,000	59,000	47,000	47,000	58,000	81,000	25,000
1978	108,000	59,000	49,000	48,000	59,000	83,000	25,000

¹Beginning in 1966, some students previously reported as nondegree-credit are included with degree-credit enrollment.

²Estimated prior to 1968. See appendix A, "Estimation Methods."

³The breakdown between degree-credit and nondegree-credit enrollment is estimated. See appendix A, "Estimation Methods."

The estimates for 1966 and 1967 differ from estimates published in the 1968 edition of "Projections of Educational Statistics" because of revisions in the 1966 comprehensive data for 4-year institutions.

⁴The projection of total nondegree-credit enrollment in 4-year institutions by sex and institutional control is based on the assumption that enrollment, expressed as a percentage of population aged 18-21 years, will follow the 1953-68 trend to 1978 in each enrollment category.

The projection of total nondegree-credit enrollment in 4-year institutions by attendance status is based on the assumption that in each enrollment category the ratio of full-time enrollment to total enrollment reported in the 1968 opening fall enrollment

survey, with minor adjustments, will remain constant to 1978.

Veterans attending college through aid provided by the Veterans' Readjustment Benefits Act of 1966 are included in the trend projections.

For further methodological details, see appendix A, table A-1.

NOTE: Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education circulars: (1) "Opening (Fall) Enrollment in Higher Education," annually, 1963 through 1968; (2) data from "Resident and Extension Enrollment in Institutions of Higher Education," fall 1966 (unpublished); and (3) "Resident and Extension Enrollment in Institutions of Higher Education," biennially, first term 1957 through 1961.

Population on which projections are based is shown in appendix B, table B-2.

Table 11.—Nondegree-credit enrollment in 2-year institutions of higher education, by sex, by attendance status, and by institutional control: United States, fall 1958 to 1978

[Resident and extension opening fall enrollment¹]

Year (fall)	Nondegree-credit enrollment ¹	Sex		Attendance status ²		Control	
		Men	Women	Full-time	Part-time	Public	Private
(1)	(2)	(3)	(4)	(6)	(6)	(7)	(8)
1958	139,000	100,000	39,000	58,000	81,000	112,000	28,000
1959	152,773	106,938	45,835	64,000	89,000	121,938	30,835
1960	166,000	119,000	47,000	69,000	97,000	134,000	32,000
1961	148,481	100,227	48,254	62,000	86,000	115,179	33,302
1962	184,000	123,000	61,000	79,000	105,000	149,000	35,000
1963	219,723	146,163	73,560	96,000	124,000	183,721	36,002
1964	278,058	179,139	98,919	120,000	158,000	253,920	24,138
1965	331,515	211,793	119,722	147,000	184,000	303,374	28,141
1966 ³	381,000	232,000	150,000	174,000	208,000	350,000	32,000
1967 ³	437,000	262,000	176,000	203,000	234,000	405,000	32,000
1968	502,797	308,058	194,739	236,796	266,001	477,333	25,464
PROJECTED⁴							
1969	527,000	321,000	206,000	248,000	279,000	502,000	25,000
1970	561,000	340,000	220,000	263,000	297,000	536,000	25,000
1971	601,000	363,000	238,000	282,000	319,000	576,000	24,000
1972	645,000	388,000	257,000	302,000	343,000	621,000	24,000
1973	690,000	414,000	277,000	323,000	368,000	666,000	24,000
1974	734,000	439,000	296,000	343,000	392,000	710,000	24,000
1975	778,000	463,000	315,000	363,000	415,000	754,000	24,000
1976	820,000	487,000	333,000	382,000	438,000	795,000	25,000
1977	859,000	510,000	350,000	400,000	459,000	834,000	25,000
1978	899,000	532,000	367,000	418,000	480,000	873,000	25,000

¹Beginning in 1965, some students previously reported as nondegree-credit are included with degree-credit enrollment.

²Estimated prior to 1968. See appendix A, "Estimation Methods."

³The breakdown between degree-credit and nondegree-credit enrollment is estimated. See appendix A, "Estimation Methods."

⁴The projection of total nondegree-credit enrollment in 2-year institutions by sex and institutional control is based on the assumption that enrollment, expressed as a percentage of population aged 18-21 years, will follow the 1958-68 trend to 1978 in each enrollment category.

The projection of total nondegree-credit enrollment by attendance status is based on the assumption that in each enrollment category the ratio of full-time enrollment to total enrollment reported in the 1968 opening fall enrollment survey, with minor adjustments, will remain constant to 1978.

Veterans attending college through aid provided by the Veterans' Readjustment Benefits Act of 1966 are included in the trend projections.

For further methodological details, see appendix A, table A-1.

NOTE: Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education circulars: (1) "Opening (Fall) Enrollment in Higher Education," annually, 1963 through 1968; (2) data from "Resident and Extension Enrollment in Institutions of Higher Education," fall 1966 (unpublished); and (3) "Resident and Extension Enrollment in Institutions of Higher Education," biennially, first term 1957 through 1961.

Population on which projections are based is shown in appendix B, table B-2.

Table 12.—Estimated full-time-equivalent enrollment in all institutions of higher education, by degree-credit status and institutional control: United States, fall 1958 to 1978¹

[Resident and extension opening fall enrollment—in thousands]

Year (fall)	All students			Students taking work creditable toward a bachelor's or higher degree			Students in occupational or general studies programs not chiefly creditable toward a bachelor's degree		
	Total	Public	Private	Total	Public	Private	Total	Public	Private
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1958	2,658	1,570	1,088	2,552	1,489	1,063	106	81	25
1959	2,777	1,648	1,129	2,665	1,562	1,103	112	86	26
1960	2,954	1,760	1,194	2,835	1,667	1,168	119	93	26
1961	3,200	1,949	1,251	3,092	1,868	1,224	108	81	27
1962	3,455	2,145	1,310	3,322	2,041	1,281	133	104	29
1963	3,696	2,351	1,345	3,539	2,225	1,314	157	126	31
1964	4,115	2,671	1,444	3,924	2,504	1,420	191	167	24
1965	4,671	3,094	1,577	4,443	2,895	1,548	228	199	29
1966	5,070	3,398	1,672	4,792	3,154	1,637	278	243	35
1967	5,478	3,760	1,719	5,161	3,478	1,683	317	282	35
1968	5,955	4,228	1,727	5,595	3,899	1,696	360	329	31
PROJECTED¹									
1969	6,091	4,369	1,722	5,715	4,024	1,691	375	345	30
1970	6,340	4,591	1,749	5,942	4,224	1,718	397	367	30
1971	6,653	4,862	1,792	6,230	4,469	1,761	424	393	31
1972	7,007	5,164	1,843	6,555	4,742	1,812	453	422	31
1973	7,363	5,470	1,893	6,880	5,019	1,862	483	451	32
1974	7,698	5,762	1,936	7,186	5,282	1,904	511	479	32
1975	8,022	6,047	1,975	7,482	5,540	1,942	540	507	32
1976	8,321	6,315	2,006	7,754	5,781	1,973	567	534	33
1977	8,588	6,559	2,029	7,995	6,000	1,995	593	559	34
1978	8,853	6,803	2,050	8,235	6,219	2,016	618	584	34

¹ The estimation, 1958 to 1968, and the projection of the full-time equivalent of part-time enrollment are based on the assumption that the 1964 percentages of part-time enrollment equivalent to full-time enrollment (33 percent for degree-credit students and 28 percent for nondegree-credit students) would remain constant 1958 to 1978.

Veterans attending college through aid provided by the Veterans' Readjustment Benefits Act of 1966 are included in the trend projections.

For further methodological details, see appendix A, table A-1.

NOTE: Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education circulars: (1) "Opening (Fall) Enrollment in Higher Education," annually, 1958 through 1968; (2) data from "Resident and Extension Enrollment in Institutions of Higher Education," fall 1966 (unpublished); (3) "Resident and Extension Enrollment in Institutions of Higher Education," biennially, first term 1957 through 1961; and (4) sample survey of full-time-equivalent enrollments and credit hours, fall 1964 (unpublished).

Table 13.—Summary of degree-credit enrollment in all institutions of higher education, by level and institutional type: United States, fall 1958 to 1978

[Resident and extension opening fall enrollment—in thousands]

Year (fall)	Total degree-credit enrollment	Resident graduate (4-year) ¹	Level and type					
			Undergraduate and first-professional (4-year)			Undergraduate (2-year)		
			Total ¹	First-time	Other ¹	Total	First-time	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1958	3,237	312	2,539	600	1,939	386	175	211
1959	3,377	331	2,636	640	1,996	410	182	228
1960	3,583	356	2,776	709	2,067	451	214	237
1961	3,860	386	2,956	775	2,181	518	244	274
1962	4,175	422	3,163	770	2,393	590	260	329
1963	4,495	464	3,406	775	2,631	625	272	353
1964	4,950	517	3,722	903	2,819	711	322	389
1965	5,526	582	4,103	1,041	3,062	841	401	441
1966 ²	5,929	624	4,360	989	3,371	945	389	556
1967 ²	6,391	688	4,628	992	3,636	1,075	447	628
1968	6,928	768	4,871	1,076	3,795	1,289	554	736
PROJECTED³								
1969	7,087	798	4,948	1,130	3,818	1,341	599	742
1970	7,377	844	5,116	1,189	3,927	1,417	647	770
1971	7,743	900	5,334	1,245	4,089	1,509	695	814
1972	8,157	963	5,583	1,296	4,287	1,611	741	870
1973	8,571	1,028	5,829	1,342	4,487	1,714	785	929
1974	8,963	1,092	6,057	1,389	4,668	1,814	830	984
1975	9,343	1,157	6,274	1,432	4,842	1,912	874	1,038
1976	9,693	1,219	6,469	1,463	5,006	2,005	909	1,096
1977	10,006	1,278	6,638	1,498	5,140	2,090	948	1,142
1978	10,318	1,339	6,803	1,544	5,259	2,176	995	1,181

¹ Estimated. See appendix A, "Estimation Methods."

² The breakdown between degree-credit and non-degree-credit enrollment in 1966 and 1967 is estimated. See appendix A, "Estimation Methods."

³ The projection of resident graduate enrollment in 4-year institutions was made separately by sex and by institutional control and is based on the assumption that in each enrollment category the estimated proportion of total enrollment at the graduate level will continue the 1958-68 trend to 1978.

The projection of undergraduate and first-professional degree-credit enrollment in 4-year institutions is the difference between projected total degree-credit enrollment in 4-year institutions shown in table 7 and resident graduate enrollment in 4-year institutions shown in table 17. Undergraduate and first-professional enrollment in 4-year institutions includes, therefore, an unknown amount of extension graduate enrollment.

The projection of undergraduate degree-credit enrollment in 2-year institutions of higher education is the same as that shown in table 8.

Veterans attending college through aid provided by the Veterans' Readjustment Benefits Act of 1966 are included in the trend projection.

For further methodological details, see appendix A, table A-1.

NOTE: Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Opening (Fall) Enrollment in Higher Education," annually, 1958 through 1968; (2) data from "Resident and Extension Enrollment in Institutions of Higher Education," fall 1966 (unpublished); and (3) "Resident and Extension Enrollment in Institutions of Higher Education," biennially, first term 1957 through 1963.

Table 14.—First-time degree-credit enrollment in all institutions of higher education, by sex, by attendance status, and by institutional control: United States, fall 1958 to 1978

[Resident and extension opening fall enrollment]

Year (fall)	First-time degree-credit enrollment ¹	Sex		Attendance status ²		Control	
		Men	Women	Full-time	Part-time	Public	Private
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1958	775,308	465,422	309,886	631,000	145,000	474,621	300,687
1959	821,520	487,890	333,630	672,000	150,000	501,543	319,977
1960	923,069	539,512	383,557	758,000	165,000	577,744	345,325
1961	1,018,361	591,913	426,448	840,000	178,000	648,236	370,125
1962	1,030,554	598,099	432,455	849,000	181,000	669,728	360,826
1963	1,046,417	604,292	442,135	864,000	182,000	686,861	359,556
1964	1,224,840	701,524	523,316	1,014,000	210,000	814,664	410,176
1965	1,441,822	829,215	612,607	1,192,000	250,000	990,021	451,801
1966 ³	1,378,000	787,000	591,000	1,140,000	238,000	947,000	430,000
1967 ³	1,439,000	814,000	626,000	1,182,000	257,000	1,024,000	415,000
1968	1,629,751	924,580	705,171	1,328,329	301,422	1,200,784	428,967
PROJECTED⁴							
1969	1,729,000	976,000	753,000	1,406,000	323,000	1,288,000	440,000
1970	1,836,000	1,031,000	805,000	1,489,000	346,000	1,383,000	453,000
1971	1,940,000	1,083,000	857,000	1,571,000	369,000	1,476,000	464,000
1972	2,037,000	1,133,000	904,000	1,646,000	391,000	1,565,000	473,000
1973	2,127,000	1,178,000	949,000	1,715,000	411,000	1,648,000	479,000
1974	2,219,000	1,224,000	995,000	1,786,000	432,000	1,733,000	485,000
1975	2,306,000	1,267,000	1,039,000	1,853,000	453,000	1,816,000	490,000
1976	2,373,000	1,298,000	1,074,000	1,904,000	469,000	1,882,000	491,000
1977	2,446,000	1,334,000	1,112,000	1,959,000	486,000	1,953,000	492,000
1978	2,539,000	1,383,000	1,156,000	2,032,000	508,000	2,041,000	498,000

¹ Beginning in 1966, some students previously reported as nondegree-credit are included with degree-credit enrollment.

² Estimated prior to 1968. See appendix A, "Estimation Methods."

³ The breakdown between degree-credit and non-degree-credit enrollment is estimated. See appendix A, "Estimation Methods."

⁴ The projection of first-time opening fall degree-credit enrollment in all institutions of higher education by sex and by institutional control is based on the assumption that first-time enrollment, expressed as a percentage of the population averaging 18 years of age, will follow the 1958-68 trend to 1978 in each category of enrollment.

Veterans attending college through aid provided by the Veterans' Readjustment Benefits Act of 1966 are included in the trend projections.

For further methodological details, see appendix A, table A-1.

NOTE: Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Enrollment data from U.S. Department of Health, Education, and Welfare, Office of Education circulars: (1) "Opening (Fall) Enrollment in Higher Education," annually, 1958 through 1968; (2) data from "Resident and Extension Enrollment in Institutions of Higher Education," fall 1966 (unpublished); and (3) "Resident and Extension Enrollment in Institutions of Higher Education," biennially, first term 1957 through 1961.

Population on which projections are based is shown in appendix B, table B-2.

Table 15.—First-time degree-credit enrollment in 4-year institutions of higher education, by sex, by attendance status, and by institutional control: United States, fall 1958 to 1978

[Resident and extension opening fall enrollment]

Year (fall)	First-time degree-credit enrollment ¹	Sex		Attendance status ²		Control	
		Men	Women	Full-time	Part-time	Public	Private
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1958	600,359	357,678	242,981	517,000	84,000	328,242	272,117
1959	639,841	376,633	263,208	555,000	85,000	348,150	291,691
1960	709,093	410,942	298,151	620,000	90,000	395,884	313,209
1961	774,584	446,248	328,336	681,000	93,000	438,135	336,449
1962	770,114	441,936	328,178	680,000	90,000	445,191	324,923
1963	774,744	441,220	333,524	687,000	88,000	452,104	322,640
1964	902,599	508,117	394,482	802,000	100,000	539,251	363,348
1965	1,041,025	587,789	453,236	929,000	112,000	642,233	398,792
1966 ³	989,000	555,000	434,000	884,000	105,000	610,000	379,000
1967 ³	992,000	548,000	444,000	889,000	103,000	628,000	364,000
1968	1,076,077	591,443	484,634	966,094	109,983	705,891	370,186
PROJECTED⁴							
1969	1,130,000	616,000	514,000	1,014,000	116,000	752,000	378,000
1970	1,189,000	643,000	546,000	1,067,000	122,000	803,000	386,000
1971	1,245,000	667,000	578,000	1,117,000	128,000	852,000	393,000
1972	1,296,000	690,000	606,000	1,163,000	133,000	898,000	398,000
1973	1,342,000	709,000	632,000	1,204,000	138,000	941,000	400,000
1974	1,389,000	729,000	660,000	1,246,000	143,000	986,000	403,000
1975	1,432,000	746,000	686,000	1,285,000	148,000	1,028,000	404,000
1976	1,463,000	757,000	706,000	1,312,000	151,000	1,061,000	402,000
1977	1,498,000	770,000	728,000	1,343,000	155,000	1,097,000	401,000
1978	1,544,000	791,000	753,000	1,385,000	160,000	1,142,000	402,000

¹ Beginning in 1966, some students previously reported as nondegree-credit are included with degree-credit enrollment.

² Estimated prior to 1968. See appendix A, "Estimation Methods."

³ The breakdown between degree-credit and non-degree-credit enrollment is estimated. See appendix A, "Estimation Methods."

⁴ The projection of first-time opening fall degree-credit enrollment in 4-year institutions of higher education by sex and by institutional control is based on the assumption that first-time enrollment, expressed as a percentage of the population averaging 18 years of age, will follow the 1958-68 trend to 1978 in each category of enrollment.

Veterans attending college through aid provided by the Veterans' Readjustment Benefits Act of 1966 are included in the trend projections.

For further methodological details, see appendix A, table A-1.

NOTE: Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Enrollment data from U.S. Department of Health, Education, and Welfare, Office of Education circulars: (1) "Opening (Fall) Enrollment in Higher Education," annually, 1958 through 1968; (2) data from "Resident and Extension Enrollment in Institutions of Higher Education," fall 1966 (unpublished); and (3) "Resident and Extension Enrollment in Institutions of Higher Education," biennially, first term 1957 through 1961.

Population on which projections are based is shown in appendix B, table B-2.

Table 16.—First-time degree-credit enrollment in 2-year institutions of higher education, by sex, by attendance status, and by institutional control: United States, fall 1958 to 1978

[Resident and extension opening fall enrollment]

Year (fall)	First-time degree-credit enrollment ¹	Sex		Attendance status ²		Control	
		Men	Women	Full-time	Part-time	Public	Private
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1958	174,949	107,744	67,205	114,000	61,000	146,379	28,570
1959	181,679	111,257	70,422	117,000	65,000	153,393	28,286
1960	213,976	128,570	85,406	139,000	75,000	181,860	32,116
1961	243,777	145,665	98,112	159,000	85,000	210,101	33,676
1962	260,440	156,163	104,277	169,000	91,000	224,537	35,903
1963	271,673	163,062	106,611	178,000	94,000	234,757	36,916
1964	322,241	193,407	128,834	212,000	110,000	275,413	46,828
1965	400,797	241,426	159,371	263,000	138,000	347,788	53,009
1966 ³	389,000	232,000	157,000	255,000	134,000	337,000	51,000
1967 ³	447,000	266,000	181,000	292,000	155,000	396,000	51,000
1968	553,674	333,137	220,537	362,235	191,439	494,893	58,731
PROJECTED⁴							
1969	599,000	360,000	239,000	391,000	207,000	536,000	63,000
1970	647,000	388,000	259,000	423,000	225,000	580,000	67,000
1971	695,000	416,000	279,000	454,000	242,000	624,000	71,000
1972	741,000	443,000	298,000	483,000	258,000	666,000	75,000
1973	785,000	469,000	316,000	512,000	273,000	706,000	79,000
1974	830,000	495,000	335,000	541,000	289,000	748,000	82,000
1975	874,000	520,000	353,000	569,000	305,000	788,000	86,000
1976	909,000	541,000	368,000	592,000	318,000	821,000	89,000
1977	948,000	564,000	384,000	617,000	331,000	856,000	92,000
1978	995,000	592,000	402,000	647,000	348,000	899,000	96,000

¹Beginning in 1966, some students previously reported as nondegree-credit are included with degree-credit enrollment.

²Estimated prior to 1968. See appendix A, "Estimation Methods."

³The breakdown between degree-credit and non-degree-credit enrollment is estimated. See appendix A, "Estimation Methods."

⁴The projection of first-time opening fall degree-credit enrollment in 2-year institutions of higher education by sex and by institutional control is based on the assumption that first-time enrollment, expressed as a percentage of the population averaging 18 years of age, will follow the 1958-68 trend to 1978 in each category of enrollment.

Veterans attending college through aid provided by the Veterans' Readjustment Benefits Act of 1966 are included in the trend projections.

For further methodological details, see appendix A, table A-1.

NOTE: Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Enrollment data from U.S. Department of Health, Education, and Welfare, Office of Education circulars: (1) "Opening (Fall) Enrollment in Higher Education," annually, 1958 through 1968; (2) data from "Resident and Extension Enrollment in Institutions of Higher Education," fall 1966 (unpublished); and (3) "Resident and Extension Enrollment in Institutions of Higher Education," biennially, first term 1957 through 1961.

Population on which projections are based is shown in appendix B, table B-2.

Table 17.—Estimated graduate enrollment in 4-year institutions of higher education, by sex, by attendance status, and by institutional control: United States, fall 1958 to 1978¹

[Resident opening fall enrollment—in thousands]

Year (fall)	Resident graduate degree-credit enrollment ¹	Sex		Attendance status ¹		Control	
		Men	Women	Full-time	Part-time	Public	Private
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1958	312	225	87	124	189	161	151
1959	331	237	94	131	200	172	159
1960	356	253	103	143	213	187	169
1961	386	273	113	162	224	208	179
1962	422	298	124	177	245	234	189
1963	464	327	137	188	276	267	196
1964	517	363	154	214	303	305	212
1965	582	409	173	254	328	352	230
1966	624	436	188	278	346	380	244
1967	688	453	236	312	377	435	254
1968	768	488	280	335	433	507	261
PROJECTED²							
1969	798	502	296	347	451	535	263
1970	844	526	318	367	477	576	269
1971	900	555	345	390	510	622	278
1972	963	588	375	417	547	675	289
1973	1,028	622	406	444	594	729	299
1974	1,092	655	437	471	622	784	309
1975	1,157	688	469	497	659	839	317
1976	1,219	719	500	523	696	894	325
1977	1,278	748	530	547	730	947	331
1978	1,339	778	561	573	766	1,001	337

¹For method of estimating total graduate enrollment and graduate enrollment by attendance status, see appendix A, "Estimation Methods."

²The projection of graduate enrollment by sex and by control of institution is based on the assumption that in each enrollment category the estimated proportion of total enrollment at the graduate level will continue the 1958-68 trend to 1978.

The projection of graduate enrollment by attendance status is based on the assumption that in each enrollment category the ratio of full-time graduate enrollment to total graduate enrollment, estimated for 1968, with minor adjustments, will remain constant to 1978.

Veterans attending college through aid provided by the Veterans' Readjustment Benefits Act of 1966 are included in the trend projection.

For further methodological details, see appendix A, table A-1.

NOTE: Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Opening (Fall) Enrollment in Higher Education," annually 1958 through 1968; (2) data from "Resident and Extension Enrollment in Institutions of Higher Education," fall 1966 (unpublished); (3) "Resident and Extension Enrollment in Institutions of Higher Education," biennially, first term 1957 through 1963; (4) "Students Enrolled for Advanced Degrees in Selected Fields of Study, Fall 1968: Advance Estimates, Preliminary, March 3, 1969"; and (5) "Students Enrolled for Advanced Degrees: Part A — Summary Data, Fall 1967."

Table 18.—Estimated undergraduate and first-professional degree-credit enrollment in all institutions of higher education, by sex, by attendance status, and by institutional control: United States, fall 1958 to 1978¹

[Resident and extension opening fall enrollment—in thousands]

Year (fall)	Undergraduate degree-credit enrollment	Sex		Attendance status		Control	
		Men	Women	Full-time	Part-time	Public	Private
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1958	2,924	1,873	1,051	2,091	833	1,733	1,192
1959	3,046	1,924	1,122	2,183	863	1,812	1,234
1960	3,227	2,004	1,223	2,323	904	1,929	1,298
1961	3,474	2,135	1,339	2,552	922	2,121	1,353
1962	3,753	2,290	1,463	2,725	1,028	2,340	1,413
1963	4,031	2,446	1,585	2,881	1,151	2,581	1,450
1964	4,433	2,670	1,764	3,204	1,229	2,875	1,559
1965	4,945	2,966	1,979	3,656	1,289	3,273	1,672
1966	5,304	3,141	2,163	3,954	1,351	3,560	1,744
1967	5,703	3,369	2,334	4,243	1,460	3,914	1,789
1968	6,160	3,631	2,529	4,603	1,557	4,385	1,775
PROJECTED¹							
1969	6,289	3,685	2,603	4,693	1,596	4,520	1,769
1970	6,533	3,807	2,726	4,869	1,663	4,738	1,795
1971	6,843	3,965	2,878	5,094	1,749	5,005	1,838
1972	7,193	4,145	3,048	5,349	1,844	5,304	1,889
1973	7,544	4,327	3,217	5,603	1,940	5,605	1,939
1974	7,871	4,493	3,379	5,840	2,031	5,890	1,981
1975	8,186	4,651	3,535	6,068	2,118	6,168	2,018
1976	8,474	4,795	3,679	6,276	2,199	6,426	2,048
1977	8,728	4,917	3,811	6,457	2,271	6,659	2,069
1978	8,979	5,040	3,939	6,637	2,342	6,891	2,088

¹ The estimation and projection of undergraduate degree-credit enrollment in all institutions, by sex, attendance status, and institutional control, is calculated by summing the above estimated and projected categories of degree-credit enrollment in 2-year institutions (table 8) and corresponding categories of undergraduate degree-credit enrollment in 4-year institutions (table 19).

For further methodological details, see appendix A, table A-1.

NOTE: Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Opening (Fall) Enrollment in Higher Education," annually, 1958 through 1968; (2) data from "Resident and Extension Enrollment in Institutions of Higher Education," fall 1966 (unpublished); (3) "Resident and Extension Enrollment in Institutions of Higher Education," biennially, first term 1957 through 1963; (4) "Students Enrolled for Advanced Degrees in Selected Fields of Study, Fall 1968: Advance Estimates, Preliminary, March 3, 1969"; and (5) "Students Enrolled for Advanced Degrees: Part A—Summary Data, Fall 1967."

Table 19.—Estimated undergraduate and first-professional degree-credit enrollment in 4-year institutions of higher education, by sex, by attendance status, and by institutional control: United States, fall 1958 to 1978¹

[Resident and extension opening fall enrollment—in thousands]

Year (fall)	Undergraduate degree-credit enrollment	Sex		Attendance status		Control	
		Men	Women	Full-time	Part-time	Public	Private
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1958	2,539	1,625	914	1,876	662	1,402	1,137
1959	2,636	1,664	972	1,957	679	1,456	1,181
1960	2,776	1,722	1,054	2,077	699	1,537	1,239
1961	2,956	1,815	1,141	2,258	699	1,665	1,291
1962	3,163	1,924	1,239	2,408	755	1,821	1,342
1963	3,406	2,059	1,347	2,553	853	2,030	1,377
1964	3,722	2,230	1,492	2,808	914	2,254	1,469
1965	4,103	2,444	1,659	3,160	943	2,535	1,569
1966	4,360	2,564	1,796	3,390	969	2,721	1,639
1967	4,628	2,716	1,912	3,626	1,002	2,949	1,680
1968	4,871	2,849	2,022	3,864	1,007	3,216	1,655
PROJECTED¹							
1969	4,948	2,873	2,075	3,925	1,023	3,304	1,644
1970	5,116	2,951	2,166	4,058	1,058	3,452	1,664
1971	5,334	3,055	2,280	4,231	1,103	3,636	1,698
1972	5,583	3,175	2,407	4,428	1,155	3,841	1,741
1973	5,829	3,296	2,534	4,624	1,206	4,048	1,782
1974	6,057	3,403	2,654	4,804	1,253	4,242	1,815
1975	6,274	3,505	2,769	4,976	1,298	4,430	1,844
1976	6,469	3,595	2,875	5,131	1,339	4,603	1,866
1977	6,638	3,667	2,971	5,264	1,374	4,758	1,879
1978	6,803	3,740	3,063	5,394	1,408	4,911	1,892

¹The estimation and projection of undergraduate degree-credit enrollment in 4-year institutions, by sex, attendance status, and institutional control, is calculated by subtracting estimated and projected graduate enrollment in the above categories (table 17) from corresponding categories of estimated and projected total degree-credit enrollment in 4-year institutions (table 7).

For further methodological details, see appendix A, table A-1.

NOTE: Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education,

and Welfare, Office of Education publications: (1) "Opening (Fall) Enrollment in Higher Education," annually, 1958 through 1968; (2) data from "Resident and Extension Enrollment in Institutions of Higher Education," fall 1966 (unpublished); (3) "Resident and Extension Enrollment in Institutions of Higher Education," biennially, first term 1957 through 1963; (4) "Students Enrolled for Advanced Degrees in Selected Fields of Study, Fall 1968: Advance Estimates, Preliminary, March 3, 1969"; and (5) "Students Enrolled for Advanced Degrees: Part A — Summary Data, Fall 1967."

CHAPTER III

High School Graduates and Earned Degrees

Frances E. Ryan and Nadine C. Brown

High school graduates (table 20)

The number of high school graduates increased from 1.6 million in the school year 1958-59 to an estimated 2.8 million in 1968-69 and is expected to increase to 3.8 million in 1978-79. These figures include graduates from all regular public and nonpublic high schools in the United States and, unlike the data on enrollments in chapter II, graduates from the following schools not in the regular school system: Federal schools for Indians, schools on Federal installations, residential schools for exceptional children, and subcollegiate departments of colleges and universities. These schools represent about 1 percent of the public school graduates and about 3 percent of the nonpublic school graduates.

Two main sources form the basis for the figures quoted above. Graduates of regular public schools are reported each fall by the State departments of education. Graduates of regular nonpublic schools are reported in surveys of the schools by the Office of Education. Other graduates included above are estimated from various auxiliary sources.

Projected high school graduates by sex and by control of school are shown in table 20. The projection of public high school graduates to 1978-79 is based on the assumption that, for boys and girls separately, high school graduates expressed as a percentage of the 18-year-old population will follow the 1958-59 to 1967-68 trend. The projection of nonpublic high school graduates assumes little or no increase in the number of graduates in line with similar assumptions regarding nonpublic enrollments.

Girls make up slightly more than half of the graduates at present, but the number of boys graduating has been increasing faster than the number of girls. By the early seventies, the number of boys graduating is expected to exceed the number of girls. The percentage of the 18-year-old population graduating will still be slightly higher for girls.

Earned degrees, by level and sex (table 21)

Earned-degree reports from individual degree-granting institutions of higher education are received each fall by the Office of Education. These provide information on the number of degrees granted by level and sex and by field of concentration. They cover degrees granted during the academic year ending in June and include degrees earned in the prior summer, awarded too late to be included with the June graduates of that year.

Three principal levels have been reported and projected: bachelor's, including first-professional degrees; master's degrees; and doctorates. Since 1960-61, first-professional degrees have been reported separately from bachelor's degrees, but the definitions of what constitutes a first-professional degree have not been uniform throughout the period. For that reason, no attempt has been made to project these degrees separately. (See "Changes in Degree-Level Definitions," appendix A, for a comparison of these definitions.) Recently, however, a stable definition of what constitutes a first-professional degree has been established, and reporting will become reasonably uniform in the future. It is hoped that by next year a workable basis for separating these degrees from bachelor's degrees reported in the past can be developed and that separate projections can be made for all first-professional degrees and master's degrees.

In the present report, ambiguities in the definitions of first-professional degrees in library science and social work have been eliminated, and comparable series for removing these degrees from the first level and adding them to master's degrees have been established. This made it possible to include them with master's degrees in the present report, even though in the past

they were reported with first-professional degrees. The broken series shown in the tables last year has thus been eliminated. For methods of estimating master's degrees in library science and social work, see appendix A, "Estimation Methods."

Based on reports of degrees through 1967-68, the total number of bachelor's and first-professional degrees granted each year rose from 380,000 in 1958-59 to an estimated 755,000 in 1968-69 and is expected to be 1,056,000 in 1978-79; the number of master's degrees rose from 72,500 in 1958-59 to an estimated 188,600 in 1968-69, and is expected to reach 368,400 in 1978-79; and the annual output of doctorates increased from 9,400 in 1958-59 to an estimated 26,100 in 1968-69, and is expected to be 57,000 in 1978-79.

The projected degrees by level and sex are shown in table 21. Each level was projected separately for men and for women. The main assumption underlying these projections is that the relationships between college-age population and the number of degrees granted at each of the three levels during the period 1969-70 to 1978-79 will continue the 1958-59 through 1967-68 trend. The trend is for an increasing percentage of the college-age population to complete undergraduate requirements and go on for advanced degrees.

In the last 2 years, this trend has accelerated and projections of degrees by level—especially master's and doctor's degrees—based on the trend from 1957-58 thru 1965-66 (the last reported year available when the 1968 projections were made) have fallen far short of predicting the actual number of degrees that were granted.

Two additional annual reports on earned degrees conferred (1966-67 and 1967-68) were available this year for making projections. In addition to showing the increases in master's degrees and doctorates greater than were projected last year, the 1966-67 and 1967-68 reports contained new definitions that reclassified master's degrees that had formerly been considered first-professional degrees and added them to master's degree totals. The change widened still further the difference between reported master's degrees and the 1968 projections of these degrees.

This year, a different population base was used for projecting degrees. This population is expected to be more sensitive to changes in the size of the population groups which contribute the most students as candidates for degrees. See appendix A, "Estimation Methods: Composite Population Estimates."

Earned degrees, by level and field (tables 22-25)

The fields presented are divided into two main groups at each level. These groups are (a) natural sciences and related professions and (b) social sciences, humanities, and related professions. The fields included in both groups and the percentage distribution of degrees by level and field for the years 1958-59, 1968-69, and 1978-79 are shown in table 22.

The projected number of earned degrees by field are shown in tables 23, 24, and 25, each for one of the three levels. These projections (with the exception of first-professional degrees in the health fields) are based on the assumption that the percentage distribution of degrees by field for each level will continue the 1958-59 to 1967-68 trend. For example, if the proportion of total degrees granted in a particular field has been increasing, it is assumed that it will continue to increase. The proportions thus projected, which are summarized in table 22, were applied to the projected total number of degrees for the corresponding level shown in table 21. Separate projections were made for men and for women.

First-level degrees in the health fields were projected by the Health Manpower Statistics Branch, Health Statistics Division, National Center for Health Statistics. They were based on estimates of expanding facilities for training, together with data on student applications in excess of present capacity. These subject fields were eliminated from the Office of Education data before its projections were made. The projected health fields were included in the final table.

First-level degrees, by field (tables 22, 23)

In 1958-59, almost one-third of all first-level degrees (bachelor's and first-professional degrees) were awarded in the fields of study constituting the natural sciences and related professions. This proportion dropped to less than one-fourth in 1968-69, with of course a proportionate increase for the social sciences, humanities, and related professions. The total number of first-level degrees granted in the natural sciences rose from 112,000 in 1958-59 to an estimated 171,000 in 1968-69 and is expected to be 237,000 in 1978-79. First-level degrees granted in the social sciences, humanities, and related professions rose from 268,000 in 1958-59 to an estimated 584,000 in 1968-69 and are expected to total 819,000 in 1978-79.

Numbers of first-level degrees by the field in which they were awarded are shown in table 23. While total natural sciences and total social sciences and humanities were each projected to rise approximately 40 percent between 1968-69 and 1978-79, the combined fields of engineering and physical sciences were projected, on the basis of 1958-59 to 1967-68 trends, to rise only 8 percent.

Second-level degrees, by field (tables 22, 24)

The proportion of second-level degrees (master's) awarded in the natural sciences and related professions is expected to remain about the same to 1978-79 at a little less than one-fourth of all second-level degrees. The total number of these degrees awarded in the natural sciences and related professions rose from 17,000 in 1958-59 to an estimated 42,000 in 1968-69 and is expected to be 89,000 by 1978-79. Second-level degrees in the group of fields composed of the social sciences, humanities, and related professions rose from 55,000 in 1958-59 to an estimated 147,000 in 1968-69 and are expected to rise to 279,000 by 1978-79.

Second-level degrees by the fields in which they were awarded are shown in table 24. These degrees are projected to rise substantially in nearly all fields, but master's degrees in the physical sciences are projected to rise less than in any other field except philosophy and religion together, and education.

Master's degrees in education are expected to increase only moderately between 1968-69 and 1978-79, mainly because the number of degrees in education does not reflect the total number of persons preparing to teach. Prospective teachers earning degrees with majors in subject fields such as mathematics, sciences, English, and history are counted in the appropriate subject fields rather than in education. The actual number of prospective teachers with majors in subject fields has shown large increases recently.

Doctor's degrees, by field (tables 22, 25)

Almost one-half of all doctor's (except first-professional) degrees awarded in 1968-69 were in the subject fields which make up the natural sciences and related professions. This proportion is expected to rise to 53 percent by 1978-79. The remaining doctor's will be awarded in the group classified as social sciences, humanities, and related professions. The total number of doctor's granted in the natural sciences and related professions rose from 4,400 in 1958-59 to an estimated 12,800 in 1968-69 and is expected to be 30,440 in 1978-79. Doctor's degrees granted in the social sciences, humanities, and related professions rose from 4,960 in 1958-59 to an estimated 13,300 in 1968-69 and are expected to be 26,560 by 1978-79.

Doctor's degrees by area of specialization are shown in table 25. The two fastest growing subject fields were engineering and mathematics including statistics. At this level, in contrast to the first- and second-degree levels, increases in the natural science fields (mainly in mathematics and engineering) were greater than those in the social sciences and humanities.

Table 20.—High school graduates, by sex and by institutional control:
United States, 1958-59 to 1978-79

[In thousands]

Year	Total high school graduates ¹	Sex		Control	
		Boys	Girls	Public	Private (estimated)
		(3)	(4)	(5)	(6)
(1)	(2)				
1958-59	1,639	790	849	1,447	192
1959-60	1,864	898	966	1,633	² 231
1960-61	1,971	958	1,013	1,732	239
1961-62	1,925	941	984	1,685	240
1962-63	1,950	959	991	1,717	² 233
1963-64	2,290	1,123	1,167	2,015	² 275
1964-65	2,665	1,314	1,351	2,366	² 298
1965-66	2,672	1,326	1,346	2,374	298
1966-67	2,680	1,332	1,348	2,381	298
1967-68	2,702	1,341	1,360	2,402	300
1968-69 ³	2,839	1,408	1,431	2,529	310
PROJECTED⁴					
1969-70	2,969	1,479	1,490	2,649	320
1970-71	3,094	1,542	1,552	2,774	320
1971-72	3,205	1,601	1,604	2,885	320
1972-73	3,305	1,654	1,651	2,985	320
1973-74	3,408	1,707	1,701	3,088	320
1974-75	3,504	1,757	1,747	3,184	320
1975-76	3,571	1,793	1,778	3,251	320
1976-77	3,646	1,833	1,812	3,326	320
1977-78	3,748	1,891	1,857	3,428	320
1978-79	3,773	1,908	1,865	3,453	320

¹Includes regular public and nonpublic schools, residential schools for exceptional children, sub-collegiate departments of institutions of higher education, Federal schools for Indians, and schools on Federal installations. Excludes equivalency certificates. More than 99 percent of public school graduates and 97 percent of nonpublic school graduates are graduates of regular day schools.

²Actual data from Office of Education surveys.

³Estimated.

⁴The projection of public high school graduates is based on the assumptions: (1) The number of boys graduating, expressed as a percentage of the number of boys in the population 18 years of age, will follow the 1958-59 to 1967-68 trend; and (2) the number of girls graduating, expressed as a percentage of the number of girls in the population 18 years of age, will follow the 1958-59 to 1967-68 trend.

The projection of nonpublic high school graduates is based on the assumptions: (1) the number of nonpublic high school graduates will remain approximately the same throughout the projection

period; and (2) the percent of boys among nonpublic high school graduates (48.1 percent in 1964-65) will remain constant to 1978-79.

⁵For further methodological details, see appendix A, table A-2.

NOTE: Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: High school graduate data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of Public Schools," annually, fall 1964 through 1968; (2) "Statistics of State School Systems," 1957-58 and 1959-60; (3) "Statistics of Nonpublic Elementary and Secondary Schools, 1965-66"; and (4) "Nonpublic School Enrollments in Grades 9-12, Fall 1964, and Graduates, 1963-64."

**Table 21.—Earned degrees, by level and by sex of student:
United States, 1958-59 to 1978-79**

Year	Bachelor's and first-professional degrees ¹			Master's degrees ¹			Doctor's degrees (except first-professional) ²		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1958-59 . . .	379,931	252,517	127,414	72,532	48,360	24,172	9,360	8,371	989
1959-60 . . .	389,183	252,996	136,187	77,692	51,965	25,727	9,829	8,801	1,028
1960-61 . . .	395,203	252,976	142,227	81,735	55,368	26,367	10,575	9,463	1,112
1961-62 . . .	414,275	259,376	154,899	88,426	59,841	28,585	11,622	10,377	1,245
1962-63 . . .	443,502	271,721	171,781	95,486	64,359	31,127	12,822	11,448	1,374
1963-64 . . .	494,174	296,501	197,673	105,530	70,514	35,016	14,490	12,955	1,535
1964-65 . . .	530,054	316,088	213,966	117,101	77,742	39,359	16,467	14,692	1,775
1965-66 . . .	551,040	328,853	222,187	140,555	93,063	47,492	18,237	16,121	2,116
1966-67 . . .	590,548	353,351	237,197	157,706	103,090	54,616	20,617	18,163	2,454
1967-68 . . .	666,710	390,507	276,203	176,749	113,519	63,230	23,089	20,183	2,906
1968-69 ³ . .	755,000	434,000	321,000	188,600	121,600	67,000	26,100	22,800	3,300
PROJECTED⁴									
1969-70 . . .	772,000	444,000	328,000	211,400	135,100	76,300	29,000	25,400	3,600
1970-71 . . .	801,000	459,000	342,000	244,300	155,600	88,700	30,800	27,100	3,800
1971-72 . . .	825,000	470,000	355,000	255,800	164,600	91,100	33,200	29,200	4,000
1972-73 . . .	859,000	484,000	375,000	270,700	175,500	95,100	37,200	32,600	4,600
1973-74 . . .	890,000	494,000	396,000	284,500	185,500	99,000	43,100	37,700	5,400
1974-75 . . .	928,000	509,000	419,000	301,700	197,000	104,200	45,600	40,000	5,600
1975-76 . . .	963,000	522,000	440,000	317,500	206,800	110,700	48,700	42,900	5,900
1976-77 . . .	997,000	537,000	460,000	336,100	218,800	117,300	51,600	45,500	6,100
1977-78 . . .	1,029,000	549,000	480,000	354,400	230,800	123,600	55,000	48,400	6,500
1978-79 . . .	1,056,000	562,000	494,000	368,400	240,300	128,100	57,000	50,200	6,800

¹ Beginning in 1965-66, all master's degrees, whether considered first-professional or not are reported as master's degrees rather than first-professional degrees.

The following specified degrees are reported as first-professional: Dentistry (D.D.S. or D.M.D.), law (LL.B. or J.D.), medicine (M.D.), theology (B.D.), veterinary medicine (D.V.M.), chiropody or podiatry (D.S.C. or D.P.), optometry (O.D.), and osteopathy (D.O.).

² Doctor's degrees include the Ph.D. in any field as well as such degrees as doctor of education, doctor of juridical science, and doctor of public health (preceded by professional degree in medicine or sanitary engineering). They exclude degrees defined as first-professional, such as doctor of jurisprudence, doctor of medicine, doctor of dental surgery, doctor of veterinary medicine, and doctor of divinity.

³ Estimated.

⁴ The projection of earned degrees is based on the assumption that the percentage of degrees to population for each level and sex will continue

the 1958-59 to 1967-68 trends. (A composite population representative of age at graduation was used as base for projecting with a timelag of 2 years from the bachelor's degree to the master's degree and of 3 additional years from the master's degree to the doctor's degree. For population used and estimation details, see appendix B, table B-2).

For further methodological details, see appendix A, table A-2.

NOTE: Data include 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Degree data from U.S. Department of Health, Education, and Welfare, Office of Education publications on "Earned Degrees Conferred by Institutions of Higher Education," 1958-59 through 1967-68.

Table 22.—Percentage distribution of earned degrees, by field of study and level:
United States, 1958-59 to 1978-79

A. NATURAL SCIENCES AND RELATED PROFESSIONS

Year	Total number of degrees, all fields	Total natural sciences	Mathematics and statistics ¹	Engineering	Physical sciences ²	Biological sciences ³	Agriculture and forestry	Health professions ⁴	Science, general program
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
BACHELOR'S AND FIRST-PROFESSIONAL									
1958-59	379,931	29.4	2.4	10.0	4.1	4.0	2.1	6.4	0.5
1968-69 ⁵	755,000	22.7	3.8	5.2	2.8	4.9	1.3	4.3	.4
1978-79 ⁶	1,056,000	22.4	5.3	4.5	1.7	5.8	.6	4.1	.4
MASTER'S									
1958-59	72,532	23.6	2.1	9.3	4.4	2.8	2.2	2.4	.5
1968-69 ⁵	188,600	22.3	3.6	8.7	3.0	3.2	1.2	2.0	.6
1978-79 ⁶	368,400	24.2	4.8	9.9	2.1	3.8	1.1	1.6	.8
DOCTOR'S (except first-professional)									
1958-59	9,360	47.0	3.0	7.6	19.4	11.2	4.1	1.6	.1
1968-69 ⁵	26,100	49.0	4.4	13.4	15.3	12.0	2.8	1.0	.0
1978-79 ⁶	57,000	53.4	6.4	20.8	12.8	10.9	1.7	.7	.1

B. SOCIAL SCIENCES, HUMANITIES, AND RELATED PROFESSIONS

Year	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	Total number of degrees	Total social sciences and humanities	Fine arts ⁷	Philosophy and religion ⁸	English and journalism	Foreign languages ⁹	Psychology	Social sciences ¹⁰	Education	Library science ¹¹	Social work ¹¹	Other ¹²
BACHELOR'S AND FIRST-PROFESSIONAL												
1958-59	379,931	70.6	5.7	1.8	5.5	1.2	1.9	12.7	18.3	0.1	0.1	23.3
1968-69 ⁵	755,000	77.3	6.4	1.4	8.2	3.1	3.7	18.7	16.0	.1	.4	19.1
1978-79 ⁶	1,056,000	77.6	6.3	1.0	10.7	5.3	4.9	23.2	12.0	.1	.4	13.7
MASTERS												
1958-59	72,532	76.4	6.2	1.3	3.9	1.5	1.7	7.6	39.4	2.2	2.4	10.1
1968-69 ⁵	188,600	77.7	6.1	1.0	5.0	3.0	2.5	9.4	30.9	3.1	3.0	13.8
1978-79 ⁶	368,400	75.8	6.0	.6	6.7	4.9	3.3	12.2	18.7	3.4	3.3	16.7
DOCTOR'S (except first-professional)												
1958-59	9,360	53.0	3.8	2.2	4.1	2.6	6.8	12.9	15.9	.1	.3	4.3
1968-69 ⁵	26,100	51.0	3.0	2.2	4.4	3.1	6.3	12.3	15.7	.1	.3	3.7
1978-79 ⁶	57,000	46.6	2.4	1.5	4.6	3.4	6.2	11.1	13.6	.1	.4	3.4

See footnotes at end of table 25.

Table 23.—Earned bachelor's and first-professional degrees, by field of study:
United States, 1958-59 to 1978-79

A NATURAL SCIENCES AND RELATED PROFESSIONS

Year	Total natural sciences	Mathematics and statistics ¹	Engineering	Physical sciences ²	Biological sciences ³	Agriculture and forestry	Health professions ⁴	Science, general program
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1958-59	111,654	8,980	37,988	15,409	15,039	8,128	24,201	1,909
1959-60	114,706	11,399	37,679	16,007	15,576	7,484	24,455	2,106
1960-61	113,695	13,097	35,698	15,452	16,060	6,733	24,634	2,021
1961-62	115,580	14,570	34,551	15,851	16,915	6,789	24,572	2,232
1962-63	119,867	16,078	33,285	16,215	19,114	6,940	25,776	2,489
1963-64	128,701	18,624	35,013	17,456	22,723	7,115	25,259	2,511
1964-65	136,841	19,547	36,589	17,861	25,167	7,663	27,356	2,658
1965-66	140,531	20,066	35,615	17,129	26,918	8,063	28,171	2,569
1966-67	144,443	21,429	35,954	17,739	28,849	8,829	29,160	2,483
1967-68	155,900	23,972	37,368	19,380	31,826	9,342	31,175	2,837
1968-69 ⁵	171,480	28,570	39,330	21,070	36,930	9,940	32,460	3,170
PROJECTED ⁶								
1969-70	176,400	30,480	39,900	20,740	38,580	9,620	33,880	3,190
1970-71	183,490	32,920	40,900	20,660	40,830	9,380	35,560	3,250
1971-72	188,830	35,220	41,540	20,360	42,850	9,050	36,510	3,290
1972-73	195,870	38,020	42,420	20,210	45,360	8,740	37,740	3,370
1973-74	202,190	40,740	42,940	19,860	47,680	8,360	39,180	3,420
1974-75	209,650	43,900	43,910	19,680	50,510	8,040	40,100	3,510
1975-76	216,470	46,980	44,720	19,380	53,180	7,670	40,970	3,570
1976-77	223,730	50,210	45,680	19,100	56,010	7,310	41,800	3,640
1977-78	230,370	53,350	46,360	18,670	58,660	6,880	42,760	3,690
1978-79	236,530	56,330	47,100	18,200	61,180	6,440	43,540	3,720

B. SOCIAL SCIENCES, HUMANITIES, AND RELATED PROFESSIONS

Year	Total social sciences and humanities	Fine arts ⁷	Philosophy and religion ⁸	English and journalism	Foreign languages ⁹	Psychology	Social sciences ¹⁰	Education	Library science ¹¹	Social work ¹¹	Other ¹²
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1958-59	268,277	21,576	6,973	20,718	4,730	7,328	48,215	69,515	383	448	88,391
1959-60	274,477	22,281	7,278	22,400	5,482	8,061	50,193	71,145	429	487	86,721
1960-61	281,508	21,895	7,426	23,976	6,473	8,460	52,192	74,028	439	567	86,052
1961-62	298,695	23,370	7,571	26,508	7,975	9,578	57,304	78,153	423	654	87,159
1962-63	323,635	25,319	8,004	30,251	9,768	10,993	65,373	82,627	462	825	90,013
1963-64	365,473	28,184	8,816	35,174	12,217	13,258	77,039	90,813	510	983	98,479
1964-65	393,213	30,385	8,751	38,880	13,926	14,676	84,231	95,667	623	1,291	104,783
1965-66	412,509	32,605	8,898	42,146	15,313	16,940	93,175	94,294	642	1,664	106,832
1966-67	446,105	36,365	9,239	45,776	16,855	19,410	104,283	95,859	701	1,881	115,736
1967-68	510,810	42,566	9,859	52,340	19,264	23,938	120,774	107,778	814	2,518	130,959
1968-69 ⁵	593,520	48,570	10,860	61,900	23,680	28,250	141,160	120,900	950	2,900	144,350
PROJECTED ⁶											
1969-70	595,600	49,300	10,800	64,850	25,620	29,820	148,000	119,580	970	2,950	143,720
1970-71	617,510	50,880	10,870	69,090	28,130	31,900	157,280	120,450	1,010	3,050	144,850
1971-72	636,180	52,230	10,850	73,170	30,650	33,850	165,810	120,700	1,040	3,140	144,740
1972-73	663,130	54,330	10,900	78,530	33,810	36,270	176,490	122,740	1,090	3,290	145,690
1973-74	687,810	56,280	10,860	83,940	37,090	38,540	186,640	124,390	1,150	3,440	145,440
1974-75	718,350	58,670	10,900	90,160	40,810	41,320	198,770	126,550	1,210	3,610	146,360
1975-76	745,530	60,740	10,870	96,090	44,450	43,930	210,330	127,630	1,260	3,760	146,450
1976-77	773,270	62,800	10,840	102,160	48,220	46,660	222,460	128,260	1,320	3,910	146,640
1977-78	798,630	64,700	10,740	108,170	52,040	49,290	234,060	128,340	1,370	4,050	145,880
1978-79	819,470	66,090	10,600	113,410	55,500	51,740	244,890	126,890	1,400	4,140	144,790

See footnotes at end of table 25.

Table 24.—Earned master's degrees, by field of study:
United States, 1958-59 to 1978-79

A. NATURAL SCIENCES AND RELATED PROFESSIONS

Year	Total natural sciences	Mathematics and statistics ¹	Engineering	Physical sciences ²	Biological sciences ³	Agriculture and forestry	Health professions ⁴	Science, general program
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1958-59	17,146	1,509	6,753	3,200	2,007	1,563	1,762	352
1959-60	18,232	1,757	7,159	3,376	2,164	1,554	1,838	394
1960-61	20,277	2,231	8,178	3,790	2,398	1,602	1,632	486
1961-62	22,224	2,680	8,909	3,925	2,642	1,763	1,632	673
1962-63	24,094	3,313	9,633	4,125	2,921	1,846	2,011	535
1963-64	26,920	3,597	10,827	4,561	3,296	1,651	2,279	709
1964-65	30,089	4,290	12,052	4,914	3,598	1,734	2,493	1,008
1965-66	33,586	5,007	13,675	4,987	4,232	2,091	2,833	761
1966-67	36,308	5,727	13,880	5,405	4,996	2,201	3,398	701
1967-68	39,201	6,075	15,182	5,499	5,506	2,271	3,677	991
1968-69 ⁵	42,070	6,800	16,430	5,690	5,970	2,250	3,830	1,100
PROJECTED ⁶								
1969-70	47,190	7,970	18,460	6,150	6,800	2,310	4,230	1,270
1970-71	54,860	9,640	21,530	6,860	8,000	2,500	4,800	1,520
1971-72	58,360	10,580	23,020	6,990	8,540	2,550	4,910	1,660
1972-73	62,650	11,710	24,810	7,170	9,210	2,840	5,080	1,820
1973-74	66,630	12,530	26,550	7,310	9,880	3,020	5,220	1,990
1974-75	71,070	13,530	28,550	7,470	10,680	3,230	5,430	2,180
1975-76	75,200	14,470	30,350	7,550	11,450	3,420	5,600	2,370
1976-77	80,140	15,590	32,510	7,670	12,350	3,640	5,800	2,590
1977-78	85,120	16,730	34,720	7,740	13,260	3,870	5,980	2,820
1978-79	89,180	17,700	36,590	7,700	14,090	4,060	6,070	3,030

B. SOCIAL SCIENCES, HUMANITIES, AND RELATED PROFESSIONS

Year	Total social sciences and humanities	Fine arts ⁷	Philosophy and religion ⁸	English and journalism	Foreign languages ⁹	Psychology	Social sciences ¹⁰	Education	Library science ¹¹	Social work ¹¹	Other ¹²
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1958-59	55,386	4,478	948	2,804	1,074	1,257	5,544	28,598	1,578	1,749	7,356
1959-60	59,460	4,809	919	3,192	1,156	1,406	5,965	30,424	1,814	1,987	7,788
1960-61	61,458	4,804	809	3,391	1,405	1,719	6,378	30,830	1,931	2,151	8,040
1961-62	66,202	5,182	898	3,765	1,626	1,832	7,241	32,654	2,140	2,272	8,592
1962-63	71,402	5,620	810	4,307	2,026	1,918	8,326	34,105	2,363	2,549	9,378
1963-64	78,610	6,020	946	4,807	2,391	2,059	9,395	37,171	2,717	2,851	10,253
1964-65	87,012	6,821	1,018	5,461	2,947	2,708	10,635	39,296	3,211	3,097	11,818
1965-66	106,969	8,359	1,442	6,788	3,727	3,117	12,900	45,094	3,916	3,872	17,754
1966-67	121,399	9,741	1,530	7,980	4,378	3,772	14,954	49,744	4,489	4,182	20,629
1967-68	137,548	10,815	1,755	8,646	5,007	4,325	16,197	56,963	5,165	4,725	23,950
1968-69 ⁵	146,530	11,440	1,800	9,450	5,630	4,730	17,730	58,200	5,900	5,600	26,050
PROJECTED ⁶											
1969-70	164,210	12,830	1,940	10,990	6,730	5,450	20,350	63,040	6,740	6,550	29,580
1970-71	189,430	14,830	2,150	13,130	8,260	6,480	24,140	70,130	7,900	7,650	34,760
1971-72	197,340	15,440	2,160	14,090	9,060	6,970	26,020	70,050	8,230	8,010	37,300
1972-73	207,950	16,270	2,200	15,310	10,050	7,570	28,320	70,660	8,700	8,490	40,380
1973-74	218,000	17,060	2,200	16,540	11,080	8,170	30,620	70,750	9,170	8,970	43,440
1974-75	230,730	18,080	2,230	18,070	12,340	8,910	33,350	71,400	9,800	9,580	46,990
1975-76	242,300	19,010	2,230	19,610	13,640	9,630	35,970	71,340	10,440	10,170	50,270
1976-77	255,970	20,120	2,240	21,380	15,130	10,460	39,040	71,410	11,160	10,850	54,180
1977-78	269,280	21,200	2,230	23,210	16,680	11,320	42,210	70,840	11,870	11,530	58,180
1978-79	279,220	22,010	2,180	24,800	18,100	12,080	44,990	68,910	12,430	12,070	61,640

See footnotes at end of table 25.

Table 25.—Earned doctor's degrees (except first-professional), by field of study:
United States, 1958-59 to 1978-79

A. NATURAL SCIENCES AND RELATED PROFESSIONS

Year	Total natural sciences	Mathematics and statistics ¹	Engineering	Physical sciences ²	Biological sciences ³	Agriculture and forestry	Health professions ⁴	Science, general program
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1958-59	6,400	282	714	1,812	1,045	388	153	6
1959-60	4,697	303	786	1,838	1,205	456	107	2
1960-61	5,070	344	943	1,991	1,193	463	133	3
1961-62	5,684	396	1,207	2,122	1,338	472	148	1
1962-63	6,326	490	1,378	2,380	1,455	462	157	4
1963-64	7,137	596	1,693	2,455	1,625	573	192	3
1964-65	8,316	688	2,124	2,823	1,928	557	173	17
1965-66	9,127	801	2,304	3,045	2,097	618	251	11
1966-67	10,128	870	2,614	3,462	2,255	670	250	7
1967-68	11,225	983	2,932	3,593	2,784	679	243	11
1968-69 ⁵	12,800	1,160	3,500	4,000	3,120	740	260	10
PROJECTED ⁶								
1969-70	14,350	1,350	4,110	4,370	3,440	790	290	20
1970-71	15,440	1,500	4,610	4,580	3,630	810	290	20
1971-72	16,750	1,680	5,210	4,840	3,860	830	300	20
1972-73	18,890	1,950	8,090	5,320	4,290	890	330	20
1973-74	22,050	2,340	7,350	6,040	4,930	980	370	30
1974-75	23,540	2,570	8,130	6,280	5,160	990	380	40
1975-76	25,420	2,940	9,080	6,610	5,460	1,010	390	40
1976-77	27,140	3,110	10,000	6,860	5,720	1,010	390	40
1977-78	29,100	3,420	11,040	7,160	6,020	1,020	400	50
1978-79	30,440	3,660	11,870	7,280	6,190	990	400	50

B. SOCIAL SCIENCES, HUMANITIES, AND RELATED PROFESSIONS

Year	Total social sciences and humanities	Fine arts ⁷	Philosophy and religion ⁸	English and journalism	Foreign languages ⁹	Psychology	Social sciences ¹⁰	Education	Library science ¹¹	Social work ¹¹	Other ¹²
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1958-59	4,960	359	206	382	241	635	1,208	1,487	6	30	400
1959-60	5,132	380	233	405	232	641	1,282	1,474	19	23	443
1960-61	5,505	410	263	408	264	703	1,369	1,594	14	36	444
1961-62	5,838	425	251	493	261	781	1,391	1,737	10	32	557
1962-63	6,496	467	267	527	277	844	1,557	1,943	17	40	557
1963-64	7,353	519	285	570	379	939	1,803	2,191	13	43	611
1964-65	8,151	545	304	706	436	1,004	2,027	2,372	12	34	711
1965-66	9,110	588	360	714	518	1,206	2,155	2,711	19	64	775
1966-67	10,487	642	408	871	578	1,393	2,526	3,143	16	64	846
1967-68	11,866	698	521	1,009	713	1,447	2,350	3,660	22	77	869
1968-69 ⁵	13,300	770	570	1,150	810	1,640	3,200	4,090	20	90	970
PROJECTED ⁶											
1969-70	14,650	840	620	1,280	910	1,810	3,520	4,480	20	100	1,070
1970-71	15,460	880	640	1,360	980	1,930	3,710	4,710	20	110	1,130
1971-72	16,450	920	660	1,470	1,060	2,070	3,960	4,990	20	120	1,200
1972-73	18,310	1,020	710	1,660	1,200	2,320	4,390	5,520	30	130	1,330
1973-74	21,050	1,160	800	1,940	1,410	2,700	5,030	6,320	30	160	1,520
1974-75	22,050	1,190	810	2,050	1,500	2,840	5,280	6,580	30	170	1,590
1975-76	23,380	1,250	840	2,200	1,610	3,030	5,590	6,940	40	180	1,690
1976-77	24,460	1,290	850	2,330	1,710	3,190	5,860	7,230	40	190	1,770
1977-78	25,800	1,340	870	2,490	1,840	3,400	6,170	7,590	40	210	1,860
1978-79	26,560	1,360	870	2,600	1,930	3,530	6,340	7,760	40	220	1,910

¹ Includes mathematics, statistics, and computer science.
² Includes astronomy, chemistry, earth sciences, meteorology, physics, and other physical sciences.
³ Includes anatomy, bacteriology, biochemistry, biology, botany, entomology, physiology, zoology, and other biological sciences.
⁴ Includes dentistry, medicine and osteopathy, nursing, optometry, pharmacy, public health, veterinary medicine, and other health professions.
⁵ Estimated.
⁶ The projection of degrees by subject field is based on the assumption that the percent distribution of degrees by field for each level and sex will continue the 1957-58 to 1967-68 trends.
 (Continued, p. 50.)

For methodological details, see appendix A, table A-2; for complete classification of degrees by field, see appendix A, "Classifications and Classification Changes."

- 7 Includes architecture, music, speech and dramatic arts, and other fine and applied arts.
 8 Includes philosophy, scholastic philosophy, religious education and Bible, and other religious fields.
 9 Includes classical languages, French, German, Russian, other Slavic languages, and other languages and language programs.
 10 Includes anthropology, economics, geography, history, international relations, political science, public administration, sociology, and other social sciences.
 11 Beginning in 1965-66, bachelor's and first-professional degrees in library science and social work exclude master's degrees whether considered as first-professional or not; they are included in master's degrees.

Prior to 1965-66, bachelor's and first-professional degrees and master's degrees in library science and social work have been estimated to conform to this classification. For method of estimating, see appendix A, "Estimation Methods."

Doctorates have not been affected by this reclassification.

- 12 Includes business and commerce; home economics; law; military, naval, or air force science; theology; and miscellaneous and unclassified fields.

NOTE: Data are for 50 States and the District of Columbia for 61 years. Because of rounding, detail may not add to totals.

SOURCES: U.S. Department of Health, Education, and Welfare, Office of Education publications: "Earned Degrees Conferred by Institutions of Higher Education," annually, 1957-58 through 1967-68.

CHAPTER IV

Teachers

Alice R. Pool and John F. Beamer, Jr.

Elementary and Secondary Schools

There were 2.4 million professional persons employed in the public and private elementary and secondary day schools in fall 1968. These included principals, supervisors, librarians, guidance and psychological personnel, and classroom teachers. Of the total number, over 90 percent were classroom teachers. The numbers of professional persons employed in the regular public school system were reported to the U.S. Office of Education by the State departments of education in each of the 50 States and the District of Columbia. The numbers in the regular nonpublic day schools were reported by the individual schools in Office of Education surveys.

Classroom teachers (table 26)

Classroom teachers are reported separately in the secondary and elementary schools. The former comprise the junior high and senior high schools; the latter, the elementary or grade schools. The number of classroom teachers in secondary schools (public and nonpublic) increased from 544,000 in 1958 to 947,000 in 1968 and is expected to be 1,116,000 in 1978. Those in public and nonpublic elementary schools increased from 931,000 in 1958 to 1,231,000 in 1968 but are expected to drop to 1,218,000 by 1978. The number of teachers in elementary schools is decreasing partly because of the shift of public seventh and eighth grade pupils from elementary to secondary junior high schools, and partly because of the decrease in the population aged 5-13 years. (See appendix B, table B-1.) The number of teachers in the secondary schools, on the other hand, continues to rise because of the continuing shift of pupils from the seventh and eighth grades into junior high (secondary) schools and because the smaller number of children born in the 1960's will not have reached high school age by 1978.

Of the total number of classroom teachers in the public schools, the Elementary and Secondary Education Act (ESEA) of 1965 can be credited with adding more than 100,000 to the teaching rolls. It is not likely that these would have been employed without this substantial Federal aid.

Pupil-teacher ratios (table 27)

The projection of teachers in both public and nonpublic schools depends upon the projection of enrollments (table 4) and upon the projection of pupil-teacher ratios (table 27). For the public schools, the 1965 to 1968 portion and the projected portion of section A in the table show the actual ratios already attained since the 1965 ESEA took effect and those expected with the continuation of this legislation. The lower section B of the table shows the ratios obtained on the basis of trend alone. The difference in these ratios is the result of about 120,000 additional teachers in 1968 and 140,000 additional expected by 1978.

The nonpublic schools are not affected by the ESEA. For these schools, the 1968 Office of Education survey (available too late for incorporation in these projections) shows the drop in pupil-teacher ratios which they had achieved by 1965 to have been partly countered by their recent financial difficulties.

Demand for additional classroom teachers (tables 28, 29)

The total demand for public elementary and secondary school teachers (not employed in the public schools the previous year) includes those needed to allow for increased enrollment and those needed for replacement of teachers leaving the profession (turnover). During the period fall 1964-fall 1968, the cumulative demand for additional public school teachers (including returnees to the profession) was 1,051,000. On the basis of trend alone, it would total 843,000 in 1969 through 1973 and 815,000 in 1974 through 1978. Allowance for the expected impact of ESEA, however, will increase these totals to 911,000 and 871,000, respectively. This means that 1.8 million new teachers or returnees to the profession are expected to be employed by the public schools during the next 10 years, 1969 through 1978. The largest number is required for turnover, which will account for over 91 percent of this demand.

The projected demand for additional public school teachers is shown in table 28. The number of teachers necessary to take care of enrollment increases was computed for each year as the difference between the total employed for the current year and the total employed for the previous year. The number for turnover was based on the assumption that 8 percent of the total classroom teachers will leave the profession temporarily or permanently each year.¹ Projection A includes the increases in classroom teachers because of ESEA.

The future demand for additional nonpublic school teachers is expected to be smaller than in the past 5 years because enrollment increases are expected to be smaller. About 55,000 new nonpublic school teachers or returnees to the profession were employed during fall 1964 through fall 1968. This number is expected to drop to 42,000 in 1969 through 1973 and to increase to 51,000 in the 1974 through 1978 period. Approximately 93,000 additional nonpublic school teachers will be employed during the next 10 years, 1969 through 1978. Turnover will account for all but 3,000 of this demand. These estimates and projections do not take into account the 1968 preliminary data on nonpublic school teachers which were received too late for incorporation in these tables.

The projected demand for additional nonpublic elementary and secondary school teachers is shown in table 29. The number for taking care of enrollment increases was computed in the same manner as for public schools, and the number for turnover is based on the assumption that 4 percent (one-half the public school rate) of the nonpublic school teachers will leave the profession permanently or temporarily each year. This lower rate (4 percent) was assumed because about one-half of all nonpublic school teachers belong to religious orders, where the turnover is presumably small.

Instructional staff (table 30)

Instructional staff in public elementary and secondary schools includes principals, supervisors, librarians, and guidance and psychological personnel, as well as classroom teachers. Instructional staff and classroom teachers are not reported separately for nonpublic schools. Since it is believed that the primary responsibility of most professional personnel employed by the nonpublic schools is classroom teaching, the number of their instructional staff shown here is the same as the number of their teachers.

Projected instructional staff is shown in table 30. Instructional staff in public elementary and secondary schools increased from 1.4 million in 1958 to 2.2 million in 1968 and, on the basis of a continuation of ESEA (section A of the table), is expected to be 2.4 million in 1978. This is over 150,000 more staff members employed in each year, 1969 to 1978, than the numbers projected in section B of the table.

¹ U.S. Department of Health, Education, and Welfare, Office of Education, *Teacher Turnover in Public Elementary and Secondary Schools, 1959-60*, by Frank Lindenfeld, U.S. Government Printing Office, Washington, D.C., 1963.

The public school instructional staff projection in section B was based on the assumption that instructional staff as a percentage of classroom teachers would continue the 1958-64 trend if it were not for the effect of ESEA. The ratio of total public school instructional staff to classroom teachers increased from 107.8 in 1958 to 111.1 in 1968 and, based on trend alone, would be expected to be 114.3 by 1978. These ratios were applied to the public classroom teacher figures shown in table 26 to obtain the projections in section B. Nonpublic school instructional staff was assumed to be 100 percent of the classroom teachers shown in table 26.

Institutions of Higher Education

The faculty data for institutions of higher education shown in tables 31 to 39 are from biennial reports on numbers of positions, submitted by individual institutions for 1957-58 through 1963-64, with estimates for 1966-67 prorated to the total number of faculty reported in the 1966-67 Higher Education General Information Survey.

Prior to 1966-67, the reports of professional staff gave the number of different functions performed by members of the staff. These functions included full-time and part-time instruction in resident degree-credit courses, instruction in resident nondegree-credit courses, and instruction in extension, mail, radio, or television courses. They also included professional positions in administration and services and in organized research. Because some of these functions overlapped, with one person carrying out more than one function, the number of positions by function was greater than the number of persons employed. The total number of persons without regard to the function performed was also reported. In 1963-64, the last report prior to 1966-67, the ratio of total positions to total persons was 1.1.

Beginning in 1966-67, the reporting was in terms of the principal position held by each person. Thus the number of positions equaled the number of persons employed. However, the breakdown of positions was quite different from the earlier reports.

Because continuity is a requisite for projecting data, the total number of persons reported in 1966-67 was converted to positions by using the 1.1 ratio of positions to persons. The estimates for 1966-67 based on the earlier reporting were prorated to this total. The new 1966-67 totals by position for the 1963-64 categories were then used for projecting the faculty data.

Organized research was treated differently from other categories of professional staff in the tables. It was the only position classification in the 1966-67 report which appeared to remain the same as in 1963-64 (except for the position to person change). It therefore was subtracted from the overall number of professional persons reported in 1966-67 and was used as reported after multiplying by 1.1 to convert to positions. However, the number obtained was much smaller than expected, perhaps because the conversion factor was too small in the case of organized research (only a factor based on total professional persons and positions was available). Or there actually may have been a drop from 1963-64 to 1966-67 in the number of persons engaged in organized research as a proportion of instructional staff for resident degree-credit courses.

Instructional staff for resident degree-credit courses (table 31)

The total of full-time and part-time instructional staff for resident degree-credit courses in all institutions of higher education (table 31) increased from 272,000 in 1958-59 to an estimated 525,000 in 1968-69 and is expected to be 721,000 in 1978-79. These figures include all full-time and part-time instructors and above, plus junior instructional staff employed for instruction in resident degree-credit courses. The junior instructional staff includes assistant instructors, teaching fellows, teaching assistants, and laboratory assistants.

The total full-time and part-time instructional staff for resident degree-credit courses was projected separately for publicly controlled 4-year and 2-year institutions and privately controlled 4-year and 2-year institutions and the four results summed to obtain the total for all

institutions. The projections are based on the assumption that student-staff ratios in each institutional control and type category will continue to increase as they have in the past. To obtain the projections, projected enrollments in each of the institutional control and type categories (tables 7 and 8) were divided by the projected student-staff ratios in corresponding categories. The resulting projections by institutional control and type categories are shown in tables 33 to 37 along with projections of all professional staff.

Full-time-equivalent instructional staff for resident degree-credit courses (table 32)

Full-time-equivalent instructional staff for resident degree-credit courses in all institutions increased from 194,000 in 1958-59 to an estimated 373,000 in 1968-69 and is expected to rise to 512,000 in 1978-79. These figures include full-time staff and full-time equivalent of part-time instructor or above, plus the estimated full-time equivalent of junior instructional staff. In 1963-64, in all institutions, about 80 percent of the instructional staff members with the rank of instructor or above were employed full time.

Total professional staff (tables 33 to 37)

Total full-time and part-time professional staff in institutions of higher education classified by function includes, in addition to staff for instruction in resident degree-credit courses, full-time and part-time instructional staff employed for extension courses, resident nondegree-credit courses, and instruction by mail, radio, or television. It also includes full-time and part-time professional staff employed for administration and services and for organized research. Full-time and part-time professional staff in institutions of higher education rose from 403,000 in 1958-59 to an estimated 792,000 in 1968-69 and is expected to be nearly 1.1 million in 1978-79.

Projected full-time and part-time professional staff for all institutions is shown in table 33. The projection of this staff is based on the assumption that each of the separate functions, as a percentage of total full-time and part-time instructional staff for resident degree-credit courses, will maintain to 1978-79 the same relationship that existed in 1963-64.

The percentages used for other instructional staff, administration and services, and organized research differed in each of the four types of institutions and are given in the footnotes to tables 34 to 37. These tables give projections of these "other" instructional and professional staff for the four types of institutions: publicly controlled 4-year and 2-year and privately controlled 4-year and 2-year institutions.

Full-time-equivalent professional staff (table 38)

The estimated and projected full-time equivalent of total full-time and part-time professional staff in all institutions is shown in table 38. The method of estimating and projecting full-time-equivalent instructional staff for resident degree-credit courses is given in the footnotes to table 32. The 1963-64 ratio of full-time-equivalent instructional staff for resident degree-credit courses to total full-time and part-time instructional staff for these courses was 0.71. The totals shown in table 33 for full-time and part-time staff employed for instruction in courses other than resident degree-credit courses, for administration and services, and for organized research, were multiplied by the above ratio to obtain the full-time equivalents for this staff given in table 38.

Demand for full-time-equivalent professional staff (table 39)

During the past 5 years, 1964-65 through 1968-69, the total demand for additional full-time-equivalent professional staff was 315,000. The totals are expected to be 287,000 in

1969-70 through 1973-74 and 324,000 in 1974-75 through 1978-79. These figures include the number of professional staff needed for instruction, administration and services, and organized research. Over 80 percent of the required staff is for instruction.

The demand for this staff is projected as the total of staff required for increased enrollment and staff needed for replacement of those who have left the profession either temporarily or permanently. Full-time-equivalent staff required for increased enrollment is computed as the difference between the total number employed in successive years. Replacement requirements are estimated at 6 percent of the total number of full-time-equivalent staff employed in the previous year.

The assumption of a 6-percent replacement rate is based on unpublished data from a 1963 Office of Education study which showed that about 5 percent of the full-time instructors and above in 4-year institutions intended to leave employment in institutions of higher education during the following year. If we estimate an additional 1 percent for mortality, the annual replacement rate is then 6 percent.

Table 26.--Classroom teachers in regular elementary and secondary day schools, by institutional control and organizational level: United States, fall 1958 to 1978¹

[In thousands]

Year (fall)	Total public and nonpublic			Public			Nonpublic (estimated) ²		
	K-12	Elementary	Secondary	K-12	Elementary	Secondary	K-12	Elementary	Secondary
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1958 ...	1,475	931	544	1,306	815	491	169	116	53
1959 ...	1,531	952	580	1,355	832	524	178	120	56
1960 ...	1,600	991	609	1,408	858	550	192	133	59
1961 ...	1,668	1,015	653	1,461	869	592	207	146	61
1962 ...	1,727	1,036	690	1,508	836	621	219	150	69
1963 ...	1,806	1,062	743	1,578	908	669	228	154	74
1964 ...	1,882	1,096	786	1,648	940	708	235	156	78

A. Includes Effect of Elementary and Secondary Education Act of 1965

ACTUAL										
Year	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1965 ...	1,951	1,122	828	1,710	965	746	240	158	82	
1966 ...	2,028	1,164	865	1,789	1,006	783	239	158	81	
1967 ...	2,097	1,199	898	1,855	1,040	815	242	159	83	
1968 ...	2,178	1,231	947	1,943	1,079	864	235	151	84	
PROJECTED ⁴										
1969 ...	2,223	1,238	985	1,988	1,087	900	235	150	85	
1970 ...	2,245	1,232	1,013	2,012	1,084	928	233	148	85	
1971 ...	2,260	1,219	1,041	2,028	1,073	955	232	146	86	
1972 ...	2,269	1,204	1,065	2,038	1,060	978	230	144	86	
1973 ...	2,285	1,192	1,093	2,054	1,047	1,006	232	145	87	
1974 ...	2,296	1,186	1,110	2,062	1,040	1,023	233	146	88	
1975 ...	2,304	1,184	1,120	2,069	1,037	1,033	235	147	88	
1976 ...	2,314	1,187	1,127	2,078	1,039	1,039	236	148	88	
1977 ...	2,324	1,200	1,123	2,086	1,052	1,035	237	149	89	
1978 ...	2,334	1,218	1,116	2,096	1,069	1,028	238	149	89	

See footnotes at end of table.

Table 26.—Classroom teachers in regular elementary and secondary day schools, by institutional control and organizational level: United States, fall 1958 to 1978¹—Continued

[In thousands]

B. Excludes Effect of Elementary and Secondary Education Act of 1965									
ESTIMATED ⁵									
1965 ...	1,921	1,117	804	1,680	959	721	240	158	82
1966 ...	1,950	1,136	822	1,720	979	741	239	158	81
1967 ...	2,005	1,150	855	1,764	992	772	242	159	83
1968 ...	2,052	1,148	904	1,817	997	820	235	151	84
PROJECTED ⁶									
1969 ...	2,083	1,148	935	1,848	997	850	235	150	85
1970 ...	2,105	1,142	963	1,872	994	878	233	148	85
1971 ...	2,120	1,129	991	1,888	983	905	232	146	86
1972 ...	2,129	1,114	1,015	1,898	970	928	230	144	86
1973 ...	2,145	1,102	1,043	1,914	957	956	232	145	87
1974 ...	2,156	1,096	1,060	1,922	950	973	233	146	88
1975 ...	2,164	1,094	1,070	1,929	947	963	235	147	88
1976 ...	2,174	1,097	1,077	1,938	949	989	236	148	88
1977 ...	2,184	1,110	1,073	1,946	962	985	237	149	89
1978 ...	2,194	1,128	1,066	1,956	979	978	238	149	89

¹ Includes full-time and part-time classroom teachers (in 1968, 99 percent of teachers in the public schools were full time). Does not include teachers in independent nursery and kindergarten schools, residential schools for exceptional children, sub-collegiate departments of institutions of higher education, Federal schools for Indians, schools on Federal Installations, and other schools not in the regular school system.

² Instructional staff and classroom teachers are not reported separately. All data unless otherwise indicated are estimated. Estimates revised spring 1968 on basis of 1965 Office of Education survey.

³ Actual data from Office of Education surveys. Data from the 1968 survey were received too late for inclusion in this table.

⁴ The projection of classroom teachers in public schools, including the effect of the Elementary and Secondary Education Act of 1965 (ESEA), assumes that 140,000 more teachers will be employed each year than the number projected for corresponding years under the 1958-64 trend projections. This increase is based on 1968 experience, as well as on the amount of funds made available by provisions of ESEA.

The projection of classroom teachers in non-public schools is based on the assumption that the projected pupil-teacher ratios at each organizational level will follow the 1958-65 trends to 1978, with the restrictions that the elementary ratios will not go below 26 and the secondary ratios will not go below 15 pupils per teacher.

⁵ Estimated, using the 1958-64 trend.

⁶ The projection of classroom teachers in public schools, excluding the effect of ESEA, is based on the assumption that the projected pupil-teacher ratios at each organizational level will follow the 1958-64 trend to 1978.

The projection of classroom teachers in non-public schools is not affected by ESEA. For further methodological details, see appendix A, table A-3.

NOTE: Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Classroom teacher data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of Public Schools," fall 1964 through 1968; (2) "Enrollment, Teachers, and School-housing," fall 1958 through 1963; (3) "Statistics of State School Systems," 1957-58 and 1959-60; (4) "Statistics of Nonpublic Elementary and Secondary Schools, 1965-66"; (5) "Statistics of Nonpublic Elementary Schools, 1961-62"; and (6) "Statistics of Nonpublic Secondary Schools, 1960-61."

Table 27.—Pupil-teacher ratios in regular elementary and secondary day schools, by institutional control and organizational level: United States, fall 1958 to 1978¹

Year (fall)	Public		Nonpublic (estimated) ²	
	Elementary	Secondary	Elementary	Secondary
(1)	(2)	(3)	(4)	(5)
1958	28.7	21.7	38.7	19.2
1959	28.7	21.5	38.8	18.5
1960	28.4	21.7	36.0	³ 18.3
1961	28.3	21.7	³ 33.3	18.0
1962	28.5	21.7	32.8	17.7
1963	28.4	21.5	32.3	17.4
1964	27.9	21.5	31.8	17.1

A. Includes Effect of Elementary and Secondary Education Act of 1965

ACTUAL				
1965	27.6	20.8	³ 31.3	³ 16.7
1966	26.9	20.3	31.4	17.3
1967	26.3	20.3	29.0	16.8
1968	25.4	20.3	28.8	16.7
PROJECTED ⁴				
1969	25.2	20.2	28.6	16.5
1970	25.1	20.2	28.4	16.4
1971	25.0	20.3	28.1	16.3
1972	24.9	20.3	27.8	16.2
1973	24.8	20.2	27.6	16.1
1974	24.7	20.3	27.4	16.0
1975	24.6	20.3	27.2	16.0
1976	24.5	20.3	27.1	15.9
1977	24.4	20.3	26.9	15.8
1978	24.5	20.2	26.8	15.8

B. Excludes Effect of Elementary and Secondary Education Act of 1965

ESTIMATED ⁵				
1965	27.8	21.5	31.3	16.1
1966	27.7	21.5	31.4	17.3
1967	27.6	21.4	29.0	16.8
1968	27.5	21.4	28.8	16.7
PROJECTED ⁶				
1969	27.5	21.4	28.6	16.5
1970	27.4	21.4	28.4	16.4
1971	27.3	21.4	28.1	16.3
1972	27.2	21.4	27.8	16.2
1973	27.1	21.3	27.6	16.1
1974	27.0	21.3	27.4	16.0
1975	26.9	21.3	27.2	16.0
1976	26.8	21.3	27.1	15.9
1977	26.7	21.3	26.9	15.8
1978	26.7	21.2	26.8	15.8

See footnotes on page 58.

¹ Includes full-time and part-time classroom teachers (in 1968, 92 percent of teachers in the public schools were full time). Does not include teachers in independent nurseries and kindergarten schools, residential schools for exceptional children, subcollegiate departments of institutions of higher education, Federal schools for Indians, schools on Federal installations, and other schools not in the regular school system.

² Instructional staff and classroom teachers are not reported separately. All data unless otherwise indicated are estimated. Estimates revised spring 1968 on basis of 1965 Office of Education survey.

³ Actual data from Office of Education surveys. Data from the 1968 survey were received too late for inclusion in this table.

⁴ The projection of pupil-teacher ratios in the regular public schools, including the effect of the Elementary and Secondary Education Act of 1965 (ESEA), at each organizational level, is based on the ratio of enrollment to the number of teachers expected to be hired each year 1969 to 1978 with the continuation of ESEA.

The projection of pupil-teacher ratios in the nonpublic schools is based on the assumption that the projected pupil-teacher ratios at each organizational level will follow the 1958-65 trend to 1978, with the restrictions that the elementary ratios will not go below 26 and the secondary ratios will not go below 15 pupils per teacher.

⁵ Estimated, using the 1958-64 trend.

⁶ The projection of pupil-teacher ratios in the regular public schools, excluding the effect of ESEA, is based on the assumption that the projected pupil-teacher ratios at each organizational level will follow the 1953-64 trend to 1978.

The projection of pupil-teacher ratios in the nonpublic schools is not affected by the ESEA.

For further methodological details, see appendix A, table A-3.

NOTE: Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Classroom teacher data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of Public Schools," fall 1964 through 1968; (2) "Enrollment, Teachers, and Schoolhousing," fall 1958 through 1963; (3) "Statistics of State School Systems," 1957-58 and 1959-60; (4) "Statistics of Nonpublic Elementary and Secondary Schools, 1965-66"; (5) "Nonpublic School Enrollment in grades 9-12, Fall 1964, and Graduates, 1963-64"; (6) "Statistics of Nonpublic Elementary Schools, 1961-62"; and (7) "Statistics of Nonpublic Secondary Schools, 1960-61."

Table 28.—Estimated demand for classroom teachers in regular public elementary and secondary day schools: United States, fall 1963 to 1978¹

Year (fall)	Total teacher demand	Demand for additional certificated teachers		
		Total	For enrollment increase ¹	For teacher turnover
(1)	(2)	(3)	(4)	(5)
1963	1,577,777	.....	.....	.....
1964	1,648,184	196,629	70,407	126,222
A. Includes Effect of Elementary and Secondary Education Act of 1965				
ACTUAL				
1965	1,710,319	193,990	62,135	131,855
1966	1,789,238	215,745	78,919	136,826
1967	1,855,189	209,090	65,951	143,139
1968	1,942,785	236,011	87,596	148,415
1964-68 .....	.....	1,051,465	365,008	686,457
PROJECTED²				
1969	1,988,000	200,000	45,000	155,000
1970	2,012,000	183,000	24,000	159,000
1971	2,028,000	177,000	16,000	161,000
1972	2,038,000	173,000	10,000	162,000
1973	2,054,000	178,000	15,000	163,000
1969-73 .....	.....	911,000	111,000	801,000
1974	2,062,000	173,000	9,000	164,000
1975	2,069,000	172,000	7,000	165,000
1976	2,078,000	175,000	9,000	166,000
1977	2,086,000	174,000	8,000	166,000
1978	2,096,000	177,000	10,000	167,000
1974-78 .....	.....	871,000	43,000	828,000
B. Excludes Effect of Elementary and Secondary Education Act of 1965				
ESTIMATED³				
1965	1,680,000	164,000	32,000	132,000
1966	1,720,000	174,000	39,000	134,000
1967	1,764,000	182,000	44,000	138,000
1968	1,817,000	194,000	53,000	141,000
PROJECTED⁴				
1969	1,848,000	176,000	31,000	145,000
1970	1,872,000	172,000	24,000	148,000
1971	1,888,000	165,000	16,000	150,000
1972	1,898,000	161,000	10,000	151,000
1973	1,914,000	167,000	15,000	152,000
1969-73 .....	.....	843,000	97,000	746,000
1974	1,922,000	162,000	9,000	153,000
1975	1,929,000	161,000	7,000	154,000
1976	1,938,000	163,000	9,000	154,000
1977	1,946,000	163,000	8,000	155,000
1978	1,956,000	166,000	10,000	156,000
1974-78 .....	.....	815,000	43,000	772,000

See footnotes on page 60.

¹ Includes full-time and part-time classroom teachers (In 1968, 99 percent of teachers in the public schools were full time). Does not include teachers in independent nurseries and kindergartens, residential schools for exceptional children, subcollegiate departments of institutions of higher education, Federal schools for Indians, schools on Federal installations, and other schools not in the regular school system.

² The projection of classroom teachers in public schools, including the effect of the Elementary and Secondary Education Act of 1965 (ESEA), assumes that 140,000 more teachers will be employed each year than the number projected for corresponding years under the 1958-64 trend projections. This increase is based on 1968 experience, as well as on the amount of funds made available by provisions of ESEA.

³ Estimated, using the 1958-64 trend.

⁴ The projection, excluding the effect of ESEA, of demand for teachers in addition to those retained from the previous year was based on the following assumptions: (1) For enrollment increase, the number of additional teachers needed will be the difference between the projected number that must be employed in a given year to maintain the 1958-64 trend in the pupil-teacher ratio and similarly projected number in the previous year; (2) for teacher turnover, the number of additional

teachers needed to replace those leaving the profession either temporarily or permanently will be 8 percent of the total employed in the previous year. The 8-percent separation rate is based on the Office of Education study "Teacher Turnover in Public Elementary and Secondary Schools, 1959-60."

The projected demand makes no allowance for replacement of teachers who hold substandard certificates (about 5 percent of employed teachers).

For further methodological details, see appendix A, table A-3.

NOTE: Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of Public Schools," fall 1964 through 1968; (2) "Enrollment, Teachers, and Schoolhousing," 1958 through 1963.

Table 29.—Estimated demand for classroom teachers in regular nonpublic elementary and secondary day schools: United States, fall 1963 to 1978

Year (fall)	Total teacher demand	Demand for additional certificated teachers		
		Total	For enrollment increase	For teacher turnover
(1)	(2)	(3)	(4)	(5)
1963	228,000	....	...	...
1964	235,000	16,000	7,000	9,000
1965	240,000	14,000	5,000	9,000
1966	239,000	9,000	-1,000	10,000
1967	242,000	13,000	3,000	10,000
1968	235,000	3,000	-7,000	10,000
1964-68 .....	.....	55,000	7,000	48,000
PROJECTED¹				
1969	235,000	9,000	...	9,000
1970	233,000	7,000	-2,000	9,000
1971	232,000	8,000	-1,000	9,000
1972	230,000	7,000	-2,000	9,000
1973	232,000	11,000	2,000	9,000
1969-73 .....	.....	42,000	-3,000	45,000
1974	233,000	10,000	1,000	9,000
1975	235,000	11,000	2,000	9,000
1976	236,000	10,000	1,000	9,000
1977	237,000	10,000	1,000	9,000
1978	238,000	10,000	1,000	9,000
1974-78 .....	.....	51,000	6,000	45,000

¹The projection of demand for teachers not employed in the nonpublic schools in the previous year was based on the following assumptions: (1) For enrollment increase, the number of additional teachers needed will be the difference between the projected number that must be employed in a given year to maintain the 1958-65 trend in pupil-teacher ratios and the similarly projected number in the previous year; and (2) for teacher turnover, the number of additional teachers needed to replace those leaving the nonpublic schools either temporarily or permanently is assumed to be 4 percent of the total employed in the previous year.

Data include instructional staff, believed to be few in number.

For further methodological details, see appendix A, table A-3.

NOTE: Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of Nonpublic Secondary Schools, 1960-61"; (2) "Statistics of Nonpublic Elementary Schools, 1961-62"; and (3) "Statistics of Nonpublic Elementary and Secondary Schools, 1965-66."

Table 30.—Estimated instructional staff in regular elementary and secondary day schools, by institutional control: United States, fall 1958 to 1978¹

(In thousands)

Year (fall)	Total	Public schools	Nonpublic schools ²
(1)	(2)	(3)	(4)
1958	1,577	1,408	169
1959	1,639	1,463	176
1960	1,718	1,526	192
1961	1,798	1,591	207
1962	1,866	1,647	219
1963	1,956	1,728	228
1964	2,046	1,811	235

A. Includes Effect of Elementary and Secondary Education Act of 1965

	ACTUAL		
1965	2,126	1,886	240
1966	2,216	1,977	239
1967	2,297	2,055	242
1968	2,394	2,159	235
	PROJECTED ³		
1969	2,452	2,217	235
1970	2,432	2,249	233
1971	2,517	2,285	232
1972	2,509	2,279	230
1973	2,547	2,315	232
1974	2,565	2,332	233
1975	2,581	2,346	235
1976	2,599	2,363	236
1977	2,615	2,378	237
1978	2,634	2,396	238

B. Excludes Effect of Elementary and Secondary Education Act of 1965

	ESTIMATED ⁴		
1965	2,093	1,853	240
1966	2,140	1,901	239
1967	2,197	1,955	242
1968	2,254	2,019	235
	PROJECTED ⁵		
1969	2,296	2,061	235
1970	2,326	2,093	233
1971	2,360	2,128	232
1972	2,352	2,122	230
1973	2,389	2,157	232
1974	2,407	2,174	233
1975	2,422	2,187	235
1976	2,440	2,204	236
1977	2,455	2,218	237
1978	2,474	2,236	238

See footnotes, page 63.

¹ Instructional staff includes principals, supervisors, librarians, and guidance and psychological personnel, as well as full-time and part-time classroom teachers. (In 1968, 99 percent of classroom teachers were full time.) Does not include instructional staff in independent nursery and kindergarten schools, residential schools for exceptional children, subcollegiate departments of higher education, Federal schools for Indians, schools on Federal Installations, and other schools not in the regular school system.

² Instructional staff and classroom teachers are not reported separately. Estimates revised spring 1968 on basis of 1965 Office of Education survey.

³ The projection of instructional staff in public schools, including the effect of ESEA, assumes an increase over the number expected on the basis of trend alone of approximately 150,000 each year. The projection of this increase is based on 1968 experience and on the amount of funds made available by provisions of ESEA.

⁴ Estimated, using the 1958-64 trend.

⁵ The projection of instructional staff in regular public schools, excluding the effect of ESEA, is

based on the assumption that the ratio of instructional staff to classroom teachers will follow the 1958-64 trend. The projection of instructional staff in nonpublic schools is the same as for classroom teachers (table 26).

For further methodological details, see appendix A, table A-3.

NOTE: Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Instructional staff data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of State School Systems," biennial circulars 1957-58 through 1965-66; (2) "Statistics of Nonpublic Elementary Schools, 1961-62"; (3) "Statistics of Nonpublic Secondary Schools, 1960-61"; and (4) "Statistics of Nonpublic Elementary and Secondary Schools, 1965-66."

Table 31.—Full-time and part-time instructional staff positions for resident degree-credit courses in all institutions of higher education, by professional rank: United States, first term 1958-59 to 1978-79¹

Year (fall)	Total	Instructor or above			Junior instructional staff
		Total	Full time	Part time	
(1)	(2)	(3)	(4)	(5)	(6)
1958-59 ²	272,000	237,000	160,000	77,000	36,000
1959-60	281,506	242,914	167,292	80,622	38,592
1960-61 ²	294,000	253,000	169,000	84,000	42,000
1961-62	310,772	264,749	177,052	87,697	46,023
1962-63 ²	334,000	285,000	190,000	95,000	49,000
1963-64	355,542	302,896	202,396	100,500	52,640
1964-65 ²	391,000	332,000	222,000	110,000	59,000
1965-66 ²	435,000	369,000	247,000	123,000	65,000
1966-67 ³	465,000	396,000	264,000	131,000	70,000
1967-68 ³	495,000	421,000	281,000	140,000	74,000
1968-69 ³	525,000	446,000	298,000	148,000	79,000
PROJECTED⁴					
1969-70	533,000	453,000	303,000	150,000	80,000
1970-71	551,000	468,000	313,000	155,000	83,000
1971-72	572,000	486,000	325,000	161,000	86,000
1972-73	596,000	507,000	339,000	168,000	89,000
1973-74	622,000	529,000	354,000	176,000	93,000
1974-75	644,000	547,000	366,000	182,000	97,000
1975-76	667,000	567,000	379,000	188,000	100,000
1976-77	686,000	583,000	389,000	193,000	103,000
1977-78	701,000	596,000	398,000	198,000	105,000
1978-79	721,000	613,000	409,000	203,000	108,000

¹ Faculty tables are in terms of professional positions, not persons. The ratio of positions to persons is approximately 1.1.

² Interpolated.

³ Estimated. Estimates were based on: (1) enrollments in 1966, 1967, and 1968; (2) the total number of professional persons in 1966-67 (converted to a position basis); and (3) the distribution of professional positions reported in 1963-64. (All reports prior to 1966-67 were in terms of positions, not persons. They provided different detail than did the 1966-67 report.)

⁴ The projection of total full-time and part-time instructional staff for resident degree-credit courses was computed separately by institutional control and type categories as outlined in tables 34 to 37, footnote 4, and summed for all institutions. The projections were based on the assumption that the ratio of total degree-credit enrollment to instructional staff for resident degree-credit courses in each institution by control and type will follow the 1957-58 to 1966-67 trend to 1978-79.

The projection of total instructional staff for resident degree-credit courses employed as full-time instructor or above, part-time instructor or above, and as junior instructor, is based on the percentage each was of total full-time and part-time instructional staff for resident degree-credit courses in 1963-64. These percentages were 57, 28, and 15 percent, respectively, and are assumed to remain at the 1963-64 level to 1978-79.

For methodological details, see appendix A, table A-3.

NOTE: Because of rounding, detail may not add to totals.

SOURCES: U.S. Department of Health, Education, and Welfare, Office of Education publications: "Numbers and Characteristics of Employees in Institutions of Higher Education, Fall 1966," and "Faculty and Other Professional Staff in Institutions of Higher Education," biennially, first term 1957-58 to 1963-64.

Table 32.—Full-time-equivalent instructional staff for resident degree-credit courses in all institutions of higher education, by professional rank: United States, first term 1958-59 to 1978-79

Year (fall)	Total full-time-equivalent instructional staff	Instructor or above			Full-time equivalent of junior instructional staff
		Total full-time equivalent	Full time	Full-time equivalent of part time	
(1)	(2)	(3)	(4)	(5)	(6)
1958-59 ¹	194,000	182,000	160,000	22,000	12,000
1959-60	200,850	187,850	162,292	25,558	13,000
1960-61 ¹	210,000	196,000	169,000	27,000	14,000
1961-62	221,553	206,553	177,052	29,501	15,000
1962-63 ¹	237,000	221,000	190,000	31,000	16,000
1963-64	252,013	235,013	202,396	32,617	17,000
1964-65 ¹	278,000	258,000	222,000	36,000	19,000
1965-66 ¹	309,000	287,000	247,000	40,000	22,000
1966-67 ²	331,000	308,000	264,000	43,000	23,000
1967-68 ²	352,000	328,000	281,000	46,000	25,000
1968-69 ²	373,000	347,000	298,000	49,000	26,000
PROJECTED³					
1969-70	378,000	352,000	303,000	50,000	26,000
1970-71	391,000	364,000	313,000	51,000	27,000
1971-72	406,000	378,000	325,000	53,000	28,000
1972-73	424,000	394,000	339,000	55,000	30,000
1973-74	442,000	411,000	354,000	58,000	31,000
1974-75	458,000	426,000	366,000	60,000	32,000
1975-76	474,000	441,000	379,000	62,000	33,000
1976-77	487,000	453,000	389,000	64,000	34,000
1977-78	498,000	463,000	398,000	65,000	35,000
1978-79	512,000	476,000	409,000	67,000	36,000

¹ Interpolated.

² Estimated. Estimates were based on: (1) enrollments in 1966, 1967, and 1968; (2) the total number of professional persons in 1965-67 (converted to a position basis); and (3) the distribution of professional positions reported in 1963-64. (All reports prior to 1966-67 were in terms of positions, not persons. They provided different detail than did the 1966-67 report.)

³ The projection of full-time-equivalent of part-time instructional staff for resident degree-credit courses is based on the following assumptions: (1) Full-time-equivalent of part-time instructor or above will remain constant to 1978-79 at the 1963-64 level of 33 percent, and (2) this percent-

age will apply to total junior instructional staff also and will remain constant to 1978-79.

For methodological details, see appendix A, table A-3.

NOTE: Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: U.S. Department of Health, Education, and Welfare, Office of Education publications: "Numbers and Characteristics of Employees in Institutions of Higher Education, Fall 1966," and "Faculty and Other Professional Staff in Institutions of Higher Education," biennially, first term 1957-58 to 1963-64.

Table 33.—Total full-time and part-time professional staff positions in all institutions of higher education, by function: United States, first term 1958-59 to 1978-79¹

Year (fall)	Total professional staff ²	Instructional staff			Other professional staff		
		Total	Resident degree-credit courses ³	Other instruction ⁴	Total	Administration and services ⁵	Organized research ⁶
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1958-59 ⁷ ..	403,000	327,000	272,000	55,000	76,000	41,000	35,000
1959-60 . . .	418,788	337,987	281,506	56,481	80,801	43,965	36,836
1960-61 ⁷ ..	439,000	350,000	294,000	56,000	88,000	46,000	43,000
1961-62 . . .	464,658	366,878	310,772	56,106	97,780	48,154	49,626
1962-63 ⁷ ..	506,000	395,000	334,000	61,000	110,000	53,000	57,000
1963-64 . . .	544,719	421,849	355,542	66,307	122,870	58,357	64,503
1964-65 ⁷ ..	595,000	466,000	391,000	75,000	129,000	64,000	65,000
1965-66 ⁷ ..	658,000	520,000	435,000	86,000	138,000	71,000	67,000
1966-67 ⁸ ..	700,000	559,000	465,000	93,000	141,000	76,000	65,000
1967-68 ⁸ ..	745,000	597,000	495,000	101,000	149,000	80,000	69,000
1968-69 ⁸ ..	792,000	636,000	525,000	111,000	157,000	84,000	73,000
PROJECTED⁹							
1969-70 . . .	805,000	646,000	533,000	114,000	159,000	85,000	74,000
1970-71 . . .	833,000	669,000	551,000	118,000	164,000	88,000	77,000
1971-72 . . .	866,000	695,000	572,000	124,000	170,000	91,000	80,000
1972-73 . . .	904,000	727,000	596,000	130,000	178,000	94,000	83,000
1973-74 . . .	944,000	759,000	622,000	137,000	185,000	98,000	87,000
1974-75 . . .	978,000	786,000	644,000	142,000	191,000	101,000	90,000
1975-76 . . .	1,013,000	815,000	667,000	148,000	198,000	105,000	93,000
1976-77 . . .	1,043,000	839,000	686,000	154,000	203,000	108,000	96,000
1977-78 . . .	1,066,000	859,000	701,000	158,000	207,000	110,000	98,000
1978-79 . . .	1,098,000	884,000	721,000	163,000	213,000	113,000	101,000

¹ Faculty tables are in terms of professional positions, not persons. The ratio of positions to persons in 1963-64 was approximately 1.1.

² Excludes professional staff for instruction at the elementary and secondary school level.

³ Includes faculty with rank of instructor or above, and junior instructional staff.

⁴ Includes instructional staff for extension courses; resident nondegree-credit courses; instruction by mail, radio, or TV; short courses, and individual lessons.

⁵ Includes professional staff for general administration, student personnel services, and libraries.

⁶ Excludes graduate students not performing research at a professional level and research consultants employed occasionally. Prior to 1966-67, includes professional staff engaged specifically for full-time or part-time research and those who have been relieved from some or all other duties in order to perform systematic organized research. Beginning in 1966-67, only those engaged primarily in organized research are included.

⁷ Interpolated.

⁸ Except for organized research, estimates were based on: (1) enrollments in 1966, 1967, and 1968; (2) the total number of professional persons in 1966-67 (converted to a position basis); and (3) the distribution of professional positions

reported in 1963-64. (All reports prior to 1966-67 were in terms of positions, not persons. They provided different detail than did the 1966-67 report.) For organized research, the number of professional persons reported in 1966-67 was adjusted to a position basis.

⁹ The projections of total full-time and part-time instructional staff for resident degree-credit courses, instructional staff for other than degree-credit courses, professional staff for administration and services, and professional staff for organized research were computed separately by institutional control and type categories as outlined in tables 34 through 37, footnote 4, and summed for all institutions.

For further methodological details, see appendix A, table A-3.

NOTE: Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: U.S. Department of Health, Education, and Welfare, Office of Education publications: "Numbers and Characteristics of Employees in Institutions of Higher Education, Fall 1966," and "Faculty and Other Professional Staff in Institutions of Higher Education," biennially, first term 1957-58 to 1963-64.

Table 34.—Total full-time and part-time professional staff positions in 4-year publicly controlled institutions of higher education, by function: United States, first term 1958-59 to 1978-79¹

Year	Total professional staff	Instructional staff			Other professional staff		
		Total	Resident degree-credit courses	Other instruction	Total	Administration and services	Organized research
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1958-59 ² . . .	193,000	158,000	122,000	35,000	35,000	14,000	21,000
1959-60	199,543	162,074	126,136	35,938	37,469	15,369	22,100
1960-61 ² . . .	209,000	169,000	132,000	36,000	41,000	16,000	24,000
1961-62	222,282	177,354	140,541	36,813	44,928	17,510	27,418
1962-63 ² . . .	247,000	195,000	155,000	40,000	52,000	20,000	32,000
1963-64	272,746	212,797	169,497	43,300	59,949	22,563	37,386
1964-65 ² . . .	305,000	240,000	190,000	49,000	65,000	25,000	40,000
1965-66 ² . . .	344,000	272,000	216,000	56,000	72,000	28,000	44,000
1966-67 ³ . . .	371,000	294,000	233,000	61,000	77,000	30,000	46,000
1967-68 ³ . . .	401,000	318,000	252,000	66,000	83,000	33,000	50,000
1968-69 ³ . . .	435,000	345,000	274,000	71,000	90,000	36,000	55,000
PROJECTED⁴							
1969-70	446,000	353,000	280,000	73,000	92,000	36,000	56,000
1970-71	464,000	368,000	292,000	76,000	96,000	38,000	58,000
1971-72	484,000	383,000	304,000	79,000	100,000	40,000	61,000
1972-73	509,000	404,000	320,000	83,000	106,000	42,000	64,000
1973-74	535,000	424,000	336,000	87,000	111,000	44,000	67,000
1974-75	555,000	440,000	349,000	91,000	115,000	45,000	70,000
1975-76	578,000	458,000	363,000	94,000	120,000	47,000	73,000
1976-77	599,000	474,000	377,000	98,000	124,000	49,000	75,000
1977-78	613,000	486,000	385,000	100,000	127,000	50,000	77,000
1978-79	635,000	503,000	399,000	104,000	132,000	52,000	80,000

¹ For exclusions and inclusions under the different categories of professional staff, see table 33, footnotes 1 through 6.

² Interpolated.

³ Estimated. Except for organized research, estimates were based on: (1) enrollments in 1966, 1967, and 1968; (2) the total number of professional persons in 1966-67 (converted to a position basis); and (3) the distribution of professional positions reported in 1963-64. (All reports prior to 1966-67 were in terms of positions, not persons. They provided different detail than did the 1966-67 report.) For organized research, the number of professional persons reported in 1966-67 was adjusted to a position basis.

⁴ The projection of total full-time and part-time instructional staff for resident degree-credit courses in 4-year public institutions is based on the assumption that the ratio of total degree-credit enrollment to instructional staff for resident degree-credit courses in these institutions will follow the 1958-59 to 1963-64 trend.

The projection of total full-time and part-time instructional staff for other than resident degree-

credit courses, professional staff for administration and services, and professional staff for organized research, is based on the percentage each was of total full-time and part-time instructional staff for resident degree-credit courses in 1963-64. These percentages in 4-year public institutions were 26, 13, and 20, respectively, and are assumed to remain at the 1963-64 level to 1978-79.

For further methodological details, see appendix A, table A-3.

NOTE: Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: U.S. Department of Health, Education, and Welfare, Office of Education publications: "Numbers and Characteristics of Employees in Institutions of Higher Education, Fall 1966," and "Faculty and Other Professional Staff in Institutions of Higher Education," biennially, first term 1957-58 to 1963-64.

Table 35.—Total full-time and part-time professional staff positions in 4-year privately controlled institutions of higher education, by function: United States, first term 1958-59 to 1978-79¹

Year	Total professional staff	Instructional staff			Other professional staff		
		Total	Resident degree-credit courses	Other instruction	Total	Administration and services	Organized research
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1958-59 ² . . .	172,000	137,000	128,000	9,000	35,000	22,000	14,000
1959-60 . . .	179,515	141,691	132,354	9,337	37,824	23,139	14,685
1960-61 ² . . .	188,000	146,000	137,000	9,000	42,000	24,000	18,000
1961-62 . . .	198,635	151,763	143,347	8,416	46,872	24,791	22,081
1962-63 ² . . .	210,000	159,000	149,000	9,000	51,000	27,000	24,000
1963-64 . . .	219,759	164,012	153,991	10,021	55,747	28,749	26,998
1964-65 ² . . .	230,000	174,000	163,000	11,000	56,000	31,000	25,000
1965-66 ² . . .	240,000	185,000	173,000	11,000	55,000	33,000	22,000
1966-67 ³ . . .	245,000	192,000	180,000	12,000	53,000	34,000	19,000
1967-68 ³ . . .	250,000	196,000	184,000	12,000	53,000	35,000	18,000
1968-69 ³ . . .	245,000	193,000	181,000	12,000	52,000	34,000	18,000
PROJECTED⁴							
1969-70	244,000	192,000	180,000	12,000	52,000	34,000	18,000
1970-71	247,000	194,000	182,000	12,000	53,000	35,000	18,000
1971-72	253,000	199,000	185,000	12,000	54,000	35,000	19,000
1972-73	257,000	202,000	190,000	12,000	55,000	36,000	19,000
1973-74	264,000	207,000	194,000	13,000	56,000	37,000	19,000
1974-75	269,000	211,000	198,000	13,000	58,000	38,000	20,000
1975-76	274,000	215,000	202,000	13,000	59,000	38,000	20,000
1976-77	275,000	216,000	203,000	13,000	59,000	39,000	20,000
1977-78	277,000	218,000	205,000	13,000	59,000	39,000	20,000
1978-79	280,000	220,000	206,000	13,000	60,000	39,000	21,000

¹ For exclusions and inclusions under the different categories of professional staff, see table 33, footnotes 1 through 6.

² Interpolated.

³ Estimated. Except for organized research, estimates were based on: (1) enrollments in 1966, 1967, and 1968; (2) the total number of professional persons in 1965-67 (converted to a position basis); and (3) the distribution of professional positions reported in 1963-64. (All reports prior to 1966-67 were in terms of positions, not persons. They provided different detail than did the 1966-67 report.) For organized research, the number of professional persons reported in 1966-67 was adjusted to a position basis.

⁴ The projection of total full-time and part-time instructional staff for resident degree-credit courses in 4-year private institutions is based on the assumption that the ratio of total degree-credit enrollment to instructional staff for resident degree-credit courses in these institutions will follow the 1958-59 to 1963-64 trend.

The projection of total full-time and part-time instructional staff for other than resident degree-credit courses, professional staff for administration and services, and professional staff for organized research, is based on the percentage each was of total full-time and part-time instructional staff for resident degree-credit courses in 1963-64. These percentages in 4-year private institutions were 7, 19, and 10, respectively, and are assumed to remain at the 1963-64 level to 1978-79.

For further methodological details, see appendix A, table A-3.

NOTE: Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: U.S. Department of Health, Education, and Welfare, Office of Education publications: "Numbers and Characteristics of Employees in Institutions of Higher Education, Fall 1966," and "Faculty and Other Professional Staff in Institutions of Higher Education," biennially, first term 1957-58 to 1963-64.

Table 36.—Total full-time and part-time professional staff positions in 2-year publicly controlled institutions of higher education, by function: United States, first term 1958-59 to 1978-79¹

Year	Total professional staff	Instructional staff			Other professional staff		
		Total	Resident degree-credit courses	Other instruction	Total	Administration and services	Organized research
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1958-59 ² . . .	28,000	25,000	17,000	8,000	3,000	3,000	12
1959-60 . . .	30,408	27,440	18,405	9,035	2,968	2,961	7
1960-61 ² . . .	32,000	29,000	20,000	9,000	3,000	3,000	8
1961-62 . . .	34,382	30,966	22,062	8,904	3,416	3,406	10
1962-63 ² . . .	38,000	34,000	24,000	10,000	4,000	4,000	24
1963-64 . . .	41,462	37,365	26,545	10,820	4,097	4,055	42
1964-65 ² . . .	48,000	43,000	31,000	12,000	5,000	5,000	L
1965-66 ² . . .	58,000	53,000	38,000	15,000	6,000	6,000	L
1966-67 ³ . . .	69,000	62,000	44,000	18,000	7,000	7,000	L
1967-68 ³ . . .	79,000	71,000	51,000	21,000	8,000	8,000	L
1968-69 ³ . . .	96,000	86,000	62,000	25,000	9,000	9,000	L
PROJECTED⁴							
1969-70 . . .	99,000	90,000	64,000	26,000	10,000	10,000	L
1970-71 . . .	105,000	95,000	68,000	27,000	10,000	10,000	L
1971-72 . . .	112,000	101,000	72,000	29,000	11,000	11,000	L
1972-73 . . .	120,000	108,000	77,000	31,000	12,000	12,000	L
1973-74 . . .	127,000	115,000	82,000	33,000	12,000	12,000	L
1974-75 . . .	135,000	122,000	87,000	35,000	13,000	13,000	L
1975-76 . . .	142,000	128,000	91,000	37,000	14,000	14,000	L
1976-77 . . .	149,000	135,000	96,000	39,000	14,000	14,000	L
1977-78 . . .	155,000	140,000	100,000	40,000	15,000	15,000	L
1978-79 . . .	162,000	146,000	104,000	42,000	16,000	16,000	L

L = less than 500.

¹ For exclusions and inclusions under the different categories of professional staff, see table 33, footnotes 1 through 6.

² Interpolated.

³ Estimated. Except for organized research, estimates were based on: (1) enrollments in 1966, 1967, and 1968; (2) the total number of professional persons in 1966-67 (converted to a position basis); and (3) the distribution of professional positions reported in 1963-64. (All reports prior to 1966-67 were in terms of positions, not persons. They provided different detail than did the 1966-67 report.) For organized research, the number of professional persons reported in 1966-67 was adjusted to a position basis.

⁴ The projection of total full-time and part-time instructional staff for resident degree-credit courses in 2-year public institutions is based on the assumption that the ratio of total degree-credit enrollment to instructional staff for resident degree-credit courses in these institutions will follow the 1958-59 to 1963-64 trend.

The projection of total full-time and part-time instructional staff for other than resident degree-

credit courses, professional staff for administration and services, and professional staff for organized research, is based on the percentage each was of total full-time and part-time instructional staff for resident degree-credit courses in 1963-64. These percentages in 2-year public institutions were 40, 15, and 0.05, respectively, and are assumed to remain at the 1963-64 level to 1978-79.

For further methodological details, see appendix A, table A-3.

NOTE: Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: U.S. Department of Health, Education, and Welfare, Office of Education publications: "Numbers and Characteristics of Employees in Institutions of Higher Education, Fall 1966," and "Faculty and Other Professional Staff in Institutions of Higher Education," biennially, first term 1957-58 to 1963-64.

Table 37.—Total full-time and part-time professional staff positions in 2-year privately controlled institutions of higher education, by function: United States, first term 1958-59 to 1978-79¹

Year	Total professional staff	Instructional staff			Other professional staff		
		Total	Resident degree-credit courses	Other instruction	Total	Administration and services	Organized research
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1958-59 ² ...	9,700	7,200	5,200	2,100	2,500	2,500	L
1959-60 ...	9,322	6,782	4,611	2,171	2,540	2,496	44
1960-61 ² ...	9,300	6,800	4,700	2,100	2,500	2,500	100
1961-62 ...	9,359	6,795	4,822	1,973	2,564	2,447	117
1962-63 ³ ...	10,400	7,500	5,300	2,100	2,900	2,800	100
1963-64 ...	10,752	7,675	5,509	2,166	3,077	3,000	77
1964-65 ² ...	13,200	9,400	6,800	2,600	3,800	3,710	100
1965-66 ³ ...	15,200	10,900	7,800	3,000	4,400	4,300	100
1966-67 ³ ...	15,500	11,100	8,000	3,100	4,500	4,400	100
1967-68 ³ ...	15,500	11,000	7,900	3,100	4,400	4,400	100
1968-69 ³ ...	16,600	11,900	8,500	3,300	4,800	4,700	100
PROJECTED⁴							
1969-70 ...	16,600	11,900	8,500	3,300	4,800	4,700	100
1970-71 ...	17,100	12,200	8,700	3,400	4,900	4,800	100
1971-72 ...	17,500	12,500	9,000	3,500	5,000	4,900	100
1972-73 ...	18,200	12,900	9,300	3,600	5,200	5,100	100
1973-74 ...	18,700	13,300	9,600	3,700	5,400	5,300	100
1974-75 ...	19,100	13,600	9,800	3,800	5,500	5,400	100
1975-76 ...	19,600	14,000	10,000	3,900	5,600	5,500	100
1976-77 ...	20,000	14,200	10,200	4,000	5,700	5,600	100
1977-78 ...	20,300	14,500	10,400	4,100	5,800	5,700	100
1978-79 ...	20,900	14,900	10,700	4,200	6,000	5,900	100

L = less than 50.

¹ For exclusions and inclusions under the different categories of professional staff, see table 33, footnotes 1 through 6.

² Interpolated.

³ Estimated. Except for organized research, estimates were based on: (1) enrollments in 1966, 1967, and 1968; (2) the total number of professional persons in 1966-67 (converted to a position basis); and (3) the distribution of professional positions reported in 1963-64. (All reports prior to 1966-67 were in terms of positions, not persons. They provided different detail than did the 1966-67 report.) For organized research, the number of professional persons reported in 1966-67 was adjusted to a position basis.

⁴ The projection of total full-time and part-time instructional staff for resident degree-credit courses in 2-year private institutions is based on the assumption that the ratio of total degree-credit enrollment to instructional staff for resident degree-credit courses in these institutions will follow the 1958-59 to 1963-64 trend.

The projection of total full-time and part-time instructional staff for other than resident degree-credit courses, professional staff for administration and services, and professional staff for organized research, is based on the percentage each was of total full-time and part-time instructional staff for resident degree-credit courses in 1963-64. These percentages in 2-year private institutions were 39, 55, and 1 percent, respectively, and are assumed to remain at the 1963-64 level to 1978-79.

For further methodological details, see appendix A, table A-3.

NOTE: Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: U.S. Department of Health, Education, and Welfare, Office of Education publications: "Numbers and Characteristics of Employees in Institutions of Higher Education, Fall 1966," and "Faculty and Other Professional Staff in Institutions of Higher Education," biennially, first term 1957-58 to 1963-64.

Table 38.—Estimated full-time-equivalent professional staff in all institutions of higher education, by function: United States, first term 1958-59 to 1978-79¹

Year (fall)	Total full-time-equivalent professional staff	Full-time-equivalent instructional staff			Full-time-equivalent other professional staff		
		Total	Resident degree-credit courses	Other instruction	Total	Administration and services	Organized research
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1958-59	287,000	233,000	194,000	39,000	54,000	29,000	25,000
1959-60	298,000	241,000	201,000	40,000	57,000	31,000	26,000
1960-61	313,000	250,000	210,000	40,000	63,000	32,000	31,000
1961-62	332,000	261,000	222,000	40,000	70,000	34,000	36,000
1962-63	359,000	281,000	237,000	44,000	79,000	38,000	41,000
1963-64	387,000	299,000	252,000	47,000	87,000	41,000	46,000
1964-65	423,000	331,000	278,000	53,000	92,000	45,000	46,000
1965-66	467,000	370,000	309,000	61,000	98,000	50,000	47,000
1966-67	497,000	397,000	331,000	66,000	100,000	54,000	46,000
1967-68	530,000	424,000	352,000	72,000	106,000	57,000	49,000
1968-69	563,000	452,000	373,000	79,000	111,000	60,000	52,000
PROJECTED							
1969-70	572,000	459,000	378,000	81,000	113,000	60,000	53,000
1970-71	592,000	475,000	391,000	84,000	117,000	62,000	54,000
1971-72	615,000	494,000	406,000	88,000	121,000	64,000	57,000
1972-73	642,000	516,000	424,000	92,000	126,000	67,000	59,000
1973-74	671,000	539,000	442,000	97,000	131,000	70,000	62,000
1974-75	695,000	559,000	458,000	101,000	136,000	72,000	64,000
1975-76	720,000	579,000	474,000	105,000	141,000	74,000	66,000
1976-77	741,000	596,000	487,000	109,000	144,000	76,000	68,000
1977-78	757,000	610,000	498,000	112,000	147,000	78,000	69,000
1978-79	780,000	623,000	512,000	116,000	151,000	80,000	71,000

¹ For the categories of professional staff members included in this table, see footnotes 2 through 6, table 33.

The estimation, 1958-59 to 1968-69, and the projection, 1969-70 to 1978-79, of the full-time equivalent of reported and projected total full-time and part-time professional staff for instructional courses other than degree-credit, for administration and services, and for organized research, is based on the assumption that the percent that full-time-equivalent instructional staff for resident degree-credit courses is of total full-time and part-time instructional staff for these courses (71 percent in 1963-64) will apply to all other professional staff as well. The totals of full-time and

part-time staff shown in table 33 were multiplied by this percentage.

For further methodological details, see appendix A, table A-3.

NOTE: Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Numbers and Characteristics of Employees in Institutions of Higher Education, Fall 1966," and (2) "Faculty and Other Professional Staff in Institutions of Higher Education," biennially, first term 1957-58 to 1963-64.

Table 39.—Estimated demand for full-time-equivalent professional staff in institutions of higher education, by function: United States, first term 1963-64 to 1978-79¹

Year (fall)	Full-time-equivalent professional staff ²					Additional full-time-equivalent professional staff needed		
	Total	Instructional staff		Adminis- tration and services	Organized research	Total	For increased enrollment	For replace- ment
		Resident degree- credit courses	Other instruction					
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1963-64 ..	387,000	252,000	47,000	41,000	46,000	....	....	....
1964-65 ..	423,000	278,000	53,000	45,000	46,000	60,000	36,000	23,000
1965-66 ..	467,000	309,000	61,000	50,000	47,000	70,000	44,000	25,000
1966-67 ..	497,000	331,000	66,000	54,000	46,000	58,000	30,000	28,000
1967-68 ..	530,000	352,000	72,000	57,000	49,000	62,000	33,000	30,000
1968-69 ..	563,000	373,000	79,000	60,000	52,000	65,000	33,000	32,000
1964-69 ..	2,480,000	1,642,000	331,000	266,000	241,000	315,000	176,000	138,000
PROJECTED³								
1969-70 ..	572,000	378,000	81,000	60,000	53,000	43,000	9,000	34,000
1970-71 ..	592,000	391,000	84,000	62,000	54,000	54,000	20,000	34,000
1971-72 ..	615,000	406,000	88,000	64,000	57,000	59,000	23,000	36,000
1972-73 ..	642,000	424,000	92,000	67,000	59,000	64,000	27,000	37,000
1973-74 ..	671,000	442,000	97,000	70,000	62,000	67,000	29,000	39,000
1969-74 ..	3,092,000	2,042,000	442,000	324,000	284,000	287,000	108,000	179,000
1974-75 ..	695,000	458,000	101,000	72,000	64,000	64,000	24,000	40,000
1975-76 ..	720,000	474,000	105,000	74,000	66,000	67,000	25,000	42,000
1976-77 ..	741,000	487,000	109,000	76,000	68,000	64,000	21,000	43,000
1977-78 ..	757,000	498,000	112,000	78,000	69,000	61,000	17,000	44,000
1978-79 ..	780,000	512,000	116,000	80,000	71,000	68,000	22,000	45,000
1974-79 ..	3,692,000	2,429,000	544,000	381,000	339,000	324,000	109,000	215,000

¹ For the categories of professional staff members included in this table, see table 33, footnotes 2 through 6.

² For the method of estimating and projecting full-time-equivalent professional staff, see table 32, footnote 4, and table 38, footnote 1.

³ The projection of additional full-time-equivalent professional staff for increased enrollment was computed as the difference between the total full-time-equivalent professional staff employed in two successive years. The projection of additional full-time-equivalent professional staff for replacement of those leaving the profession, temporarily or permanently, was estimated at 6 percent of the total full-time-equivalent professional staff employed in the previous year.

For methodological details, see appendix A, table A-3.

NOTE: Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: U.S. Department of Health, Education, and Welfare, Office of Education publications: "Numbers and Characteristics of Employees in Institutions of Higher Education, Fall 1966," and "Faculty and Other Professional Staff in Institutions of Higher Education," biennially, first term 1957-58 to 1963-64.

CHAPTER V

Expenditures of Educational Institutions

Forrest W. Harrison and C. George Lind

Explanations and definitions

The main tables in this chapter include only expenditures of regular public and nonpublic elementary and secondary schools and institutions of higher education in the 50 States and the District of Columbia. This means that "other" and "special" institutions are not included.

"Other" institutions include elementary and secondary residential schools for exceptional children (public and nonpublic), Federal schools for Indians (public), and federally operated elementary and secondary schools on military posts (public). In 1968-69, it is estimated that expenditures of "other" schools were about \$200 million for public and \$100 million for nonpublic schools in this category. Almost all "other" schools, including the nonpublic, are nonprofitmaking institutions.

"Special" institutions include schools such as trade schools or business colleges not in the regular school or college framework. Expenditure data are not available for "special" schools, but it is estimated that they spend approximately \$900 million per year. This supposition is based on a U.S. Bureau of the Census estimate that 1.5 million persons, aged 5 to 34 years, were enrolled in "special" schools in October 1968.¹ If an average expenditure per student of about \$600 is assumed, the total expenditures for these schools would be about \$900 million. Almost all "special" schools are nonpublic profitmaking institutions.

Regular institutions include public and most nonprofit-making nonpublic elementary and secondary schools (kindergarten through grade 12) plus the institutions of higher education offering degree-credit courses, and a small number of technical and professional schools. Most of these schools and colleges are oriented toward regular academic programs, but some of them are primarily technical training institutions or offer both academic and vocational courses. As noted, the main tables and discussions here are for these regular institutions. However, "other" schools are included in the discussion and table on pages 74 and 75-79.

Total expenditures include all funds expended for capital outlay, current expenditures, and interest. They exclude repayment of debt and transfers of funds that would result in duplication.

Capital outlay includes expenditures which result in additions to plant assets; this includes the expenditures by public school building authorities but excludes lease or rental payments made to these agencies. Borrowed money is included; a large percentage of the funds expended for capital outlay was received from loans. In 1965-66, it is estimated that 83 percent of the capital outlay for public elementary and secondary schools was for land and buildings; the remaining 17 percent, for new school buses and other equipment. The proportion for equipment could be higher than 17 percent in 1968-69 because a substantial amount of the funds available from the Elementary and Secondary Education Act of 1965 was spent for equipment. About 81 percent of the capital outlay by institutions of higher education was for land and buildings; the remaining 19 percent, for equipment.

Current expenditures include any expenditures except those for repayment of debt and capital outlay. Interest is generally excluded from the current expenditures shown here because it is treated separately. The largest current expense item is salaries of instructional staff, accounting for about 62 percent of current expenditures. The remaining 38 percent goes for transportation, maintenance, etc.

¹ U.S. Department of Commerce, Bureau of the Census, "Current Population Reports, School Enrollment: October 1968 and 1967." Series P-20, No. 190, 1969.

Interest includes all funds expended for the use of money. Most of the interest shown here was expended on account of long-term debt that was incurred for constructing buildings.

Expenditures by source of funds

Regular and "other" schools

Although no attempt was made to project amounts of funds from the various sources to be expended by educational institutions, estimates are shown by source for the past 11 years. To do this, estimates for "other" schools were added to the total expenditures shown in table 40 for the appropriate years. The resulting total expenditures for regular and "other" schools were then broken down by source of funds by first adjusting receipts to equate them with expenditures and then assuming a continuation of the 1959-60 through 1965-66 trend in the amount of receipts from each source. Receipts and expenditures were equated mainly by including loans and excluding the receipts used for repayments of loans.

Total expenditures are defined as the expenditure of all money from both loans and grants and exclude only the funds used for reducing debt and transfers that result in duplication. Expenditures from Federal, State, and local sources are defined as institutional expenditures of all grants (but not loans) of funds received from those sources. Expenditures from all other sources include all funds received by the institutions that were not received as grants from Federal, State, and local governments. Loans to institutions of higher education from any source are included under "all other." (It is estimated that in 1968-69, \$308 million in Federal loans to institutions of higher education was included in the "all other" category shown here.)

Since the foregoing definitions are designed to show sources of funds through the eyes of educational institutions, the Federal figures shown in the preceding table are different from those shown in appendix B, table B-10 on Federal funds for education. The three main reasons are as follows:

(1) Different items are included. For example, the table on Federal funds in appendix B shows grants and loans to individuals, which would appear in institutional accounts here as receipts from tuition or auxiliary services; or the money may be spent for board and room outside the institution and not be a receipt of the institution from any source.

(2) The same items may be handled differently. For example, the table on Federal funds shows only basic research for institutions of higher education; the institutions include some applied research grants from the Federal Government.

(3) The table on Federal funds generally shows obligated funds; the institutional figures show expenditures.

Total expenditures

Regular institutions (table 40)

Total annual expenditures of regular educational institutions (in 1968-69 dollars) increased from \$28.5 billion in 1958-59 to \$61.1 billion in 1968-69 and are expected to be \$87.4 billion in 1978-79. The expenditure increases are due chiefly to increases in enrollment at all levels of education, especially in high schools and colleges, and the increasing costs of the many items such as school facilities and salaries of teachers that are necessary for providing education. The projected total expenditures are shown in table 40. They are based mainly on the assumptions that the 1958-59 to 1968-69 trend will continue through 1978-79 and that some additional amounts (above trend) will be expended because of the effects of the Elementary and Secondary Education Act of 1965.

Estimated expenditures by regular and "other" educational institutions,
by source of funds: United States, 1959-60 to 1969-70¹

Source of funds, by control and level	1959-60	1961-62	1963-64	1965-66	1966-67	1967-68	1968-69	1969-70
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
AMOUNT, in billions of current dollars								
All levels:								
Total, public and nonpublic	\$24.7	\$29.8	\$36.1	\$45.4	\$49.8	\$54.9	\$61.4	\$65.8
Federal	1.8	2.4	3.1	4.9	5.8	6.6	7.2	7.7
State	7.3	8.8	10.7	13.1	14.2	15.9	18.3	19.8
Local	9.5	11.1	12.8	15.2	16.1	17.7	20.0	21.4
All other	6.1	7.5	9.5	12.2	13.7	14.7	15.9	16.9
Total, public	19.7	23.4	28.0	35.3	38.9	43.5	49.3	53.1
Federal	1.3	1.6	2.0	3.5	4.2	4.9	5.3	5.6
State	7.3	8.7	10.6	13.0	14.1	15.8	18.2	19.7
Local	9.5	11.1	12.8	15.2	16.1	17.7	20.0	21.4
All other	1.6	2.0	2.6	3.6	4.5	5.1	5.8	6.4
Total, nonpublic	5.0	6.4	8.1	10.1	10.9	11.4	12.1	12.7
Federal .....	.5	.8	1.1	1.4	1.6	1.7	1.9	2.1
State	(²)	.1	.1	.1	.1	.1	.1	.1
Local	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
All other	4.5	5.5	6.9	8.6	9.2	9.6	10.1	10.5
Elementary and secondary schools:								
Total, public and nonpublic	18.0	21.3	24.8	30.2	32.3	35.8	40.1	43.1
Federal .....	.8	.9	.9	2.0	2.5	2.9	2.9	2.9
State	5.7	6.8	8.1	9.6	10.3	11.5	13.3	14.6
Local	9.3	10.9	12.5	14.8	15.6	17.2	19.4	20.8
All other	2.2	2.7	3.3	3.8	3.9	4.2	4.5	4.8

See footnotes at end of table.

**Estimated expenditures by regular and "other" educational institutions,
by source of funds: United States, 1959-60 to 1969-70¹—Continued**

Source of funds, by control and level	1959-60 (2)	1961-62 (3)	1963-64 (4)	1965-66 (5)	1966-67 (6)	1967-68 (7)	1968-69 (8)	1969-70 (9)
AMOUNT, in billions of current dollars								
Total, public⁴	\$15.9	\$18.7	\$21.6	\$26.5	\$28.5	\$31.7	\$35.7	\$38.5
Federal .....	.8	.9	.9	2.0	2.5	2.9	2.9	2.9
State	5.7	6.8	8.1	9.6	10.3	11.5	13.3	14.6
Local	9.3	10.9	12.5	14.8	15.6	17.2	19.4	20.8
All other .....	.1	.1	.1	.1	.1	.1	.1	.2
Total, nonpublic	2.1	2.6	3.2	3.7	3.8	4.1	4.4	4.6
Federal								
State								
Local								
All other	2.1	2.6	3.2	3.7	3.8	4.1	4.4	4.6
Institutions of higher education:								
Total, public and nonpublic	6.7	8.5	11.3	15.2	17.5	19.1	21.3	22.7
Federal	1.0	1.5	2.2	2.9	3.3	3.7	4.3	4.8
State	1.6	2.0	2.6	3.5	3.9	4.4	5.0	5.2
Local .....	.2	.2	.3	.4	.5	.5	.6	.6
All other	3.9	4.8	6.2	8.4	9.8	10.5	11.4	12.1
Total, public⁴	3.8	4.7	6.4	8.8	10.4	11.8	13.6	14.6
Federal .....	.5	.7	1.1	1.5	1.7	2.0	2.4	2.7
State	1.6	1.9	2.5	3.4	3.8	4.3	4.9	5.1
Local .....	.2	.2	.3	.4	.5	.5	.6	.6
All other	1.5	1.9	2.5	3.5	4.4	5.0	5.7	6.2

Total, nonpublic ⁴	2.9	3.8	4.9	6.4	7.1	7.3	7.7	8.1
Federal	0.5	0.8	1.1	1.4	1.6	1.7	1.9	2.1
State	(²)	.1	(²)	.1	.1	.1	.1	.1
Local	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
All other	2.4	2.9	3.7	4.9	5.4	5.5	5.7	5.9

PERCENT

All levels:								
Total, public and nonpublic	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Federal	7.3	8.1	8.6	10.8	11.7	12.0	11.7	11.7
State	29.5	29.5	29.6	28.8	28.5	29.0	29.8	30.1
Local	38.5	37.2	35.5	33.5	32.3	32.2	32.6	32.5
All other	24.7	25.2	26.3	26.9	27.5	26.8	25.9	25.7
Total, public								
Total, public	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Federal	6.6	6.8	7.1	9.9	10.8	11.3	10.7	10.5
State	37.1	37.2	37.9	36.8	36.2	36.3	36.9	37.1
Local	48.2	47.4	45.7	43.1	41.4	40.7	40.6	40.3
All other	8.1	8.6	9.3	10.2	11.6	11.7	11.8	12.1
Total, nonpublic								
Total, nonpublic	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Federal	10.0	12.5	13.6	13.9	14.7	14.9	15.7	16.5
State	(³)	1.6	1.2	1.0	.9	.9	.8	.8
Local	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)
All other	90.0	85.9	85.2	85.1	84.4	84.2	83.5	82.7

See footnotes at end of table.

Estimated expenditures by regular and "other" educational institutions,
by source of funds: United States, 1959-60 to 1969-70¹ -Continued

Source of funds, by control and level	1959-60	1961-62	1963-64	1965-66	1966-67	1967-68	1968-69	1969-70
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
PERCENT								
Elementary and secondary schools:								
Total ² , public and nonpublic	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Federal	4.4	4.2	3.6	6.6	7.7	8.1	7.2	6.7
State	31.7	31.9	32.7	31.8	31.9	32.1	33.2	33.9
Local	51.7	51.2	50.4	49.0	48.3	48.1	48.4	48.3
All other	12.2	12.7	13.3	12.6	12.1	11.7	11.2	11.1
Total, public ⁴	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Federal	4.9	4.8	4.2	7.4	8.8	9.0	8.0	7.6
State	35.6	36.2	37.5	36.4	36.2	36.4	37.3	37.9
Local	59.2	58.7	57.9	55.9	54.7	54.3	54.4	54.1
All other	.3	.3	.4	.3	.3	.3	.3	.4
Total, nonpublic	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Federal	.....	.....	.....	.....	.....	.....	.....	.....
State	.....	.....	.....	.....	.....	.....	.....	.....
Local	.....	.....	.....	.....	.....	.....	.....	.....
All other	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Institutions of higher education:													
Total, public and nonpublic		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Federal	.....	14.9	17.6	19.5	19.1	18.9	19.4	20.2	21.2	21.2	21.2	21.2	21.2
State	.....	23.9	23.5	23.0	23.0	22.3	23.0	23.5	22.9	22.9	23.5	22.9	22.9
Local	.....	3.0	2.4	2.6	2.6	2.8	2.6	2.8	2.6	2.6	2.8	2.6	2.6
All other	.....	58.2	56.5	54.9	55.3	56.0	55.0	53.5	53.3	53.3	53.5	53.3	53.3
Total, public⁴	.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Federal	.....	14.7	15.5	16.7	17.1	16.7	17.2	17.7	18.2	18.2	17.7	18.2	18.2
State	.....	41.1	40.7	39.4	38.5	37.0	36.4	35.8	35.3	35.3	35.8	35.3	35.3
Local	.....	4.6	4.2	4.3	4.1	4.4	4.3	4.2	4.1	4.1	4.2	4.1	4.1
All other	.....	39.6	39.6	39.6	40.3	41.9	42.1	42.3	42.4	42.4	42.3	42.4	42.4
Total, nonpublic⁴	.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Federal	.....	17.0	20.4	22.9	21.6	22.3	23.3	24.3	25.3	25.3	24.3	25.3	25.3
State	.....	1.4	1.4	1.2	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Local	.....	.1	.2	.2	.2	.4	.4	.4	.4	.4	.4	.4	.4
All other	.....	81.5	78.0	75.7	76.8	75.9	74.9	73.9	72.9	72.9	73.9	72.9	72.9

¹ In addition to regular schools (shown in table 41) these figures include "other" elementary and secondary schools such as residential schools for exceptional children, Federal schools for Indians, and federally operated elementary and secondary schools on posts. The annual expenditures of "other" elementary and secondary schools were estimated as follows:

Years	Public, Millions	Nonpublic
1959-60	\$100	Less than \$50 million.
1961-62	200	Less than \$50 million.
1963-64 to 1969-70	200	\$100 million.

² Less than \$50 million.
³ Less than 0.05 percent.

⁴ Total expenditures distributed according to the trend of receipts shown in appendix B, table B-9. See text for more complete explanation.
NOTE: Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Data for the table above were based on statistics shown in U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of State School Systems," 1957-58, 1959-60, 1961-62, 1963-64, and 1965-66; (2) "Statistics of Public Schools," fall 1964, 1965, 1966, 1967, and 1968; (3) "Financial Statistics of Higher Education," 1957-58, 1959-60, 1961-62, 1963-64, 1965-66, and 1966-67; (4) "Digest of Educational Statistics," 1968; and unpublished data in the U.S. Office of Education.

Regular public elementary and secondary schools (tables 40, 42)

Current expenditures

Annual current expenditures for public elementary and secondary schools (in 1968-69 dollars) increased from \$18.1 billion in 1958-59 to \$35.5 billion in 1968-69, an increase of 96 percent. They are expected to increase 32 percent to \$46.7 billion by 1978-79. These projections include the increased expenditures expected because of the Elementary and Secondary Education Act of 1965.

Increased enrollment together with increased costs per pupil have accounted for the increase in current expenditures. Expenditures have been increasing and are expected to continue to increase for practically all of the major items included in current expense, such as administration, instruction, operation and maintenance of plant, fixed charges, and other school services and programs. Annual current expenditures per pupil (in 1968-69 dollars) increased from \$440 in 1958-59 to \$696 in 1968-69 and are expected to increase to \$885 by 1978-79. The last two figures include the effects of the Elementary and Secondary Education Act of 1965.

Projected current expenditures for public elementary and secondary day schools are shown in table 42. They were projected as follows:

(1) Current expenditures per pupil in average daily attendance (ADA) for the base years 1958-59 to 1968-69 were converted to 1968-69 dollars on the basis of the Consumer Price Index prepared by the Bureau of Labor Statistics, U.S. Department of Labor. Monthly index numbers were averaged on a July-June basis to correspond to the school years.

(2) The current expenditures per pupil for the years 1958-59 to 1964-65 were used in deriving a formula (by least squares) for projecting trend figures for 1965-66 to 1968-69. This formula was $y = \$421 + \$19(t)$ (t = time in years, $t=1$ in 1958-59).

(3) Average daily attendance was calculated for 1969-70 to 1978-79 by assuming that the ratio of average daily attendance to projected fall enrollment in kindergarten through grade 12 will remain constant at 92.7 percent (the average of the years 1963-64 through 1968-69).

(4) Total current expenditures (excluding effects of the Elementary and Secondary Education Act, 1965) allocated to public elementary and secondary school pupil costs (1968-69 dollars) were projected for 1965-66 to 1978-79 by multiplying the current expenditures per pupil, as projected in step (2), by the corresponding average daily attendance projected in step (3). These figures exclude expenditures for summer schools, adult education, and community colleges operated by school districts.

(5) Total current expenditures (excluding effects of the Elementary and Secondary Education Act, 1965) for all programs operated by school districts—including summer schools, adult education, and community colleges—were projected for 1965-66 to 1978-79 by assuming that current expenditures for all programs remain constant at the 1967-68 rate of 103.5 percent of current expenditures allocated for public elementary and secondary school pupil costs.

(6) Current expenditures per pupil (including the Elementary and Secondary Education Act, 1965) allocated to public elementary and secondary pupil costs were projected by adding \$70 to the figures projected in step (2). (In 1968-69 the current expenditure per pupil reported by State departments of education was \$70 higher than the trend figure for 1968-69 derived in step (2).)

(7) Total current expenditures allocated to pupil costs (including the effects of the Elementary and Secondary Education Act of 1965) were projected by multiplying the current expenditures per pupil, as projected in step (6), by the corresponding average daily attendance projected in step (3).

(8) Total current expenditures for all programs operated by school districts (including the effects of the Elementary and Secondary Education Act) were projected by multiplying the figures in step (7) by 103.5 percent.

Salaries of instructional staff (tables 43, 29)

A large part of current expenditures for public elementary and secondary schools is for salaries of instructional staff (amounting to 62 percent in 1968-69). Total expenditures for these salaries (in 1968-69 dollars) increased from \$8.6 billion in 1958-59 to \$17.7 billion in 1968-69, and are expected to be \$26.4 billion in 1978-79. These increases are due to larger numbers of instructional staff and to higher average annual salaries. The amounts for 1965-66 to 1978-79 also reflect the larger number of instructional staff expected on account of the Elementary and Secondary Education Act of 1965.

The average annual salary of instructional staff (in 1968-69 dollars) increased from \$6,075 in 1958-59 to \$8,200 in 1968-69 and is expected to be \$11,000 in 1978-79. During the past 10 years, the average annual salary has been increasing about \$200 per year in 1968-69 dollars. The projected figure for 1978-79 (\$11,000) is based on the assumption that the 1958-59 to 1964-65 trend will continue to 1978-79.

Projected total and average annual salaries of instructional staff in public elementary and secondary schools are shown in table 43. The procedure was as follows:

The average annual salary (y) was projected as a continuation of the 1958-59 to 1964-65 trend: $y' = \$5775 + \$217(t)$ (t =time in years, $t=1$ in 1958-59).

Total expenditures for salaries of instructional staff were then computed as the product of the average annual salary and the total number of instructional staff. (The total number of instructional staff was taken from table 29.)

Classroom construction and capital outlay (table 44)

Capital outlay (in 1968-69 dollars) by regular public elementary and secondary schools, including the expenditures of State and local school building authorities, was \$19.6 billion for the 5-year period 1959-60 to 1963-64, and \$22.9 billion for the following 5-year period, 1964-65 to 1968-69. It is expected to be \$24.5 billion for 1969-70 to 1973-74 and \$26.0 billion for 1974-75 to 1978-79.

Projected expenditures for capital outlay together with projections of classroom construction are shown in table 44. They are not projections of need but are simply projections of the classroom construction and capital outlay expected in the light of the 1959-60 to 1968-69 trend. The procedure was as follows:

(1) The total number of rooms completed was projected on the basis of the 1959-60 to 1968-69 trend: $y' = 78,114 - 247(t)$ (t =time in years, $t=1$ in 1958-59). The basic data and projections are shown in table 44.

(2) Capital outlay was projected by multiplying the number of rooms completed by the projected capital outlay per room according to the 1958-59 to 1968-69 trend. The projected figures range from \$63,000 to \$70,000 per room, in 1968-69 dollars.

The basic data and projections are shown in table 44.

It should be noted that not all the capital outlay shown here represents construction. It was estimated that, in 1965-66, 2 percent of capital outlay was for transportation equipment, 15 percent for other equipment, and 83 percent for land and buildings.

We may expect a sharp decrease in the number of rooms to be completed on account of enrollment increases and a sharp increase in the number completed for other reasons. Other reasons include: (1) replacements (abandonments), (2) migration factors (including school district reorganization), and (3) reduction of crowded and unsatisfactory rooms. Data limitations do not permit an exact analysis of these three factors. Since there are some indications that the number of crowded and unsatisfactory rooms did not change substantially during the period of time between the studies of 1962 and 1964-65 (see table, p. 82), it seems safe to assume that almost all of the rooms built during that time were used to take care of migration factors. That

the number of crowded and unsatisfactory rooms was not reduced during the 3-year period is indicated in Office of Education studies on school facilities for 1962 and 1964-65.¹ The following information was selected from those two studies:

Item	1962	1964-65
Number of additional public school classrooms needed:		
To eliminate off-site	6,000	14,000
To eliminate nonpermanent	31,000	31,000
To eliminate improvised or makeshift	28,000	31,000
To eliminate rooms in buildings with four or more defects	NA	158,000
To achieve a pupil-room ratio for all students of:		
27.6 elementary and 26.3 secondary pupils	117,000	.....
27.4 elementary and 27.5 secondary pupils . . . . .	.....	98,000
25 elementary and 20 secondary pupils	272,000	285,000
U.S. median pupil-room ratio	¹ 27.6 ² 26.3	¹ 27.4 ² 27.5

NA — Not available. ¹Elementary schools. ²Secondary schools.

In 1964-65 the number of additional rooms which would have eliminated the use of off-site, nonpermanent, and improvised or makeshift rooms was 76,000 and the number for replacing rooms in buildings with four or more defects was 158,000. Another 98,000 rooms would have been needed to permit all public school pupils to be in rooms with an average of 27 pupils. If they were to be accommodated in rooms with no more than 25 elementary or 20 secondary pupils, the additional number needed would have been 285,000.

Interest expenditures (table 45)

Annual expenditures (in 1968-69 dollars) for interest by public elementary and secondary schools increased from \$512 million in 1958-59 to over \$1.015 billion in 1968-69 and are expected to be \$1.58 billion in 1978-79. Projected interest is shown in table 45. The projections are based on the assumption that the 1958-59 to 1968-69 upward trend will continue through 1978-79. Although capital outlay is expected to level off in the next decade, this assumption seems reasonable because interest payments continue 20 years or more after construction, resulting in debt being incurred at a greater rate than it is being eliminated. The trend formula for projecting interest (y) in 1968-69 dollars was as follows: $y = \$389 + \$57(t)$ (t=time in years, t=1 in 1958-59).

Nonpublic elementary and secondary schools (tables 40, 41, 26)

Expenditure data for nonpublic elementary and secondary schools comparable to those for public schools are nonexistent. The main reason is that it is extremely difficult to arrive at a universally accepted method for determining the value of donated services for nonpublic schools, even if data on actual expenditures were collected. These donated services make up a substantial part of nonpublic school resources, especially in the elementary and secondary schools operated by religious orders. In 1965-66, over three-fourths of the nearly 200,000 nonpublic school teachers belonged to religious orders of the Roman Catholic Church. Also, it might be argued that many of the remaining nonpublic school teachers, whose salaries generally run lower than those in public schools, really donated part of their services.

¹ U.S. Department of Health, Education, and Welfare, Office of Education, "National Inventory of School Facilities and Personnel, Spring 1962," by George J. Collins, and "Condition of Public School Plants, 1964-65," by George J. Collins and William L. Stormer.

Although it is difficult to arrive at national estimates of nonpublic school expenditures that everyone will accept, the substantial contribution of nonpublic elementary and secondary schools cannot be ignored when total expenditures for education are being considered. Therefore, illustrative estimates of nonpublic elementary and secondary school expenditures were developed rather arbitrarily and are shown in table 40. They are based on the assumption that the cost per teacher (including donated facilities and services) in nonpublic schools is the same as in public schools. The formula was as follows: $y=xp$ (x =ratio of nonpublic to public school teachers, and p =public school expenditures). The ratio of nonpublic to public school teachers was slightly over 13 percent during the 1958 to 1968 decade and is expected to be slightly over 11 percent during the 1968 to 1978 decade. The numbers upon which these ratios were computed are shown in table 26.

Some previous Office of Education estimates were based on the assumption that per pupil costs in nonpublic were the same as in public schools. Since the average pupil-teacher ratio is higher in nonpublic than in public schools, the previous estimates were higher than those shown here. Both types of estimates are, in a sense, hypothetical. That is, one showed what it would cost to educate nonpublic elementary and secondary school children if they were enrolled in public schools and if the public school pupil-teacher ratio were maintained; and the other type, shown in tables 40 and 41, shows the cost if the pupil-teacher ratio were maintained at the nonpublic school level.

Institutions of higher education

Current expenditures (tables 46, 40)

Annual current expenditures of institutions of higher education (in 1968-69 dollars) increased from \$5.9 billion in 1958-59 to \$18.2 billion in 1968-69. They are expected to reach \$33.0 billion by 1978-79, or to nearly double during the projected 10-year period. The projected data are based largely upon expected increases in enrollment and upon the trend of increasing costs per student expressed in constant dollars. Thus, while enrollment is not expected to increase at as rapid a rate as during the past 10 years, this factor will be more than offset by increasing expenditures per student. The result is an expected or projected constant dollar increase of \$14.8 billion over the next 10 years compared to a constant dollar increase of \$12.3 billion over the past 10 years (see table 46). When expressed in terms of current expenditures per full-time-equivalent student, the data are as follows:

Item	1958-59	1968-69	1978-79
Total current expenditures	\$2,236	\$3,049	\$3,729
Publicly controlled institutions	2,132	2,597	3,048
Nonpublicly controlled institutions	2,386	4,156	5,987

Current expenditures are divided into four functional components: student education, related activities, organized research, and auxiliary enterprises and student aid. "Student education" encompasses general administration, instruction and departmental research, extension and public services, libraries, and operation and maintenance. Expenditures for student education were projected by use of the trend of annual expenditures per full-time-equivalent student over the 10-year base period in conjunction with the projected enrollment of such students (see table 46). When expressed in terms of current expenditures per full-time-equivalent student, the data are as follows:

Item	1958-59	1968-69	1978-79
Current expenditures for student education	\$1,355	\$1,772	\$2,089
Publicly controlled institutions	1,350	1,638	1,865
Nonpublicly controlled institutions	1,361	2,100	2,833

Current expenditures for "student education," related activities, and organized research are commonly known as current expenditures for educational and general purposes, and these expenditures per full-time-equivalent student are as follows:

Item	1958-69	1968-69	1978-79
Expenditures for educational and general purposes	\$1,887	\$2,490	\$2,947
Publicly controlled institutions	1,841	2,172	2,457
Nonpublicly controlled institutions	1,954	3,269	4,575

The institutions of higher education engage in organized research and related activities and auxiliary enterprises in widely varying degrees. Thus, only the "student education" component expressed as expenditure per full-time-equivalent student can be considered a norm for all institutions. Per student data for the United States for total current expenditures and for education and general expenditures are presented as general interest items and not as institutional norms.

Related activities, auxiliary enterprises, and student aid expenditures were projected on the basis of their percentage relationship to student education during the base period. These functions are obviously closely related to trends in enrollment, but allowance had to be made for the change during the base period in their percentage relationship to student education. The base period data indicate a trend toward more emphasis on these activities.

Items	Percent		
	1968-69	1958-69	1978-79
Related activities:			
Publicly controlled institutions	9.90	10.75	11.94
Nonpublicly controlled institutions	8.76	9.68	10.54
Auxiliary enterprises:			
Publicly controlled institutions	26.49	26.45	27.80
Nonpublicly controlled institutions	32.78	33.32	36.09
Student aid:			
Publicly controlled institutions	3.07	5.21	6.44
Nonpublicly controlled institutions	8.14	11.75	14.88

The projection of expenditures for organized research, as a component of current expenditures, was done without regard to enrollment or to relationship with expenditures for student education. In view of the extremely variable nature of this component's relation to industry and education, we have projected on the basis of the constant dollar trend of expenditures for organized research during the base period. This projection may well be quite conservative, especially for the publicly controlled institutions, which undoubtedly have the potential to engage in organized research to a far greater degree than performance over the past 10 years would indicate (see table 46).

Capital outlay (tables 48, 40)

Annual capital outlay of institutions of higher education (in 1968-69 dollars) increased from \$1.9 billion during 1958-59 to an estimated \$4.4 billion in 1966-67 before falling back to \$3.1 billion during 1968-69. Capital outlay over the entire 10-year base period of 1959-60 to 1968-69 amounted to an estimated total of \$32.0 billion (in 1968-69 dollars) and is expected to reach a total of \$28.6 billion (in 1968-69 dollars) over the 10-year projected period of 1969-70 to 1978-79. The decline in annual projected capital outlay, from \$3.1 billion in

1968-69 to \$2.4 billion in 1978-79 can be attributed to declining numbers of additional students projected for these years.

Base period estimates of capital outlay were made on the basis of reported book value of plant at the beginning and end of each biennial reporting year and converted to 1968-69 dollars. An amount equal to 1 percent of the value of plant was added each year as a conservative estimate of replacement and rehabilitation. The capital outlay for the entire base period was equated to the additional numbers of students for the same period. For the projected 10-year period, projections of capital outlay and additional numbers of students were equated.

The historical data showed clearly that capital outlay could not be related to increased enrollment on an annual basis. The shortest reasonably reliable period of time proved to be 5 years. However, an annual figure could be interpolated by utilizing a moving average of enrollment increases, although the result was considerably less reliable than that obtained for a 5-year total. We would emphasize, then, that the annual capital outlay shown in tables 40 and 48 be regarded as interpolations and that the 1968-69 constant dollar aspect of the projections be kept in mind.

Expenditures for interest (table 40)

Data on expenditures for interest by institutions of higher education are incomplete and cannot be shown as a separate item. The major portion of expenditures for interest is estimated to be included with the current expenditures shown in table 40.

**Table 40.—Expenditures (1968-69 dollars) of regular educational institutions,
by instructional level and institutional control:
United States, 1958-59 to 1978-79**

[In billions of 1968-69 dollars]

Year end control	Total (all levels)	Elementary and secondary day schools ¹ (Nonpublic school expenditures are estimated on the basis of expenditures per teacher in public schools)				Institutions of higher education ²		
		Total	Current expenditures ³	Capital outlay ⁴	Interest ⁵	Total	Current expenditures ⁶	Capital outlay ⁷
		(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1958-59:								
Total	\$28.5	\$20.7	\$16.0	\$4.1	\$0.6	\$7.8	\$5.9	\$1.9
Public	22.5	18.1	14.0	3.6	.5	4.4	3.3	1.1
Nonpublic ..	6.0	2.6	2.0	.5	.1	3.4	2.6	.8
1959-60:								
Total	30.8	22.4	17.2	4.5	.7	8.4	6.5	1.9
Public	24.5	19.8	15.2	4.0	.6	4.7	3.6	1.1
Nonpublic ..	6.3	2.6	2.0	.5	.1	3.7	2.9	.8
1960-61:								
Total	33.3	23.7	18.5	4.5	.7	9.6	7.2	2.4
Public	26.2	20.9	16.3	4.0	.6	5.3	4.0	1.3
Nonpublic ..	7.1	2.8	2.2	.5	.1	4.3	3.2	1.1
1961-62:								
Total	35.9	25.5	20.1	4.6	.8	10.4	8.0	2.4
Public	28.1	22.3	17.6	4.0	.7	5.8	4.4	1.4
Nonpublic ..	7.8	3.2	2.5	.6	.1	4.6	3.6	1.0
1962-63:								
Total	39.1	26.8	21.8	4.1	.9	12.3	9.0	3.3
Public	30.4	23.4	19.0	3.6	.8	7.0	4.9	2.1
Nonpublic ..	8.7	3.4	2.8	.5	.1	5.3	4.1	1.2
1963-64:								
Total	42.0	28.9	23.4	4.6	.9	13.1	10.0	3.1
Public	32.6	25.2	20.4	4.0	.8	7.4	5.5	1.9
Nonpublic ..	9.4	3.7	3.0	.6	.1	5.7	4.5	1.2
1964-65:								
Total	46.2	31.2	24.9	5.3	1.0	15.0	11.5	3.5
Public	35.7	27.3	21.8	4.6	.9	8.4	6.4	2.0
Nonpublic ..	10.5	3.9	3.1	.7	.1	6.6	5.1	1.5
1965-66:⁸								
Total	51.0	33.7	27.6	5.1	1.0	17.3	13.4	3.9
Public	39.6	29.6	24.2	4.5	.9	10.0	7.5	2.5
Nonpublic ...	11.4	4.1	3.4	.6	.1	7.3	5.9	1.4
1966-67:⁸								
Total	54.1	35.0	28.7	5.2	1.1	19.1	14.7	4.4
Public	42.3	30.9	25.3	4.6	1.0	11.4	8.5	2.9
Nonpublic ..	11.8	4.1	3.4	.6	.1	7.7	6.2	1.5

**Table 40.—Expenditures (1968-69 dollars) of regular educational institutions,
by instructional level and institutional control:
United States, 1958-59 to 1978-79—Continued**

[In billions of 1968-69 dollars]

Year and control	Total (all levels)	Elementary and secondary day schools ¹ (Nonpublic school expenditures are estimated on the basis of expenditures per teacher in public schools)				Institutions of higher education ²		
		Total	Current expenditures ³	Capital outlay ⁴	Interest ⁵	Total	Current expenditures ⁶	Capital outlay ⁷
		(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1967-68:⁸								
Total	\$57.5	\$37.4	\$31.2	\$5.1	\$1.1	\$20.1	\$16.3	\$3.8
Public	45.5	33.1	27.6	4.5	1.0	12.4	9.6	2.8
Nonpublic ..	12.0	4.3	3.6	.6	.1	7.7	6.7	1.0
1968-69:⁸								
Total	61.1	39.8	33.4	5.3	1.1	21.3	18.2	3.1
Public	49.1	35.5	29.8	4.7	1.0	13.6	11.1	2.5
Nonpublic ..	12.0	4.3	3.6	.6	.1	7.7	7.1	.6
PROJECTED⁸								
1969-70:								
Total	63.4	41.5	35.0	5.3	1.2	21.9	19.1	2.8
Public	51.1	37.1	31.3	4.7	1.1	14.0	11.6	2.4
Nonpublic ..	12.3	4.4	3.7	.6	.1	7.9	7.5	.4
1970-71:								
Total	65.9	42.7	36.3	5.2	1.2	23.2	20.4	2.8
Public	53.0	38.3	32.5	4.7	1.1	14.7	12.4	2.3
Nonpublic ..	12.9	4.4	3.8	.5	.1	8.5	8.0	.5
1971-72:								
Total	67.7	43.1	36.2	5.6	1.3	24.6	21.9	2.7
Public	54.2	38.7	32.5	5.0	1.2	15.5	13.4	2.1
Nonpublic ..	13.5	4.4	3.7	.6	.1	9.1	8.5	.6
1972-73:								
Total	71.6	45.1	38.2	5.6	1.3	26.5	23.4	3.1
Public	57.2	40.5	34.3	5.0	1.2	16.7	14.4	2.3
Nonpublic ..	14.4	4.6	3.9	.6	.1	9.8	9.0	.8
1973-74:								
Total	74.5	46.3	39.2	5.7	1.4	28.2	25.0	3.2
Public	59.4	41.6	35.2	5.1	1.3	17.8	15.4	2.4
Nonpublic ..	15.1	4.7	4.0	.6	.1	10.4	9.6	.8
1974-75:								
Total	77.3	47.5	40.1	5.8	1.6	29.8	26.6	3.2
Public	61.5	42.6	36.0	5.2	1.4	18.9	16.5	2.4
Nonpublic ..	15.8	4.9	4.1	.6	.2	10.9	10.1	.8
1975-76:								
Total	79.9	48.6	41.1	5.9	1.6	31.3	28.3	3.0
Public	63.5	43.6	36.9	5.3	1.4	19.9	17.6	2.3
Nonpublic ..	16.4	5.0	4.2	.6	.2	11.4	10.7	.7

**Table 40.—Expenditures (1968-69 dollars) of regular educational institutions,
by instructional level and institutional control:
United States, 1958-59 to 1978-79—Continued**

[In billions of 1968-69 dollars]

Year and control	Total (all levels)	Elementary and secondary day schools ¹ (Nonpublic school expenditures are estimated on the basis of expenditures per teacher in public schools)				Institutions of higher education ²		
		Total	Current expenditures ³	Capital outlay ⁴	Interest ⁵	Total	Current expenditures ⁶	Capital outlay ⁷
		(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1976-77:								
Total	\$82.4	\$49.7	\$42.1	\$5.9	\$1.7	\$32.7	\$29.9	\$2.8
Public	65.5	44.6	37.8	5.3	1.5	20.9	18.7	2.2
Nonpublic ..	16.9	5.1	4.3	.6	.2	11.8	11.2	.6
1977-78:								
Total	84.7	50.7	43.1	5.9	1.7	34.0	31.4	2.6
Public	67.3	45.5	38.7	5.3	1.5	21.8	19.7	2.1
Nonpublic ..	17.4	5.2	4.4	.6	.2	12.2	11.7	.5
1978-79:								
Total	87.4	52.0	44.3	5.9	1.8	35.4	33.0	2.4
Public	69.5	46.7	39.8	5.3	1.6	22.8	20.8	2.0
Nonpublic ..	17.9	5.3	4.5	.6	.2	12.6	12.2	.4

¹

Excludes expenditures for residential schools for exceptional children, subcollegiate departments of institutions of higher education, Federal schools for Indians, and schools on Federal installations. See text table on expenditures by source of funds for data on these schools. All nonpublic elementary and secondary school expenditures shown here are estimated on the basis of expenditures per teacher in public elementary and secondary schools.

²

Includes expenditures for subcollegiate departments of institutions of higher education, estimated at \$82 million in 1968-69. Includes expenditures for interest from current funds and excludes interest paid from plant funds. (An estimated \$165 million was expended for total interest in 1968-69.)

³

Includes current expenditures of public elementary and secondary school systems for community services, summer schools, community colleges, and adult education. Interest is included in the estimated current expenditures of nonpublic schools.

⁴ Includes capital outlay of State and local school building authorities.

⁵ Interest for nonpublic schools is based on interest for public schools.

⁶ Includes expenditures for interest from current funds. Excludes expenditures from current funds for capital outlay.

⁷ The estimated annual capital outlay data shown here include estimated expenditures for replacement and rehabilitation.

⁸ Includes effect of Elementary and Secondary Education Act of 1965.

NOTE: Data are for 50 States and the District of Columbia.

SOURCES: Data are a summary of tables 42 through 48, each of which indicates source of data.

**Table 41.—Expenditures (current dollars) of regular educational institutions,
by instructional level and institutional control:
United States, 1958-59 to 1970-71**

[In billions of current dollars]

Year and control	Total (all levels)	Elementary and secondary day schools ¹ (Nonpublic school expenditures are estimated on the basis of expenditures per teacher in public schools)				Institutions of higher education ²		
		Total	Current expenditures ³	Capital outlay ⁴	Interest ⁵	Total	Current expenditures ⁶	Capital outlay ⁷
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1958-59:								
Total	\$22.4	\$16.2	\$12.9	\$2.8	\$0.5	\$6.2	\$4.9	\$1.3
Public	17.8	14.3	11.4	2.5	.4	3.5	2.8	.7
Nonpublic ..	4.6	1.9	1.5	.3	.1	2.7	2.1	.6
1959-60:								
Total	24.6	17.9	14.1	3.2	.6	6.7	5.4	1.3
Public	19.6	15.8	12.5	2.8	.5	3.8	3.0	.8
Nonpublic ..	5.0	2.1	1.6	.4	.1	2.9	2.4	.5
1960-61:								
Total	27.0	19.3	15.4	3.3	.6	7.7	6.0	1.7
Public	21.2	17.0	13.6	2.9	.5	4.2	3.3	.9
Nonpublic ..	5.8	2.3	1.8	.4	.1	3.5	2.7	.8
1961-62:								
Total	29.6	21.1	17.0	3.4	.7	8.5	6.8	1.7
Public	23.2	18.5	14.9	3.0	.6	4.7	3.7	1.0
Nonpublic ..	6.4	2.6	2.1	.4	.1	3.8	3.1	.7
1962-63:								
Total	32.5	22.3	18.5	3.1	.7	10.2	7.7	2.5
Public	25.3	19.5	16.2	2.7	.6	5.8	4.2	1.6
Nonpublic ..	7.2	2.8	2.3	.4	.1	4.4	3.5	.9
1963-64:								
Total	35.8	24.5	20.2	3.5	.8	11.3	8.8	2.5
Public	27.8	21.4	17.6	3.1	.7	6.4	4.9	1.5
Nonpublic ..	8.0	3.1	2.6	.4	.1	4.9	3.9	1.0
1964-65:								
Total	39.9	27.0	21.8	4.2	.9	12.9	10.1	2.8
Public	30.8	23.6	19.1	3.7	.8	7.2	5.6	1.6
Nonpublic ..	9.1	3.4	2.7	.5	.1	5.7	4.5	1.2
1965-66⁸								
Total	45.1	29.9	24.7	4.3	.9	15.2	11.9	3.3
Public	35.1	26.3	21.7	3.8	.8	8.8	6.7	2.1
Nonpublic ..	10.0	3.6	3.0	.5	.1	6.4	5.2	1.2
1966-67:⁸								
Total	49.5	32.0	26.5	4.5	1.0	17.5	13.6	3.9
Public	38.7	28.3	23.4	4.0	.9	10.4	7.9	2.5
Nonpublic ..	10.8	3.7	3.1	.5	.1	7.1	5.7	1.4

**Table 41.—Expenditures (current dollars) of regular educational institutions,
by instructional level and institutional control:
United States, 1958-59 to 1970-71—Continued**

[In billions of current dollars]

Year and control	Total (all levels)	Elementary and secondary day schools ¹ (Nonpublic school expenditures are estimated on the basis of expenditures per teacher in public schools)				Institutions of higher education ²		
		Total	Current expenditures ³	Capital outlay ⁴	Interest ⁵	Total	Current expenditures ⁶	Capital outlay ⁷
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1967-68:⁸								
Total	\$54.6	\$35.5	\$29.7	\$4.7	\$1.1	\$19.1	\$15.6	\$3.5
Public	43.3	31.5	26.3	4.2	1.0	11.8	9.2	2.6
Nonpublic ..	11.3	4.0	3.4	.5	.1	7.3	6.4	.9
1968-69:⁸								
Total	61.1	39.8	33.4	5.3	1.1	21.3	18.2	3.1
Public	49.1	35.5	29.8	4.7	1.0	13.6	11.1	2.5
Nonpublic ..	12.0	4.3	3.6	.6	.1	7.7	7.1	.6
PROJECTED⁸								
1969-70:								
Total	65.5	42.8	36.1	5.5	1.2	22.7	19.7	3.0
Public	52.9	38.3	32.3	4.9	1.1	14.6	12.0	2.6
Nonpublic ..	12.6	4.5	3.8	.6	.1	8.1	7.7	.4
1970-71:								
Total	70.0	45.4	38.4	5.7	1.3	24.6	21.5	3.1
Public	56.4	40.7	34.4	5.1	1.2	15.7	13.1	2.6
Nonpublic ..	13.6	4.7	4.0	.6	.1	8.9	8.4	.5

¹ Excludes expenditures for residential schools for exceptional children, subcollegiate departments of institutions of higher education, Federal schools for Indians, and schools on Federal installations. See text table on expenditures by source of funds for data on these schools. All nonpublic elementary and secondary school expenditures shown here are estimated on the basis of expenditures per teacher in public elementary and secondary schools.

² Includes expenditures for subcollegiate departments of institutions of higher education, estimated at \$82 million in 1968-69. Includes expenditures for interest from current funds and excludes interest paid from plant funds. (An estimated \$165 million was expended for total interest in 1968-69.)

³ Includes current expenditures of public elementary and secondary school systems for community services, summer schools, community colleges, and adult education. Interest is included in

the estimated current expenditures of nonpublic schools.

⁴ Includes capital outlay of State and local school building authorities.

⁵ Interest for nonpublic schools is based on interest for public schools.

⁶ Includes expenditures for interest from current funds. Excludes expenditures from current funds for capital outlay.

⁷ The estimated annual capital outlay data shown here include estimated expenditures for replacement and rehabilitation.

⁸ Includes effect of Elementary and Secondary Education Act of 1965.

NOTE: Data are for 50 States and the District of Columbia.

SOURCES: Data are a summary of tables 42 through 48, each of which indicates source of data.

**Table 42.—Current expenditures of public school systems:
United States, 1958-59 to 1978-79**

Year	Average daily attendance (in thousands)	Allocated to pupil costs ¹				All programs ²	
		Per pupil in average daily attendance		Total (in billions)		Total (in billions)	
		Current dollars	1968-69 dollars	Current dollars	1968-69 dollars	Current dollars	1968-69 dollars
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1958-59 ³	31,184	\$357.71	\$440	\$11.2	\$13.8	\$11.4	\$14.0
1959-60	32,477	375.14	455	12.2	14.8	12.5	15.2
1960-61 ³	33,524	396.50	475	13.3	15.9	13.6	16.3
1961-62	34,682	418.50	496	14.7	17.4	14.9	17.6
1962-63 ³	35,882	439.00	514	15.8	18.5	16.2	19.0
1963-64	37,405	460.24	531	17.2	19.9	17.6	20.4
1964-65 ⁴	38,600	484.00	552	18.6	21.2	19.1	21.8
1965-66	39,154	537.35	600	21.0	23.5	21.7	24.2
1966-67 ⁴	40,000	569.00	616	22.6	24.5	23.4	25.3
1967-68 ⁴	40,700	623.00	653	25.4	26.6	26.3	27.6
1968-69 ⁴	41,700	696.00	696	28.6	28.6	29.8	29.8

A. INCLUDES THE EFFECT OF THE ELEMENTARY AND SECONDARY EDUCATION ACT OF 1965

ACTUAL							
1965-66	39,154	537.35	600	21.0	23.5	21.7	24.2
1966-67 ⁴	40,000	569.00	616	22.6	24.5	23.4	25.3
1967-68 ⁴	40,700	623.00	653	25.4	26.6	26.3	27.6
1968-69 ⁴	41,700	696.00	696	28.6	28.6	29.8	29.8

PROJECTED⁵

(Based on assumption that current expenditure per pupil will be \$70 higher than trend)

1969-70	42,300	737.00	716	31.2	30.3	32.3	31.3
1970-71	42,700	778.00	735	33.2	31.4	34.4	32.5
1971-72	42,800	.....	753	...	32.2	...	33.4
1972-73	42,900	.....	772	...	33.1	...	34.3
1973-74	42,900	.....	792	...	34.0	...	35.2
1974-75	43,000	.....	810	...	34.8	...	36.0
1975-76	43,000	.....	828	...	35.6	...	36.9
1976-77	43,100	.....	847	...	36.5	...	37.8
1977-78	43,200	.....	866	...	37.4	...	38.7
1978-79	43,400	.....	885	...	38.4	...	39.8

B. EXCLUDES THE EFFECT OF THE ELEMENTARY AND SECONDARY EDUCATION ACT OF 1965

ESTIMATED ⁷							
1965-66	39,154	475	530	18.6	20.8	19.2	21.5
1966-67	40,000	504	546	20.2	21.8	20.9	22.6
1967-68	40,700	557	583	22.7	23.7	23.5	24.6
1968-69	41,700	626	626	26.1	26.1	27.0	27.0

See footnotes at end of table.

**Table 42.—Current expenditures of public school systems:
United States, 1958-59 to 1978-79—Continued**

Year	Average daily attendance (in thousands)	Allocated to pupil costs ¹				All programs ²	
		Per pupil in average daily attendance		Total (in billions)		Total (in billions)	
		Current dollars	1968-69 dollars	Current dollars	1968-69 dollars	Current dollars	1968-69 dollars
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
PROJECTED⁸							
(Based on continuation of 1958-59 to 1964-65 trend in current expenditure per pupil)							
1969-70	42,300	⁶ 665	646	⁶ 28.1	27.3	⁶ 29.1	28.3
1970-71	42,700	⁶ 704	665	⁶ 30.1	28.4	⁶ 31.1	29.4
1971-72	42,800	.....	683	...	29.2	...	30.3
1972-73	42,900	.....	702	...	30.1	...	31.2
1973-74	42,900	.....	721	...	30.9	...	32.0
1974-75	43,000	.....	740	...	31.8	...	32.9
1975-76	43,000	.....	758	...	32.6	...	33.7
1976-77	43,100	.....	777	...	33.5	...	34.7
1977-78	43,200	.....	796	...	34.4	...	35.6
1978-79	43,400	.....	815	...	35.4	...	36.6

¹ Includes only the current expenditures for public day schools allocated to pupil costs, and excludes the other expenditures shown in footnote 2.

² Includes current expenditures for summer schools, adult education, and community colleges operated by school districts, in addition to expenditures allocable to pupil costs.

³ Estimated on the basis of actual enrollment and interpolated expenditures per pupil.

⁴ Derived from estimates furnished by States.

⁵ The projections of current expenditures of public school systems including the effect of the Elementary and Secondary Education Act of 1965 are based on the assumptions that (1) grades K-12 of public schools (table 3) will remain constant at the level of 0.927, the average for the last 6 years, 1963-64 through 1968-69; (2) current expenditures allocated to costs per pupil in average daily attendance will follow the 1958-59 to 1964-65 trend; (3) the ratio of current expenditures for all programs to current expenditures allocated to pupil costs will remain constant at the 1967-68 level of 1.035; and (4) an increase in expenditures of \$70 per pupil will be added to the trend expenditures outlined above as a result of the Elementary and Secondary Education Act of 1965.

⁶ Based on the assumption that the Consumer Price Index will follow the 1964-65 to 1968-69 trend through 1970-71.

⁷ Estimated, using the 1958-59 to 1964-65 trend.

⁸ The projections of current expenditures of public school systems excluding the effect of the Elementary and Secondary Education Act of 1965 are based on the first three assumptions outlined in footnote 5 above.

For methodological details see appendix A, table A-4, and discussion in text.

NOTE: Data are for 50 States and the District of Columbia for all years.

SOURCES: Data are based on statistics shown in U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of State School Systems" circulars (1959-60 through 1965-66); and (2) "Statistics of Public Schools," fall 1964 through 1968. Current expenditures were converted to 1968-69 dollars on the basis of the Consumer Price Index prepared by the Bureau of Labor Statistics, U.S. Department of Labor. For method of converting, see appendix B, table B-12.

The expenditures shown in this table include current expenditures for administration for State boards of education, State departments of education, and intermediate administrative units. Therefore, they are higher than those that exclude such expenditures.

Table 43.—Current expenditures for salaries of instructional staff in regular public elementary and secondary day schools: United States, 1958-59 to 1978-79

Year	Number of instructional staff ¹ (in thousands)	Salaries of instructional staff ²			
		Average annual salary		Total (in billions)	
		Current dollars	1968-69 dollars	Current dollars	1968-69 dollars
(1)	(2)	(3)	(4)	(5)	(6)
1958-59 ³	1,408	\$4,940	\$6,075	\$7.0	\$8.6
1959-60	1,463	5,174	6,276	7.6	9.2
1960-61 ³	1,526	5,440	6,512	8.3	9.9
1961-62	1,591	5,700	6,755	9.1	10.7
1962-63 ³	1,647	5,930	6,944	9.8	11.4
1963-64	1,728	6,240	7,205	10.8	12.5
1964-65 ⁴	1,811	6,400	7,296	11.6	13.2
1965-66	1,886	6,935	7,739	13.1	14.6
1966-67 ⁴	1,977	7,110	7,695	14.1	15.2
1967-68 ⁴	2,055	7,630	7,992	15.7	16.4
1968-69 ⁴	2,159	8,200	8,200	17.7	17.7

A. INCLUDES EFFECT OF THE ELEMENTARY AND SECONDARY EDUCATION ACT OF 1965 ON NUMBER OF STAFF

	ACTUAL				
	(2)	(3)	(4)	(5)	(6)
1965-66	1,886	6,935	7,739	13.1	14.6
1966-67 ⁴	1,977	7,110	7,695	14.1	15.2
1967-68 ⁴	2,055	7,630	7,992	15.7	16.4
1968-69 ⁴	2,159	8,200	8,200	17.7	17.7
PROJECTED ⁵					
1969-70	2,217	8,800	8,500	19.5	18.8
1970-71	2,249	9,300	8,800	20.9	19.8
1971-72	2,285	.....	9,000	.....	20.6
1972-73	2,279	.....	9,300	.....	21.2
1973-74	2,315	.....	9,600	.....	22.2
1974-75	2,332	.....	9,900	.....	23.1
1975-76	2,346	.....	10,100	.....	23.7
1976-77	2,363	.....	10,400	.....	24.6
1977-78	2,378	.....	10,700	.....	25.4
1978-79	2,396	.....	11,000	.....	26.4

B. EXCLUDES EFFECT OF THE ELEMENTARY AND SECONDARY EDUCATION ACT OF 1965 ON NUMBER OF STAFF

	ESTIMATED ⁶				
	(2)	(3)	(4)	(5)	(6)
1965-66	1,853	6,733	7,513	12.5	13.9
1966-67 ⁴	1,901	7,143	7,731	13.6	14.7
1967-68 ⁴	1,955	7,588	7,948	14.8	15.5
1968-69	2,019	8,165	8,165	16.5	16.5
PROJECTED ⁵					
1969-70	2,061	⁷ 8,631	8,383	17.8	17.3
1970-71	2,093	⁷ 9,108	8,600	19.1	18.0
1971-72	2,128	.....	8,817	.....	18.8
1972-73	2,122	.....	9,035	.....	19.2

See footnotes at end of table.

Table 43.—Current expenditures for salaries of instructional staff in regular public elementary and secondary day schools: United States, 1958-59 to 1978-79—Continued

Year	Number of instructional staff ¹ (in thousands)	Salaries of instructional staff ²			
		Average annual salary		Total (in billions)	
		Current dollars	1968-69 dollars	Current dollars	1968-69 dollars
(1)	(2)	(3)	(4)	(5)	(6)
1973-74	2,157	.....	9,252	.....	20.0
1974-75	2,174	.....	9,469	.....	20.6
1975-76	2,187	.....	9,687	.....	21.2
1976-77	2,204	.....	9,904	.....	21.8
1977-78	2,218	.....	10,121	.....	22.4
1978-79	2,236	.....	10,339	.....	23.1

¹ Data on number of instructional staff were taken from table 30.

² The average annual salaries of instructional staff are about 3 percent higher than the salaries of classroom teachers.

³ Interpolated.

⁴ Estimates of salaries furnished by State education departments.

⁵ The projections of current expenditures for salaries of instructional staff in public elementary and secondary schools, including the effect of the Elementary and Secondary Education Act of 1965, are based on the following assumptions: (1) Average annual salaries will follow the 1968-69 trend; (2) the ratio of instructional staff to classroom teachers in regular public schools will follow the 1958-64 trend (see tables 26 and 30); and (3) funds provided by the Elementary and Secondary Education Act of 1965 will increase the number of instructional staff over the number expected on the basis of trend alone by approximately 140,000 each year.

⁶ Estimated, using the 1958-59 to 1964-65 trend. The projections of current expenditures for salaries of instructional staff in public elementary and secondary schools, excluding the effect of the

Elementary and Secondary Education Act of 1965, are based on the first two assumptions outlined in footnote 5 above.

For methodological details, see appendix A, table A-4.

⁷ Based on the assumption that the Consumer Price Index will follow the 1964-65 to 1968-69 trend through 1970-71.

NOTE: Data are for 50 States and the District of Columbia for all years.

SOURCES: Data are based on statistics shown in U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of State School Systems, Biennial Survey of Education in the United States," chapter 2 (1957-58); "Statistics of State School Systems" circulars (1959-60 through 1965-66); and (3) "Statistics of Public Schools," fall 1964 through 1968.

Conversion to 1968-69 dollars was based on the Consumer Price Index prepared by the Bureau of Labor Statistics, U.S. Department of Labor. For method of converting see appendix B, table B-8.

Table 44.—Construction of public elementary and secondary school classrooms and capital outlay: United States, 1958-59 to 1978-79

[Capital outlay includes expenditures of public school building authorities]

Year	Rooms completed	Fiscal year bond sales in millions of current dollars	School year capital outlay ¹				
			Current dollars			1968-69 dollars	
			Percent of bond sales	Total in millions	Per room	Total in millions	Per room
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1958-59 ²	70,000	\$1,948	128	\$2,500	\$35,700	\$3,600	\$51,400
1959-60	69,400	2,198	128	2,823	40,700	4,000	57,600
1960-61 ³	72,157	2,357	123	2,900	40,200	4,000	55,400
1961-62	71,987	2,568	116	2,987	41,500	4,000	55,600
1962-63 ⁴	65,300	2,274	119	2,700	41,300	3,500	55,100
1963-64	69,300	2,570	122	3,135	45,200	4,000	57,700
1959-60 to 1963-64	348,144	11,967	122	14,545	41,780	19,600	56,290
1964-65 ⁵	65,200	2,823	131	3,700	56,700	4,600	70,600
1965-66	72,600	2,883	130	3,755	51,700	4,500	62,000
1966-67 ⁵	71,000	3,254	123	4,000	56,300	4,600	64,800
1967-68 ⁵	75,400	2,917	144	4,200	55,700	4,500	59,700
1968-69 ⁵	75,000	2,904	160	4,654	63,000	4,700	62,700
1964-65 to 1968-69	359,200	15,077	135	20,309	56,540	22,900	63,750
PROJECTED⁶							
1969-70	75,000			⁷ 4,900	65,000	4,700	63,000
1970-71	75,000			⁷ 5,100	68,000	4,700	63,000
1971-72	74,000					5,000	67,000
1972-73	74,000					5,000	67,000
1973-74	74,000					5,100	69,000
1969-70 to 1973-74	372,000					24,500	65,900
1974-75	74,000					5,200	70,000
1975-76	74,000					5,200	70,000
1976-77	74,000					5,200	70,000
1977-78	74,000					5,200	70,000
1978-79	74,000					5,200	70,000
1974-75 to 1978-79	370,000					26,000	70,000

¹ In 1961-62, 2 percent of capital outlay was estimated to be for transportation equipment, 15 percent for other equipment, and 83 percent for land and buildings.

² Capital outlay was estimated at 128 percent of bond sales, the average for 1957-58 and 1959-60.

³ Capital outlay was estimated at 122 percent of bond sales, the average for 1959-60 and 1961-62.

⁴ Capital outlay was estimated at 119 percent of bond sales, the average for 1961-62 and 1963-64.

⁵ Capital outlay was estimated by State departments of education.

⁶ Projections of construction of public elementary and secondary school classrooms and of capital outlay are based on the assumptions that: (1) The total number of rooms constructed will decline slightly, projected on the basis of the 1957-58 to 1968-69 trend; and (2) the capital outlay per room will remain constant at \$70,000 per room toward the end of the period.

⁷ Based on the assumption that the Construction Cost Index will follow the 1964-65 to 1968-69 trend through 1969-70.

For further methodological details, see appendix A, table A-4.

NOTE: Data are for 50 States and the District of Columbia for all years.

SOURCES: Data are based on statistics shown in U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of State School Systems, 1957-58"; (2) "Enrollment,

Teachers, and Schoolhousing," fall 1957 to fall 1963; (3) "Statistics of Public Schools," fall 1964 through 1968; (4) "Bond Sales for Public School Purposes," 1960-61 to 1967-68. Conversion to 1968-69 dollars was based on the American Appraisal Co. Construction Cost Index. For method of converting, see appendix 8, table B-8.

Table 45.—Expenditures for interest by public elementary and secondary school systems: United States, 1958-59 to 1978-79

[In millions]

Year	Total interest including payments to schoolhousing authorities or similar agencies	
	Current dollars	1968-69 dollars
(1)	(2)	(3)
1958-59 ¹	\$416	\$512
1959-60	490	594
1960-61 ¹	539	645
1961-62	588	697
1962-63 ¹	644	754
1963-64	701	809
1964-65 ²	761	868
1965-66	792	884
1966-67 ²	949	1,027
1967-68 ²	950	995
1968-69	1,015	1,015
PROJECTED³		
1969-70	⁴ 1,100	1,070
1970-71	⁴ 1,200	1,130
1971-72		1,190
1972-73		1,240
1973-74		1,300
1974-75		1,360
1975-76		1,410
1976-77		1,470
1977-78		1,530
1978-79		1,580

¹ Interpolated.

² Estimates furnished by State education departments.

³ Projections of expenditures for interest are based on the assumption that these expenditures will follow the 1958-59 to 1968-69 trend.

⁴ Based on the assumption that the Consumer Price Index will follow the 1964-65 to 1968-69 trend through 1970-71.

For methodological details, see appendix A, table A-4.

SOURCES: Data are based on statistics shown in U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of State School Systems," 1959-60 to 1965-66; and (2) "Statistics of Public Schools," fall 1964 through fall 1968. Conversion to 1968-69 dollars was based on the Consumer Price Index prepared by the Bureau of Labor Statistics, U.S. Department of Labor.

For method of converting, see appendix 8, table B-8.

NOTE: Data are for 50 States and the District of Columbia for all years.

Table 46.—Expenditures from current funds and total current expenditures (1968-69 dollars) by institutions of higher education: United States, 1958-59 to 1978-79

(In billions of 1968-69 dollars)

Year and control	Expenditures for educational and general purposes				Expenditures for auxiliary enterprises and student aid ³	Total expenditures from current funds	Capital outlay from current funds only	Total current expenditures ⁴
	Total	Student education ¹	Organized research	Related activities ²				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1958-59⁵								
Total	\$5.0	\$3.6	\$1.1	\$0.3	\$1.2	\$6.2	\$0.3	\$5.9
Public	2.9	2.1	.6	.2	.6	3.5	.2	3.3
Nonpublic	2.1	1.5	.5	.1	.6	2.7	.1	2.6
1959-60								
Total	5.4	3.9	1.2	.3	1.4	6.8	.3	6.5
Public	3.1	2.3	.6	.2	.7	3.8	.2	3.6
Nonpublic	2.3	1.6	.6	.1	.7	3.0	.1	2.9
1960-61⁵								
Total	6.1	4.2	1.5	.4	1.5	7.6	.4	7.2
Public	3.4	2.4	.8	.2	.8	4.2	.2	4.0
Nonpublic	2.7	1.8	.7	.2	.7	3.4	.2	3.2
1961-62								
Total	6.8	4.6	1.7	.5	1.6	8.4	.4	8.0
Public	3.8	2.7	.8	.3	.8	4.6	.2	4.4
Nonpublic	3.0	1.9	.9	.2	.8	3.8	.2	3.6
1962-63⁵								
Total	7.7	5.2	2.0	.5	1.8	9.5	.5	9.0
Public	4.3	3.0	1.0	.3	.9	5.2	.3	4.9
Nonpublic	3.4	2.2	1.0	.2	.9	4.3	.2	4.1
1963-64								
Total	8.6	5.8	2.3	.5	1.9	10.5	.5	10.0
Public	4.8	3.4	1.1	.3	1.0	5.8	.3	5.5
Nonpublic	3.8	2.4	1.2	.2	.9	4.7	.2	4.5
1964-65⁵								
Total	9.7	6.5	2.5	.7	2.3	12.0	.5	11.5
Public	5.5	3.9	1.2	.4	1.2	6.7	.3	6.4
Nonpublic	4.2	2.6	1.3	.3	1.1	5.3	.2	5.1
1965-66								
Total	11.1	7.6	2.7	.8	2.9	14.0	.6	13.4
Public	6.4	4.6	1.3	.5	1.5	7.9	.4	7.5
Nonpublic	4.7	3.0	1.4	.3	1.4	6.1	.2	5.9
1966-67								
Total	12.3	8.7	2.7	.9	3.1	15.4	.7	14.7
Public	7.3	5.4	1.3	.6	1.7	9.0	.5	8.5
Nonpublic	5.0	3.3	1.4	.3	1.4	6.4	.2	6.2
1967-68⁶								
Total	13.4	9.6	2.9	.9	3.5	16.9	.6	16.3
Public	8.1	6.1	1.4	.6	1.9	10.0	.4	9.6
Nonpublic	5.3	3.5	1.5	.3	1.6	6.9	.2	6.7

See footnotes at end of table.

Table 46.—Expenditures from current funds and total current expenditures (1968-69 dollars) by institutions of higher education: United States, 1958-59 to 1978-79—Continued

[In billions of 1968-69 dollars]

Year and control	Expenditures for educational and general purposes				Expenditures for auxiliary enterprises and student aid ³	Total expenditures from current funds	Capital outlay from current funds only	Total current expenditures ⁴
	Total	Student education ¹	Organized research	Related activities ²				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1968-69⁶								
Total	\$14.8	\$10.5	\$3.2	\$1.1	\$3.9	\$18.7	\$0.5	\$18.2
Public	9.2	6.9	1.5	.8	2.3	11.5	.4	11.1
Nonpublic	5.6	3.6	1.7	.3	1.6	7.2	.1	7.1
PROJECTED⁷								
1969-70								
Total	15.6	11.0	3.4	1.2	4.0	19.6	.5	19.1
Public	9.7	7.3	1.6	.8	2.3	12.0	.4	11.6
Nonpublic	5.9	3.7	1.8	.4	1.7	7.6	.1	7.5
1970-71								
Total	16.6	11.6	3.7	1.3	4.3	20.9	.5	20.4
Public	10.3	7.7	1.7	.9	2.5	12.8	.4	12.4
Nonpublic	6.3	3.9	2.0	.4	1.8	8.1	.1	8.0
1971-72								
Total	17.6	12.4	3.9	1.3	4.7	22.3	.4	21.9
Public	11.0	8.3	1.8	.9	2.7	13.7	.3	13.4
Nonpublic	6.6	4.1	2.1	.4	2.0	8.6	.1	8.5
1972-73								
Total	18.9	13.4	4.1	1.4	5.0	23.9	.5	23.4
Public	11.9	9.0	1.9	1.0	2.9	14.8	.4	14.4
Nonpublic	7.0	4.4	2.2	.4	2.1	9.1	.1	9.0
1973-74								
Total	20.2	14.3	4.3	1.6	5.3	25.5	.5	25.0
Public	12.7	9.6	2.0	1.1	3.1	15.8	.4	15.4
Nonpublic	7.5	4.7	2.3	.5	2.2	9.7	.1	9.6
1974-75								
Total	21.3	15.1	4.5	1.7	5.8	27.1	.5	26.6
Public	13.5	10.2	2.1	1.2	3.4	16.9	.4	16.5
Nonpublic	7.8	4.9	2.4	.5	2.4	10.2	.1	10.1
1975-76								
Total	22.7	16.1	4.8	1.8	6.1	28.8	.5	28.3
Public	14.4	10.9	2.2	1.3	3.6	18.0	.4	17.6
Nonpublic	8.3	5.2	2.6	.5	2.5	10.8	.1	10.7
1976-77								
Total	23.9	16.9	5.0	2.0	6.5	30.4	.5	29.9
Public	15.2	11.5	2.3	1.4	3.9	19.1	.4	18.7
Nonpublic	8.7	5.4	2.7	.6	2.6	11.3	.1	11.2

See footnotes at end of table.

Table 46.—Expenditures from current funds and total current expenditures (1968-69 dollars) by institutions of higher education: United States, 1958-59 to 1978-79—Continued

[In billions of 1968-69 dollars]

Year and control	Expenditures for educational and general purposes				Expenditures for auxiliary enterprises and student aid ³	Total expenditures from current funds	Capital outlay from current funds only	Total current expenditures ⁴
	Total	Student education ¹	Organized research	Related activities ²				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1977-78								
Total	\$24.9	\$17.7	\$5.2	\$2.0	\$6.9	\$31.8	\$0.4	\$31.4
Public	15.9	12.1	2.4	1.4	4.1	20.0	.3	19.7
Nonpublic	9.0	5.6	2.8	.6	2.8	11.8	.1	11.7
1978-79								
Total	26.1	18.5	5.5	2.1	7.3	33.4	.4	33.0
Public	16.7	12.7	2.5	1.5	4.4	21.1	.3	20.8
Nonpublic	9.4	5.8	3.0	.6	2.9	12.3	.1	12.2

¹ Includes general administration, instruction and departmental research, extension and public services, libraries, and operation and maintenance of the physical plant.

² Includes expenditures for such items as laboratory schools, medical school hospitals, dental clinics, home economics cafeterias, agricultural college creameries, college-operated industrial plants connected with instruction programs but not actually integral parts of them, etc.

³ Auxiliary enterprises include student dormitories, dining halls, cafeterias, student unions, bookstores, faculty housing, athletic programs not part of the instructional program, lectures, concerts, etc.

Student aid consists of scholarships, fellowships, and prizes, and includes remission of fees.

⁴ Current-fund expenditures less capital outlay from current funds.

⁵ Interpolated.

⁶ Estimated.

⁷ The projection of expenditures from current funds is based on assumptions that: (1) Expenditure per student and the percent of college-age persons attending college, on which expenditures for student education depend, will continue to increase as they did during the years 1958-59 to 1968-69; (2) expenditures for organized research will follow the 1958-59 to 1968-69 trend; (3) the relationship to student education of expenditures for related activities, for auxiliary enterprises, and

for student aid will continue the 1958-59 to 1968-69 trend; and (4) the 1968-69 to 1978-79 expenditures from current funds for capital outlay will approximate 16 percent of total capital outlay.

For further methodological details, see appendix A, table A-4.

NOTE: Data are for 50 States and the District of Columbia for all years.

SOURCES: Expenditure data from U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of Higher Education, Biennial Survey of Education in the United States, 1957-58," chapter 4; (2) "Financial Statistics of Higher Education," 1959-60; (3) "Higher Education Finances," 1961-62 and 1963-64; "Financial Statistics of Institutions of Higher Education, 'Current Funds Revenue and Expenditures' and 'Property,' 1965-66 and 1966-67"; and (4) unpublished data in the Office of Education.

Conversion to 1968-69 dollars was based on the Consumer Price Index published by the Bureau of Labor Statistics, U.S. Department of Labor and (for capital outlay) on the American Appraisal Company Construction Cost Index. For method of converting the indexes, see appendix B, table B-8.

**Table 47.—Expenditures from current funds and total current expenditures (current dollars)
- by institutions of higher education: United States, 1958-59 to 1970-71**

[In billions of current dollars]

Year and control	Expenditures for educational and general purposes				Expenditures for auxiliary enterprises and student aid ³	Total expenditures from current funds	Capital outlay from current funds only	Total current expenditures ⁴
	Total	Student education ¹	Organized research	Related activities ²				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1958-59⁵								
Total	\$4.1	\$2.9	\$0.9	\$0.3	\$1.0	\$5.1	\$0.2	\$4.9
Public	2.4	1.7	.5	.2	.5	2.9	.1	2.8
Nonpublic	1.7	1.2	.4	.1	.5	2.2	.1	2.1
1959-60								
Total	4.5	3.2	1.0	.3	1.1	5.6	.2	5.4
Public	2.6	1.9	.5	.2	.5	3.1	.1	3.0
Nonpublic	1.9	1.3	.5	.1	.6	2.5	.1	2.4
1960-61⁵								
Total	5.1	3.6	1.2	.3	1.2	6.3	.3	6.0
Public	2.9	2.1	.6	.2	.6	3.5	.2	3.3
Nonpublic	2.2	1.5	.6	.1	.6	2.8	.1	2.7
1961-62								
Total	5.7	3.9	1.5	.3	1.4	7.1	.3	6.8
Public	3.2	2.3	.7	.2	.7	3.9	.2	3.7
Nonpublic	2.5	1.6	.8	.1	.7	3.2	.1	3.1
1962-63⁵								
Total	6.6	4.4	1.7	.5	1.6	8.2	.5	7.7
Public	3.7	2.6	.8	.3	.8	4.5	.3	4.2
Nonpublic	2.9	1.8	.9	.2	.8	3.7	.2	3.5
1963-64								
Total	7.4	5.0	1.9	.5	1.8	9.2	.4	8.8
Public	4.2	3.0	.9	.3	.9	5.1	.2	4.9
Nonpublic	3.2	2.0	1.0	.2	.9	4.1	.2	3.9
1964-65⁵								
Total	8.5	5.7	2.2	.6	2.1	10.6	.5	10.1
Public	4.8	3.4	1.0	.4	1.1	5.9	.3	5.6
Nonpublic	3.7	2.3	1.2	.2	1.0	4.7	.2	4.5
1965-66								
Total	9.9	6.8	2.5	.6	2.5	12.4	.5	11.9
Public	5.7	4.1	1.2	.4	1.3	7.0	.3	6.7
Nonpublic	4.2	2.7	1.3	.2	1.2	5.4	.2	5.2
1966-67								
Total	11.3	8.0	2.5	.8	2.9	14.2	.6	13.6
Public	6.7	5.0	1.2	.5	1.6	8.3	.4	7.9
Nonpublic	4.6	3.0	1.3	.3	1.3	5.9	.2	5.7
1967-68⁶								
Total	12.9	9.1	2.9	.9	3.3	16.2	.6	15.6
Public	7.8	5.8	1.4	.6	1.8	9.6	.4	9.2
Nonpublic	5.1	3.3	1.5	.3	1.5	6.6	.2	6.4

See footnotes at end of table.

Table 47.—Expenditures from current funds and total current expenditures (current dollars) by institutions of higher education: United States, 1958-59 to 1970-71—Continued

[In billions of current dollars]

Year and control	Expenditures for educational and general purposes				Expenditures for auxiliary enterprises and student aid ³	Total expenditures from current funds	Capital outlay from current funds only	Total current expenditures ⁴
	Total	Student education ¹	Organized research	Related activities ²				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1968-69⁵								
Total	\$14.8	\$10.5	\$3.2	\$1.1	\$3.9	\$18.7	\$0.5	\$18.2
Public	9.2	6.9	1.5	.8	2.3	11.5	.4	11.1
Nonpublic	5.6	3.6	1.7	.3	1.6	7.2	.1	7.1
PROJECTED⁷								
1969-70								
Total	16.0	11.3	3.5	1.2	4.2	20.2	.5	19.7
Public	10.0	7.5	1.7	.8	2.4	12.4	.4	12.0
Nonpublic	6.0	3.8	1.8	.4	1.8	7.8	.1	7.7
1970-71								
Total	17.5	12.4	3.8	1.3	4.5	22.0	.5	21.5
Public	10.9	8.2	1.8	.9	2.6	13.5	.4	13.1
Nonpublic	6.6	4.2	2.0	.4	1.9	8.5	.1	8.4

¹ Includes general administration, instruction and departmental research, extension and public services, libraries, and operation and maintenance of the physical plant.

² Includes expenditures for such items as laboratory schools, medical school hospitals, dental clinics, home economics cafeterias, agricultural college creameries, college-operated industrial plants connected with instructional programs but not actually integral parts of them, etc.

³ Auxiliary enterprises include student dormitories, dining halls, cafeterias, student unions, bookstores, faculty housing, athletic programs not part of the instructional program, lectures, concerts, etc.

Student aid consists of scholarships, fellowships, and prizes, and includes remission of fees.

⁴ Current-fund expenditures less capital outlay from current funds.

⁵ Interpolated.

⁶ Estimated.

⁷ Projected by applying the 1954-65 to 1968-69 trend in the Consumer Price Index to the projected expenditures of current funds in constant dollars (table 46).

For further methodological details, see appendix A, table A-4.

NOTE: Data are for 50 States and the District of Columbia for all years.

SOURCES: Expenditure data from U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of Higher Education, Biennial Survey of Education in the United States, 1957-58," chapter 4; (2) "Financial Statistics of Higher Education," 1959-60; (3) "Higher Education Finances," 1961-62 and 1963-64; "Financial Statistics of Institutions of Higher Education, 'Current Funds Revenues and Expenditures' and 'Property,' 1965-66 and 1966-67"; and (4) unpublished data in the Office of Education.

**Table 48.--Capital outlay of institutions of higher education:
United States, 1958-59 to 1978-79**

Year	Total		Public		Nonpublic	
	Billions of current dollars	Billions of 1968-69 dollars	Billions of current dollars	Billions of 1968-69 dollars	Billions of current dollars	Billions of 1968-69 dollars
(1)	(2)	(3)	(4)	(6)	(6)	(7)
1958-59 ¹	\$1.304	\$1.902	\$0.721	\$1.052	\$0.583	\$0.850
1959-60	1.354	1.917	.807	1.142	.547	.775
1960-61 ¹	1.737	2.403	.932	1.289	.805	1.114
1961-62	1.714	2.317	1.010	1.365	.704	.952
1962-63 ¹	2.534	3.333	1.596	2.099	.938	1.234
1963-64	2.466	3.151	1.518	1.939	.948	1.212
1959-60 to 1963-64	9.805	13.121	5.863	7.824	3.942	5.287
1964-65 ¹	2.825	3.519	1.595	1.987	1.230	1.532
1965-66	3.253	3.914	2.064	2.483	1.189	1.431
1966-67	3.943	4.494	2.573	2.932	1.370	1.562
1967-68 ²	3.543	3.835	2.599	2.813	.944	1.022
1968-69 ²	3.112	3.112	2.480	2.480	.632	.632
1964-65 to 1968-69	16.676	18.874	11.311	12.695	5.365	6.179
PROJECTED³						
1969-70	\$3.002	\$2.866	\$2.540	\$2.425	\$0.462	\$0.441
1970-71	3.044	2.782	2.545	2.326	.499	.456
1971-72 .....	.....	2.672	.....	2.058	.....	.614
1972-73 .....	.....	3.094	.....	2.308	.....	.786
1973-74 .....	.....	3.243	.....	2.412	.....	.831
1969-70 to 1973-74 .....	.....	14.657	.....	11.529	.....	3.128
1974-75 .....	.....	3.193	.....	2.407	.....	.786
1975-76 .....	.....	2.995	.....	2.311	.....	.684
1976-77 .....	.....	2.785	.....	2.208	.....	.577
1977-78 .....	.....	2.546	.....	2.087	.....	.459
1978-79 .....	.....	2.425	.....	2.021	.....	.404
1974-75 to 1978-79 .....	.....	13.944	.....	11.034	.....	2.910

¹ Interpolated.

² Estimated.

³ The projection of capital outlay is based on assumption that: (1) capital outlay per additional full-time-equivalent of total opening fall enrollment will follow the 1958-59 to 1968-69 trend insofar as capital outlay resulting in increased value of plant is concerned; (2) capital outlay for replacement and rehabilitation will remain constant at the level of 1 percent of value of plant each year through 1978-79; and (3) since capital outlay relates to increased numbers of students over a number of years rather than annually, a moving average would more reasonably reflect annual capital outlay.

For further methodological details, see appendix A, table A-4.

NOTE: Data are for 50 States and the District of Columbia for all years.

SOURCES: Capital outlay data from U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of Higher Education, Biennial Survey of Education in the United States, 1957-58," chapter 4; "Financial Statistics of Higher Education," 1959-69; (3) "Higher Education Finances," 1961-62 and 1963-64; "Financial Statistics of Institutions of Higher Education: Property, 1965-66 and 1966-67"; and (4) unpublished data in the Office of Education.

CHAPTER VI

Student Charges by Institutions of Higher Education

C. George Lind

Definition and limitations

Estimated average student charges are based on the charges reported by institutions of higher education for the years 1961-62 through 1964-65 and 1966-67, weighted by the number of full-time students attending the institutions. The charges were those to a typical undergraduate full-time resident in-State student. Since reports on student attendance during the base years did not identify the full-time students as undergraduates, graduates, or nonresidents, the weighting factor assumes that graduates and nonresidents are charged the undergraduate and resident tuition and fees.

Estimated average charges per student (entire academic year) (tables 49 and 50)

The estimated average student charges (tuition and required fees, board, and room) by publicly controlled institutions of higher education, in 1968-69 constant dollars, increased from \$977 in 1958-59 to \$1,143 in 1968-69 and are expected to reach \$1,323 by 1978-79 (table 49). Estimated average student charges by nonpublicly controlled institutions of higher education were \$1,767 in 1958-59, \$2,433 in 1968-69, and are expected to reach \$3,122 by 1978-79.

Tuition and required fees are largely responsible for the increases in student charges. Tuition and fees in constant 1968-69 dollars charged by publicly controlled institutions rose from \$235 in 1958-59 to \$314 in 1968-69 and are expected to reach \$395 by 1978-79. Nonpublicly controlled institutions charged an estimated average tuition and fee of \$908 in 1958-59, \$1,443 in 1968-69, and are projected to be \$1,989 by 1978-79. Required fees are those for matriculation, laboratory, library, health, etc., but do not include books. Charges for tuition and required fees vary to a considerable extent by control and type of institution. Two factors bear upon the variation: (1) income of public institutions from government sources and (2) the varying cost of educating a student in different types of institutions.

The charges for board, while increasing slightly during the base period (table 50), when adjusted to constant 1968-69 dollars (table 49) had declined slightly in all but public universities and nonpublic 2-year institutions. The declines are not projected and, in effect, the assumption is made that the many large institutions which had held their board charges unchanged, in current unadjusted dollars, would not be able to continue that practice during the next decade.

Nonpublicly controlled institutions generally charge more than publicly controlled institutions for dormitory rooms, and universities generally charge more than other types of institutions for dormitory rooms. However, the rate of the increases in charges for dormitory rooms is not markedly dissimilar by either control or type of institution, and the variations in the charges may be ascribed to the level of accommodation afforded.

Table 49.—Estimated average charges (1968-69 dollars) per full-time undergraduate resident degree-credit student in institutions of higher education, by institutional type and control: United States, 1958-59 to 1978-79

[For academic year, in constant 1968-69 dollars]

(1)	Total tuition, board, and room				Tuition and required fees				Board (7-day basis)				Dormitory rooms				
	Year and control	All	Univer- sity	Other 4-year	2-year	All	Univer- sity	Other 4-year	2-year	All	Univer- sity	Other 4-year	2-year	All	Univer- sity	Other 4-year	2-year
1958-59: ¹		\$977	\$1,042	\$861	\$669	\$235	\$271	\$176	\$ 92	\$502	\$508	\$485	\$422	\$240	\$263	\$200	\$155
Public		1,767	1,980	1,648	1,177	908	1,060	820	475	559	593	550	486	300	327	278	216
Nonpublic		995	1,068	886	682	243	285	190	96	502	510	485	422	250	273	211	164
1959-60: ¹		1,835	2,064	1,718	1,257	963	1,125	878	528	559	593	550	492	313	346	290	237
Public		1,012	1,096	909	697	250	300	202	101	502	511	485	422	260	285	222	174
Nonpublic		1,905	2,148	1,789	1,339	1,018	1,190	935	582	559	593	550	500	328	365	304	257
1961-62: ²		1,029	1,122	934	710	258	314	216	104	501	513	485	422	270	295	233	184
Public		1,974	2,231	1,861	1,419	1,074	1,255	993	636	559	593	550	506	341	383	318	277
Nonpublic		1,055	1,155	953	721	260	314	225	114	509	534	472	423	286	307	256	184
1962-63: ²		2,018	2,368	1,883	1,489	1,105	1,345	1,018	703	556	594	541	500	357	429	324	286
Public		1,069	1,184	977	728	270	324	248	112	502	540	461	417	297	320	263	199
Nonpublic		2,096	2,431	1,963	1,516	1,169	1,404	1,080	741	562	596	548	493	365	431	335	282
1963-64: ²		1,083	1,199	988	728	277	340	255	113	497	527	458	412	309	332	275	203
Public		2,173	2,511	2,063	1,658	1,240	1,479	1,166	800	556	587	546	529	377	445	351	329
Nonpublic		1,096	1,234	1,005	748	287	365	267	122	496	529	454	409	313	340	284	217
1964-65: ²		2,236	2,584	2,118	1,739	1,287	1,527	1,212	858	552	590	538	528	397	467	368	353
Public		1,096	1,234	1,005	748	287	365	267	122	496	529	454	409	313	340	284	217
Nonpublic		2,236	2,584	2,118	1,739	1,287	1,527	1,212	858	552	590	538	528	397	467	368	353

1966-67: ²																
Public	1,111	1,267	1,024	769	298	390	280	131	495	530	451	407	318	347	293	231
Nonpublic	2,299	2,658	2,172	1,818	1,334	1,576	1,258	915	548	593	530	527	417	489	384	376
1967-68: ¹																
Public	1,127	1,295	1,042	778	306	405	293	135	493	532	444	404	328	358	305	240
Nonpublic	2,366	2,741	2,231	1,899	1,389	1,641	1,307	970	546	592	527	533	431	508	397	396
1968-69: ¹																
Public	1,143	1,322	1,059	790	314	420	306	140	491	534	437	400	338	368	316	250
Nonpublic	2,433	2,824	2,290	1,973	1,443	1,705	1,356	1,024	544	592	524	539	446	527	410	416

PROJECTED⁴

1969-70:																
Public	\$1,161	\$1,350	\$1,085	\$803	\$322	\$434	\$320	\$144	\$491	\$537	\$437	\$400	\$348	\$379	\$328	\$259
Nonpublic	2,502	2,908	2,353	2,060	1,498	1,770	1,435	1,079	544	592	524	545	460	546	424	436
1970-71:																
Public	1,179	1,378	1,109	818	330	449	333	149	491	539	437	400	358	390	339	269
Nonpublic	2,570	2,992	2,415	2,140	1,552	1,835	1,454	1,133	544	592	524	551	474	565	437	456
1971-72:																
Public	1,197	1,406	1,134	831	338	464	346	153	491	541	437	400	368	401	351	278
Nonpublic	2,640	3,075	2,477	2,221	1,607	1,899	1,503	1,188	544	592	524	557	489	594	450	476
1972-73:																
Public	1,215	1,435	1,158	846	346	479	359	158	491	544	437	400	378	412	362	288
Nonpublic	2,709	3,159	2,540	2,300	1,662	1,964	1,552	1,242	544	592	524	562	503	603	464	496

See footnotes at end of table.

Table 49.—Estimated average charges (1968-69 dollars) per full-time undergraduate resident degree-credit student in institutions of higher education, by institutional type and control: United States, 1958-59 to 1978-79—Continued

[For academic year, in constant 1968-69 dollars]

Year and control	Total tuition, board, and room				Tuition and required fees				Board (7-day basis)				Dormitory rooms			
	All	Univer- sity	Other 4-year	2-year	All	Univer- sity	Other 4-year	2-year	All	Univer- sity	Other 4-year	2-year	Univer- sity	Other 4-year	2-year	
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
1973-74:																
Public	1,233	1,462	1,183	859	355	494	372	162	491	546	437	400	387	422	374	297
Nonpublic	2,777	3,243	2,602	2,382	1,716	2,029	1,601	1,297	544	592	524	568	517	622	477	517
1974-75:																
Public	1,251	1,490	1,208	872	363	509	385	166	491	548	437	400	397	433	386	306
Nonpublic	2,847	3,326	2,664	2,463	1,771	2,093	1,650	1,352	544	592	524	574	532	641	490	537
1975-76:																
Public	1,269	1,518	1,232	887	371	524	398	171	491	550	437	400	407	444	397	316
Nonpublic	2,915	3,410	2,726	2,543	1,825	2,158	1,699	1,406	544	592	524	580	546	660	503	557
1976-77:																
Public	1,287	1,544	1,258	900	379	538	412	175	491	552	437	400	417	454	409	325
Nonpublic	2,984	3,494	2,788	2,624	1,880	2,223	1,748	1,461	544	592	524	586	560	679	516	577
1977-78:																
Public	1,305	1,573	1,282	915	387	553	425	180	491	555	437	400	427	465	420	335
Nonpublic	3,052	3,577	2,851	2,704	1,934	2,287	1,797	1,515	544	592	524	592	574	698	530	597
1978-79:																
Public	1,323	1,601	1,307	928	395	568	438	184	491	557	437	400	437	476	432	344
Nonpublic	3,122	3,661	2,913	2,785	1,989	2,352	1,846	1,570	544	592	524	598	589	717	543	617

¹ Estimated.
² Represents charges weighted by number of full-time degree-credit students, 1961-62 through 1964-65, and weighted by full-time resident students for 1966-67. These charges, shown in table 50 in current dollars, were converted to 1968-69 constant dollars by application of the Consumer Price Index. See constant dollar index, appendix B, table B-8.
³ Interpolated.
⁴ The projection of basic student charges is based on the assumption that these charges will continue to increase through 1978-79 as they did during the base years of 1961-62 through 1964-65 and 1966-67, in constant dollars. Decreases in charges for board dur-

ing the base period are not projected and are frozen at the 1968-69 level. The base year data for board charges, in current unadjusted dollars, did show an increase, but not enough to offset the application of the Consumer Price Index.
 For further methodological details, see appendix A, table A-4.
 NOTE: Data are for 50 States and the District of Columbia for all years.
 SOURCES: U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Higher Education Basic Student Charges," 1961-62 through 1964-65 and 1966-67; and (2) "Opening (Fall) Enrollment in Higher Education," 1961 through 1964 and 1956.

Table 50.—Estimated average charges (current dollars) per full-time undergraduate resident degree-credit student in institutions of higher education, by institutional type and control: United States, 1958-59 to 1970-71—Continued
 [For academic year, in current unadjusted dollars]

Year and control	Total tuition, board, and room				Tuition and required fees				Board (7-day basis)				Dormitory rooms				
	All	Univer- sity	Other 4-year	2-year	All	Univer- sity	Other 4-year	2-year	All	Univer- sity	Other 4-year	2-year	All	Univer- sity	Other 4-year	2-year	
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	
1966-67:																	
Public	\$1,026	\$1,171	\$947	\$710	\$275	\$360	\$259	\$121	\$457	\$490	\$417	\$376	\$294	\$321	\$271	\$213	
Nonpublic	2,124	2,456	2,007	1,679	1,233	1,456	1,162	845	506	548	450	487	385	452	355	347	
1967-68: ¹																	
Public	1,076	1,237	995	744	292	387	280	129	471	508	424	336	313	342	291	229	
Nonpublic	2,258	2,617	2,130	1,813	1,326	1,567	1,248	926	521	565	503	509	411	485	379	378	
1968-69: ¹																	
Public	1,143	1,322	1,059	790	314	420	306	140	491	534	437	400	338	368	316	250	
Nonpublic	2,433	2,824	2,290	1,979	1,443	1,705	1,356	1,024	544	592	524	539	446	527	410	416	
PROJECTED																	
1969-70: ¹																	
Public	1,196	1,390	1,117	827	332	447	329	148	506	553	450	412	358	390	338	267	
Nonpublic	2,576	2,993	2,423	2,121	1,542	1,822	1,447	1,111	560	609	539	561	474	562	437	449	
1970-71: ¹																	
Public	1,248	1,460	1,175	867	349	476	353	158	520	571	463	424	379	413	359	285	
Nonpublic	2,722	3,168	2,552	2,267	1,644	1,943	1,540	1,200	576	627	555	584	502	598	463	483	

¹ Data for 1958-59 through 1969-71 and for 1967-68 through 1970-71 estimated by applying the Consumer Price Index to the data in table 49. See constant dollar index, appendix B, table B-8.

² Interpolated.

For further methodological details, see appendix A, table A-4.

NOTE: Data are for 50 States and the District of Columbia for all years.
 SOURCES: U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Higher Education Basic Student Charges," 1961-62 through 1964-65 and 1966-67; and (2) "Opening (Fall) Enrollment in Higher Education," 1961 through 1964 and 1966.

APPENDIX A
General Methodology
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APPENDIX A

General Methodology

The 1969 projections of educational data by the U.S. Office of Education are based on reports of regular day schools, both public and private, and of accredited institutions of higher education listed in the *Education Directory* of the Office of Education.¹ The projections include enrollments at all levels, high school graduates, degrees by level and field, teacher and faculty demand, and expenditures in elementary and secondary schools and in institutions of higher education. Of these, projections were based directly on population for the number of children attending independent nursery and kindergarten schools, those attending kindergarten through second grade of regular public schools, enrollments in higher education, high school graduates, and degrees by level. The others, with the exception of enrollment in grades 3 through 12 of the public schools and of degrees by field, were based on enrollments. Enrollments in grades 3 through 12 of public schools were based on grade retention rates. (Retention rates could not be used for projecting higher education enrollments because the data on these enrollments have not been collected by year of enrollment.) Degrees by field were based on the distribution of total degrees by field at each level over a 10-year period.

Population aged 18-21 years was used for projecting college enrollments. It is recognized that not all college enrollments fall in this age group; nevertheless, in the absence of data on age of college students, some fairly sensitive yet stable exposure measure had to be used. Since about two-thirds of all degree-credit enrollment is full time, it can be assumed that around the same proportion of the students fit the population age group used. The population averaging 18 years of age was chosen for projecting both high school graduates and first-time college enrollment. This age group gave a smoother fit when correlated with these data than could be obtained with other age groups. For projecting kindergarten, first-grade, and second-grade enrollments, the populations aged 5, 6, and 7 years, respectively, were used.

For projecting degrees, a composite population representative of the actual ages of the recipients of such degrees was used. (For details of estimating this population, see p. 137.) To avoid escalation in rates, the projection of degrees was based directly on the composite population, with a suitable timelag taken into account.

The choice of average time elapsed between the ages for bachelor's degrees and master's degrees and between the ages for master's degrees and doctorates was made on an empirical basis. The different series of degree data were plotted against time so that different timelags between the series could be compared. The following choices were made: Age at time of master's degree, 2 years older than age at time of bachelor's degree; age at time of doctorate, 2 years older than age at time of master's degree.

For making the projections, regression methods were used wherever a trend could be established. Where no consistent series was available or the data were too irregular to establish a trend, a constant based on the latest observation or an average of the last two or three observations was used. For some projections—such as graduate enrollments, enrollments in institutions of higher education by full-time and part-time attendance, and nondegree-credit enrollments—relationships had to be obtained from a different series of data and transferred to the opening fall higher education enrollment series. The latter series is current and has been reasonably consistent in the past, although lacking some detailed characteristics which are required by educators for decisionmaking.

¹ U.S. Department of Health, Education, and Welfare, Office of Education, *Education Directory, 1968-69: Part 3, Higher Education*. U.S. Government Printing Office, Washington, D.C., 1968.

For the trend, observations in the 10 most recent years were used, and these were extrapolated for 10 years into the future. The 10-year timespan was considered better than a longer timespan because of the rapid change in economic and social conditions and the improvement in the available statistics in recent years.

Straight lines fitted by the least squares technique to the ratio (for example, of enrollment to population) as the dependent variable and time in years as the independent variable were used for projecting whenever possible. The rationale for using the straight line is that the long-range, true curve of relationship would be likely to yield a straight line over any portion covering so short a timespan. An advantage in using straight lines is their additive property when the ratio bases are the same. This simplifies projection of components (all complex data are usually projected by components and summed).

The fitted straight line often lies considerably above or below the last observed point, resulting in an unusual rise or drop from the last actual observation. To avoid this and give face validity to the projections, the line was used only to establish the last point, and a new line was drawn through the last observed ratio and the end point on the curve. (In this case, the fitted equation is used only to establish the ratio at the end of the 10-year span.) When all of the component curves are adjusted in this manner, they are additive just as the original curves were. For this reason, when any curve in a group of components exhibited a serious difference from the last observation, all of the component curves were adjusted, even if differences were slight. An independent curve was adjusted only when the discrepancy was serious.

An exception to the use of the straight line for projecting trends was made in projecting grade-retention rates in the public schools. Because retention rates have risen rapidly in the past 10 years, a straight line equation would produce projected rates well above permissible limits. To allow for leveling off and to keep within such limits, an asymptotic equation was used, with limits at 100 percent, except at certain grade levels where transfer of students from nonpublic schools occurs in large numbers.

For each major area (enrollments, degrees, teachers, and expenditures), the tables that follow outline the equations and constants that were used; the standard error, when appropriate; and adjustments, if used. Adjustments have been expressed in terms of the projection equation. Footnotes explain the meaning of the variables and constants used for estimating.

The tables are followed by sections which explain the methods used in estimating missing data of the past 10 years, define the meaning of terms as used by the Office of Education in requesting data, and outline the classification of summarized degree data.

Table A-1.--Methodology (Chapter II)

Item	Text table number	Constant (percent)	Projection method			Standard error	Index of determination	Adjusted equation ¹	Other
			Least squares equation (y=percent; z=percent (natural logs); t=year; 1958=1)	Trend					
Fall enrollment (independent public kindergarten and nursery schools) ²	2		$y' = 0.045 + 0.038t$	0.93	0.069	$y' = -0.053 + 0.038t$	(³)		
3 years old ⁴			$y' = 0.65 + 0.11t$	.98	.024	$y' = -0.65 + 0.11t$		
4 years old ⁵			$y' = 4.53 + 0.20t$	.96	.078	$y' = -4.52 + 0.20t$		
5 years old ⁶			$y' = 2.68 + 0.20t$	.08	.87	$y' = -2.24 + 0.23t$		
6 years old ⁷									
Fall enrollment (independent nonpublic kindergarten and nursery schools) ²	2		$y' = 0.261 + 0.063t$	.97	.019	$y' = -0.289 + 0.061t$	(⁸)	
3 years old ⁹			$y' = 0.60 + 0.10t$	.98	.029	$y' = -0.57 + 0.10t$		
4 years old ¹⁰			$y' = 1.0746 + 0.0089t$	.03	.095	$y' = -0.9865 + 0.0147t$	(¹²)	
5 years old ¹¹									
6 years old									
Fall enrollment (regular public day schools)	3								
Kindergarten ¹³			$y' = 44.66 + 1.34t$	.95	1.05	$y' = 49.25 + 1.12t$		
Grade 1 ¹⁴			$y' = 95.38 - 0.14t$	.39	.52	$y' = 95.84 - 0.16t$		
Grade 2 ¹⁵			$y' = 88.7927 - 0.0021t$	.0003	.399	$y' = 88.036 + 0.034t$		
Grade 3 ¹⁶			$z' = \log(100 \cdot y') = 0.586 - 0.056t$	.24	.343			
Grade 4 ¹⁷			$z' = \log(100 \cdot y') = 0.407 - 0.048t$	.31	.254			
Grade 5 ¹⁸			$z' = \log(100 \cdot y') = 0.389 - 0.160t$	.44	.627			
Grade 6 ¹⁹			$z' = \log(100 \cdot y') = 0.952 - 0.235t$	.65	.608			
Grade 7 ²⁰			$z' = \log(104 \cdot y') = 1.334 - 0.108t$	.77	.206			
Grade 8 ²¹			$z' = \log(100 \cdot y') = 1.386 - 0.134t$	.87	.182			
Grade 9 ²²			$z' = \log(105 \cdot y') = 1.478 - 0.158t$	.63	.425			
Grade 10 ²³			$z' = \log(100 \cdot y') = 2.169 - 0.118t$	.92	.120			
Grade 11 ²⁴			$z' = \log(100 \cdot y') = 2.507 - 0.052t$	.82	.085			
Grade 12 ²⁵			$z' = \log(100 \cdot y') = 2.455 - 0.046t$	.60	.134			

Elementary ungraded ²⁶	.66	.134	$y' = 1.282 + 0.028t$
Secondary ungraded ²⁷	.97	.048	$y' = 0.826 + 0.069t$
Post graduate ²⁸	.66	.083	$y' = 0.209 + 0.026t$
Organizational level ²⁹	.83	2.11	$y' = 58.98 + 0.92t$
Fall enrollment (regular nonpublic day schools)			
Grades kindergarten to 8			
Degree-credit fall enrollment ³²			
Men, public 4-year institutions	.88	1.09	$y' = 20.20 + 0.85t$
Women, public 4-year institutions	.97	.57	$y' = 11.71 + 0.96t$
Men, private 4-year institutions	.75	.41	$y' = 18.15 + 0.16t$
Women, private 4-year institutions	.44	.318	$y' = 8.826 + 0.135t$
Men, public 2-year institutions	.92	.47	$y' = 5.41 + 0.40t$
Women, public 2-year institutions	.93	.33	$y' = 3.01 + 0.31t$
Men, private 2-year institutions	.80	.067	$y' = 0.465 + 0.041t$
Women, private 2-year institutions	.82	.034	$y' = 0.497 + 0.024t$
Nondegree-credit fall enrollment ³³			
Men, public 4-year institutions	.29	.0470	$y' = 0.4894 + 0.0049t$
Women, public 4-year institutions	.58	.041	$y' = 0.2337 + 0.0073t$
Men, private 4-year institutions	.34	.0264	$y' = 0.2108 + 0.0052t$
Women, private 4-year institutions	.69	.013	$y' = 0.0621 + 0.0065t$
Men, public 2-year institutions	.81	.39	$y' = 1.78 + 0.21t$
Women, public 2-year institutions	.89	.22	$y' = 0.80 + 0.16t$
Men, private 2-year institutions	.84	.046	$y' = 0.547 + 0.032t$
Women, private 2-year institutions	.0119	.0280	$y' = 0.1400 + 0.0022t$

³⁰⁾
³¹⁾

See footnotes at end of table.

Table A-1.--Methodology (Chapter II)--Continued

Item	Text table number	Constant (percent)	Projection method			Other		
			Least squares equation (y=percent; z=percent (natural logs); t=year; 1958=1)	Trend	Index of determination		Standard error	Adjusted equation ¹
Full-time nondegree-credit fall enrollment ³⁴	9-11	49.3						
Men, public 4-year institutions		42.1						
Women, public 4-year institutions		27.1						
Men, private 4-year institutions		46.4						
Women, private 4-year institutions		47.3						
Men, public 2-year institutions		43.8						
Women, public 2-year institutions		66.9						
Men, private 2-year institutions		70.9						
Women, private 2-year institutions								
Full-time-equivalent degree-credit fall enrollment ³⁵	12	33.0						
Public institutions		33.0						
Private institutions								
Full-time-equivalent nondegree-credit fall enrollment ³⁶	12	28.0						
Public institutions		28.0						
Private institutions								
First-time degree-credit fall enrollment ³⁷	14-16							
Men, public 4-year institutions			$y' = 14.96 + 0.52t$	0.87	0.66	$y' = 14.71 + 0.58t$		
Women, public 4-year institutions			$y' = 10.18 + 0.71t$	.97	.42	$y' = 9.31 + 0.82t$		
Men, private 4-year institutions			$y' = 13.88 - 0.19t$	.73	.40	$y' = 13.63 - 0.20t$		
Women, private 4-year institutions			$y' = 9.5557 - 0.0088t$	.01	.29	$y' = 9.062 + 0.014t$		
Men, public 2-year institutions			$y' = 5.73 + 0.83t$	.87	1.09	$y' = 7.70 + 0.81t$		

Table A-1.—Methodology (Chapter II)—Continued

Item	Text table number	Constant (percent)	Projection Method		
			Least squares equation ($y = \text{percent}$; $z = \text{percent}$ (natural logs); $t = \text{year}$; 1958=1)	Trend	Other
			Index of determination	Standard error	Adjusted equation ¹
Full-time undergraduate and first-professional degree-credit fall enrollment (4-year institutions) ⁴¹	19	81.3			
Men, public institutions		77.2			
Women, public institutions		78.8			
Men, private institutions		79.1			
Women, private institutions					
Full-time undergraduate degree-credit fall enrollment (2-year institutions) ⁴²	8	58.6			
Men, public institutions		48.1			
Women, public institutions		83.9			
Men, private institutions		84.0			
Women, private institutions					

¹ Adjusted by relocating line through last observed point and 1978 point of fitted line.

² First observation is for 1964.

³ Total public kindergarten and nursery school enrollment less kindergarten enrollment.

⁴ In regular public day schools.

⁵ $y = \text{percent}$ 3-year-olds enrolled in public kindergarten and nursery schools is of population aged 3 years.

⁶ $y = \text{percent}$ 4-year-olds enrolled in public kindergarten and nursery schools is of population aged 4 years.

⁷ $y = \text{percent}$ 5-year-olds enrolled in public kindergarten and nursery schools is of population aged 5 years.

⁸ $y = \text{percent}$ 6-year-olds enrolled in public kindergarten and nursery schools is of population aged 6 years.

⁹ Total nonpublic kindergarten and nursery school enrollment less kindergarten enrollment in regular nonpublic day schools.

¹⁰ $y = \text{percent}$ 3-year-olds enrolled in private kindergarten and nursery schools is of population aged 3 years.

¹¹ $y = \text{percent}$ 4-year-olds enrolled in private kindergarten and nursery schools is of population aged 4 years.

¹¹ $y = \text{percent}$ 5-year-olds enrolled in private kindergarten and nursery schools is of population aged 5 years.

¹² Constant = 1967 number (in thousands) of 6-year-olds enrolled in private kindergarten and nursery schools.

¹³ $y = \text{percent}$ kindergarten enrollment is of population aged 5 years.

¹⁴ $y = \text{percent}$ 1st grade enrollment is of population aged 6 years.

¹⁵ $y = \text{percent}$ 2nd grade enrollment is of population aged 7 years.

¹⁶ $z = \text{percent}$ (in natural logs) grade 3 is of grade 2 in preceding year with restriction that percent cannot exceed 100.

¹⁷ $z = \text{percent}$ (in natural logs) grade 4 is of grade 3 in preceding year with restriction that percent cannot exceed 100.

¹⁸ $z = \text{percent}$ (in natural logs) grade 5 is of grade 4 in preceding year with restriction that percent cannot exceed 100.

¹⁹ $z = \text{percent}$ (in natural logs) grade 6 is of grade 5 in preceding year with restriction that percent cannot exceed 100.

²⁰ $z = \text{percent}$ (in natural logs) grade 7 is of grade 6 in preceding year with restriction that percent cannot exceed 100. (Transfers from nonpublic schools assumed to account for excess over 100.)

- 21 z = percent (in natural logs) grade 8 is of grade 7 preceding year with restriction that percent cannot exceed 100.
- 22 z = percent (in natural logs) grade 9 is of grade 8 in preceding year with restriction that percent cannot exceed 105. (Transfers from nonpublic schools assumed to account for excess over 100.)
- 23 z = percent (in natural logs) grade 10 is of grade 9 in preceding year with restriction that percent cannot exceed 100.
- 24 z = percent (in natural logs) that grade 11 is of grade 10 in preceding year with restriction that percent cannot exceed 100.
- 25 z = percent (in natural logs) grade 12 is of grade 11 in preceding year with restriction that percent cannot exceed 100.
- 26 z = percent elementary ungraded enrollment is of population aged 5 to 13.
- 27 y = percent secondary ungraded enrollment is of population aged 14 to 17.
- 28 y = percent postgraduate enrollment is of population aged 18 at nearest birthday.
- 29 y = percent 7th and 8th grades organized as secondary are of total 7th and 8th grades.
- 30 Approximations based on the assumption that the number of enrollments in grades K-8 in nonpublic schools will continue to decrease to 1972, and then remain constant through 1978.
- 31 Approximations based on the assumption that the number of enrollments in grades 9-12 in nonpublic schools will remain at the 1968 level through 1978.
- 32 y = percent opening fall degree-credit enrollment is of population aged 18-21 in completed years (projected separately by sex and by type and control of institution).
- 33 y = percent that opening fall nondegree-credit enrollment is of population aged 18-21 years (projected separately for each category by sex and by type and control of institution).
- 34 Constant = percent that full-time nondegree-credit enrollment was of total nondegree-credit enrollment in 1968, calculated separately by type and control of institution and by sex.
- 35 Constant = percent that full-time equivalent of part-time degree-credit enrollment was of part-time degree-credit enrollment in the 1964 full-time-equivalent enrollment and credit-hours survey (percent same in publicly and privately controlled institutions).
- 36 Constant = percent full-time equivalent of part-time nondegree-credit enrollment was of part-time nondegree-credit enrollment in the 1964 full-time-equivalent enrollment and credit-hours survey (percent same in publicly and privately controlled institutions).
- 37 y = percent that first-time opening fall degree-credit enrollment is of population aged 18 at nearest birthday (projected separately by sex and by type and control of institution).
- 38 Constant = percent that full-time first-time degree-credit opening fall enrollment was of total first-time degree-credit opening fall enrollment in 1968.
- 39 y = percent that estimated resident graduate degree-credit enrollment is of total resident plus extension, graduate plus undergraduate enrollment in 4-year institutions (projected separately by sex and control of institution). The extrapolated percentages were applied to projected resident plus extension, graduate plus undergraduate opening fall degree-credit enrollment in 4-year institutions.
- 40 Constant = percent that full-time enrollment for advanced degrees was of total enrollment for advanced degrees in 1967, adjusted by trends shown in the 1968 advance report of enrollment for advanced degrees and calculated separately for each category by type and control of institution and by sex.
- 41 Constant = percent that full-time undergraduate and first-professional (calculated as the difference between reported full-time degree-credit opening fall enrollment and estimated graduate enrollment) was of degree-credit total enrollment in 1968. Estimates were made separately by control of institution and sex in 4-year institutions only.
- 42 Constant = percent that full-time opening fall degree-credit enrollment was of total opening fall degree-credit enrollment in 1968, calculated separately by control of institution and sex in 2-year institutions only.

Table A-2.--Methodology (Chapter III)

Item	Text table number	Constant (percent)	Projection method			
			Least squares equation (t=Year; 1957-58=1)	Index of determination	Standard error	Adjusted equation ¹
High school graduates	20					
Public ²						
Men			$y' = 51.92 + 1.32t$	0.89	1.61	$y' = 50.26 + 1.40t$
Women			$y' = 56.56 + 1.13t$	.87	1.53	$y' = 54.94 + 1.20t$
Nonpublic ³		448.1				
Bachelor's and 1st-professional degrees conferred on men ⁵	21		$y' = 22.07 + 0.23t$	.53	.75	$y' = 24.60 + 0.10t$
Selected fields ⁶	23		$y' = 2.52 + 0.17t$	.61	.48	$y' = 1.50 + 0.22t$
Mathematics and statistics		79.00				
Engineering			$y' = 5.70 + 0.12t$	.84	.18	$y' = 5.50 + 0.11t$
Physical sciences			$y' = 4.16 + 0.17t$	.90	.20	$y' = 3.92 + 0.18t$
Biological sciences			$y' = 3.207 - 0.095t$	.77	.18	$y' = 3.51 - 0.11t$
Agriculture, forestry						
Health professions						
Science, general program			$y' = 0.6563 - 0.0093t$	.29	.050	$y' = 0.5607 - 0.0051t$
Fine arts			$y' = 4.082 + 0.025t$	.25	.15	$y' = 4.5026 + 0.0068t$
Philosophy and religion			$y' = 2.253 - 0.021t$	.48	.078	$y' = 2.030 - 0.012t$
English and Journalism			$y' = 3.19 + 0.14t$	.96	.099	$y' = 3.01 + 0.15t$
Foreign languages			$y' = 0.657 + 0.073t$	.94	.065	$y' = 0.433 + 0.083t$
Psychology			$y' = 1.32 + 0.19t$	.98	.097	$y' = 1.57 + 0.18t$
Social sciences			$y' = 12.49 + 0.67t$	.96	.46	$y' = 12.78 + 0.66t$
Education			$y' = 8.20 - 0.16t$	.90	.18	$y' = 8.18 - 0.16t$
Library science		7.02				
Social work		7.15				
Other			$y' = 28.31 - 0.23t$	.77	.45	$y' = 29.93 - 0.30t$

(⁸)

Table A-2.—Methodology (Chapter III)—Continued

Item	Text table number	Constant (percent)	Projection method					
			Least squares equation (t=year; 1957-58=1)	Index of determination	Trend Standard error	Adjusted equation ¹	Other	
Agriculture, forestry		11.50						
Health professions			$y' = 2.103 - 0.044t$	0.59	0.13	$y' = 2.130 - 0.045t$		
Science, general program			$y' = 0.619 + 0.017t$	.07	.21	$y' = 0.362 + 0.023t$		
Fine arts			$y' = 5.950 - 0.077t$	.65	.20	$y' = 6.468 - 0.160t$		
Philosophy and religion			$y' = 1.464 - 0.045t$	.69	.11	$y' = 1.660 - 0.054t$		
English and journalism			$y' = 3.030 + 0.049t$	.79	.09	$y' = 2.393 + 0.055t$		
Foreign languages			$y' = 1.075 + 0.076t$	.88	.10	$y' = 1.035 + 0.078t$		
Psychology			$y' = 1.822 + 0.049t$	.70	.11	$y' = 1.912 + 0.045t$		
Social sciences			$y' = 8.99 + 0.21t$	.88	.27	$y' = 8.38 + 0.24t$		
Education			$y' = 35.14 - 1.00t$	.95	.78	$y' = 35.83 - 1.03t$		
Library science		11.00						
Social work		11.200						
Other			$y' = 10.15 + 0.57t$	.62	1.57	$y' = 13.44 + 0.43t$		
Master's (except 1st-professional) degrees conferred on women ⁹	21		$y' = 1.42 + 0.23t$	.86	.32	$y' = 2.62 + 0.17t$		
Selected fields ¹⁰	24							
Mathematics and statistics			$y' = 1.27 + 0.11t$	.73	.24	$y' = 0.57 + 0.14t$		
Engineering			$y' = 0.0947 + 0.0052t$	.54	.017	$y' = 0.1048 + 0.0047t$		
Physical sciences			$y' = 1.438 - 0.029t$	.32	.15	$y' = 1.210 - 0.019t$		
Biological sciences			$y' = 2.067 + 0.056t$	.34	.27	$y' = 1.621 + 0.075t$		
Agriculture, forestry			$y' = 0.0789 + 0.0073t$	.63	.020	$y' = 0.0402 + 0.0090t$		
Health professions			$y' = 3.311 - 0.047t$	.32	.24	$y' = 3.480 - 0.054t$		
Science, general program			$y' = 0.29 + 0.0063t$	.11	.062	$y' = 0.3069 + 0.0056t$		
Fine arts			$y' = 7.434 + 0.028t$	.12	.26	$y' = 6.898 + 0.051t$		
Philosophy and religion			$y' = 0.7971 - 0.0047t$	.01	.14	$y' = 1.015 - 0.014t$		
English and journalism			$y' = 5.89 + 0.20t$	.65	.52	$y' = 4.50 + 0.26t$		
Foreign languages			$y' = 1.82 + 0.28t$	.95	.22	$y' = 1.11 + 0.31t$		

Psychology							$y' = 1.604 + 0.084t$
Social sciences							$y' = 3.85 + 0.18t$
Education							$y' = 66.72 - 1.88t$
Library science	11	.74	.67				
Social work	7.00	.96					
Other	11						
Doctor's degrees conferred on men ¹²	21	.80	.28				$y' = 7.09 - 0.16t$
Selected fields ¹³	25	.98	.048				$y' = 0.609 + 0.096t$
Mathematics and statistics . . . . .		.94	.16				$y' = 2.43 + 0.20t$
Engineering . . . . .		.94	.65				$y' = 5.37 + 0.83t$
Physical sciences . . . . .		.82	.57				$y' = 20.11 - 0.30t$
Biological sciences . . . . .		.26	.50				$y' = 13.14 - 0.14t$
Agriculture, forestry . . . . .		.69	.33				$y' = 4.66 - 0.12t$
Health professions . . . . .		.44	.18				$y' = 1.512 - 0.042t$
Science, general program . . . . .		.15	.027				$y' = 0.0085 + 0.0037t$
Fine arts . . . . .		.57	.20				$y' = 3.426 - 0.055t$
Philosophy and religion . . . . .		.32	.20				$y' = 3.163 - 0.070t$
English and Journalism . . . . .		.0000	.15				$y' = 3.7374 - 0.0047t$
Foreign languages . . . . .		.44	.16				$y' = 2.245 + 0.025t$
Psychology . . . . .		.46	.22				$y' = 5.970 - 0.043t$
Social sciences . . . . .		.46	.34				$y' = 13.73 - 0.11t$
Education . . . . .		.08	.61				$y' = 15.97 - 0.13t$
Library science	14	.10	.054				
Social work . . . . .	.06	.41	.21				$y' = 4.044 - 0.029t$
Other							

See footnotes at end of table.

Table A-2.—Methodology (Chapter III)—Continued

Item	Text table number	Constant (percent)	Projection method			Other
			Least squares equation (t=Year; 1957-58=1)	Index of determination	Standard error		Adjusted equation^{1}
Doctor's degrees conferred on women ¹²	21		$y' = -0.055 + 0.014t$	0.94	1.30	$y' = -0.096 + 0.012t$
Selected fields ¹³	25					
Mathematics and statistics			$y' = 1.48 + 0.10t$	.32	.52	$y' = -0.11 + 0.17t$
Engineering			$y' = 0.327 + 0.018t$	.11	.17	$y' = 0.116 + 0.027t$
Physical sciences			$y' = 6.7566 - 0.0076t$	.0035	.45	$y' = 6.3654 + 0.0035t$
Biological sciences			$y' = 11.35 + 0.21t$	.35	1.01	$y' = 13.61 + 0.14t$
Agriculture, forestry			$y' = 0.665 - 0.020t$	.10	.21	$y' = 0.595 - 0.017t$
Health professions			$y' = 0.607 + 0.040t$	.26	.23	$y' = 0.654 + 0.037t$
Science, general program			$y' = 0.0162 + 0.0072t$	.19	.052	$y' = -0.0713 + 0.0036t$
Fine arts			$y' = 5.678 - 0.088t$	.19	.64	$y' = 5.157 - 0.065t$
Philosophy and religion			$y' = 2.066 - 0.058t$	.14	.50	$y' = 1.836 - 0.048t$
English and journalism			$y' = 6.30 + 0.23t$	.61	.65	$y' = 6.82 + 0.21t$
Foreign languages			$y' = 5.729 + 0.091t$	.14	.79	$y' = 6.281 + 0.067t$
Psychology			$y' = 9.55 + 0.24t$	.44	.96	$y' = 8.39 + 0.29t$
Social sciences			$y' = 11.038 - 0.024t$	.0071	1.01	$y' = 12.293 - 0.079t$
Education			$y' = 30.78 - 0.61t$	.76	1.21	$y' = 32.41 - 0.68t$
Library science		14, 20				
Social work			$y' = 0.8990 + 0.0093t$	.02	.26	$y' = 0.102 + 0.044t$
Other			$y' = 5.94 - 0.13t$	.48	.48	$y' = 5.111 - 0.096t$

¹ Adjusted by relocating line through last observed point and 1978-79 point of fitted line.
² y = percent that public high school graduates are of population averaging 18 years of age for men and women separately.
³ Assumes approximately no change in number of nonpublic high school graduates through 1978-79.
⁴ Constant = percent that boys were of nonpublic high school graduates in 1964-65.
⁵ y = percent that B.A. degrees are of population averaging 18 years of age 4 years earlier.
⁶ Earlier.
⁷ y = percent that B.A. degrees in these selected fields are of all B.A. degrees.
⁸ Constant = percent that B.A. degrees in these selected fields were of all B.A. degrees in 1967-68.
⁹ Capacity.
¹⁰ y = percent that M.A. degrees are of population averaging 18 years of age 6 years earlier.
¹¹ Constant = percent that M.A. degrees in these selected fields are of all M.A. degrees in 1967-68.
¹² y = percent that doctor's degrees are of population averaging 18 years of age 9 years earlier.
¹³ y = percent that doctor's degrees in these selected fields are of all doctor's degrees.
¹⁴ Constant = percent that doctor's degrees in these selected fields were of all doctor's degrees in 1957-68.

Table A-3.—Methodology (Chapter IV)

Item	Text table number	Projection method					Other
		Constant (percent)	Least squares equation (y=percent; t=year; 1958=1)	Index of determination	Standard error	Adjusted equation ¹	
Classroom teachers in regular day schools	26						(²)
Public elementary							(²)
Public secondary							(²)
Nonpublic elementary							(²)
Nonpublic secondary							(²)
Pupil-teacher ratios in regular elementary and secondary day schools	27						
Public elementary ³			$y' = 28.83 - 0.10t$	0.67	0.17	$y' = 28.523 - 0.089t$	
Public secondary ³			$y' = 21.700 - 0.021t$	.19	.11	$y' = 21.625 - 0.018t$	
Nonpublic elementary ⁴			$\log (y' - 26) = 2.701 - 0.139t$	.97	.14		
Nonpublic secondary ⁵			$\log (y' - 15) = 1.348 - 0.076t$	.93	.11		
Demand for classroom teachers in public regular day schools	28						(⁶)
For enrollment increase							
For teacher turnover ⁷		8.0					
Demand for classroom teachers in nonpublic regular day schools	29						(⁶)
For enrollment increase							
For teacher turnover ⁸		4.0					
Instructional staff in regular elementary and secondary day schools	30						(¹⁰)
Public ⁹			$y' = 107.63 + 0.32t$	.99	.17		
Nonpublic							
Total instructional staff for resident degree-credit courses ¹¹	31						
Public 4-year institutions ¹¹			$y' = 12.68 + 0.10t$	.72	.21	$y' = 12.11 + 0.13t$	
Private 4-year institutions ¹¹			$y' = 10.119 + 0.033t$	.65	.079	$y' = 10.265 + 0.026t$	

See footnotes at end of table.

Table A-3.—Methodology (Chapter IV)—Continued

Item	Text table number	Constant (percent)	Projection method			Other
			Least squares equation (y=percent; t=year; 1958=1)	Trend	Adjusted equation ¹	
Public 2-year institutions ¹²		19.0				
Private 2-year institutions ¹¹						
Full-time instructor or above ¹³		56.8				
Part-time instructor or above ¹⁴		28.2				
Junior instructional staff ¹⁵		15.0				
Full-time-equivalent instructional staff for resident degree-credit courses	32					
Full-time equivalent of part-time instructional staff ¹⁶		33.0				
Full-time equivalent of junior instructional staff ¹⁷		33.0				
Total full-time and part-time professional staff in institutions of higher education:	33-37					
Public 4-year institutions:						
Instructional staff:						
For resident degree-credit courses						
Other instructional staff ¹⁹		26.0				(18)
Other professional staff:						
Administration and services ²⁰		13.0				
Organized research ²¹		20.0				
Private 4-year institutions:						
Instructional staff:						
For resident degree-credit courses						
Other instructional staff ⁹		6.5				(18)
Other professional staff:						
Administration and services ²⁰		19.0				
Organized research ²¹		10.0				

Public 2-year institutions:			
Instructional staff:			(18)
For resident degree-credit courses			
Other instructional staff ¹⁹	40.3		
Other professional staff:			
Administration and services ²⁰	15.0		
Organized research ²¹	.05		
Private 2-year institutions:			(18)
Instructional staff:			
For resident degree-credit courses			
Other instructional staff ¹⁹	39.0		
Other professional staff:			
Administration and services ²⁰	55.0		
Organized research ²¹	1.0		
Total estimated full-time-equivalent			
professionals: staff employed in		38	
institutions of higher education			
Instructional staff:			(22)
For resident degree-credit courses			
Other instructional staff ²³	71.0		
Other professional staff:			
Administration and services ²³	71.0		
Organized research ²³	71.0		

See footnotes at end of table.

Table A-3.—Methodology (Chapter IV)—Continued

Item	Text table number	Constant (percent)	Projection method			Other
			Least squares equation (y=percent; t=year; 1958=1)	Index of determination	Standard error		Adjusted equation^{1}
Total demand for estimated full-time-equivalent professional staff in institutions of higher education	39					
Demand for additional professional staff:						
For increased enrollment						
For replacement ^{2,5}		6.0				(²⁴)

1 Adjusted by relocating line through last observed point and 1978 point on fitted line.
 2 Projected enrollment (table 4) divided by projected pupil-teacher ratio (table 27) for each type of school by control and level.
 3 y = ratio of number of pupils to number of teachers.
 4 y = ratio of number of pupils to number of teachers with restriction that ratio cannot go below 26.
 5 y = ratio of number of pupils to number of teachers with restriction that ratio cannot go below 15.
 6 Increase in total teacher demand over each previous year.
 7 8 percent of total teacher demand in each previous year.
 8 4 percent of total teacher demand in each previous year.
 9 y = ratio, instructional staff to classroom teachers (staff-teacher ratio times projected classroom teachers = projected instructional staff).
 10 Instructional staff assumed = classroom teachers.
 11 y = student-staff ratio (enrollment (tables 7 and 8) divided by instructional staff for resident degree-credit courses (tables 34 through 37)) calculated separately for each category by type and control of institution.
 12 Constant = 1968 student-staff ratio (enrollment (table 8) divided by instructional staff for resident degree-credit courses (table 36)).
 13 Constant = percent full-time instructor or above was of total instructional staff in 1963-64 for all institutions.
 14 Constant = percent part-time instructor or above was of total instructional staff in 1963-64 for all institutions.
 15 Constant = percent junior instructional staff was of total instructional staff in 1963-64 for all institutions.
 16 Constant = percent full-time equivalent of part-time instructor or above was of part-time instructor or above in 1963-64.

NOTE: Sources of data and assumptions on which projections were based are given in text footnotes.

Table A-4.--Methodology (Chapters V and VI)

Item	Text table number	Projection method				Other			
		Constant	Least squares equation (t=years; 1958-59=1)	Index of determination	Trend		Standard error	Adjusted equation	
Expenditures for education by elementary and secondary day schools	40,41								
Current expenditures:									
Public									(1)
Nonpublic									(2)
Capital outlay:									
Public									(3)
Nonpublic									(4)
Interest:									
Public									(5)
Nonpublic									(6)
Expenditures for education by institutions of higher education	40,41								
Current expenditures:									
Public									(7)
Nonpublic									(7)
Capital outlay:									
Public									(8)
Nonpublic									(8)
Current expenditures of public school systems	42								
Average daily attendance									
Current expenditure allocated to pupil costs (excluding effects of 1965 legislation): ¹⁰									
Per pupil in average daily attendance									
Total									
			$Y' = -\$419.43 + \$18.82(t)^{11}$	1.00		\$1.58		$Y' = -\$387.90 + \$18.76(t)$	(12)

See footnotes at end of table.

Table A-4.—Methodology (Chapters V and VI)—Continued

Item	Text table number	Projection method				Other
		Constant	Least squares equation (t=years; 1958-59=1)	Index of determination	Trend Standard error		Adjusted equation
Current expenditure allocated to pupil costs (including effects of 1965 legislation). ¹⁰						
Per pupil in average daily attendance						
Total						(.3)
Current expenditures for all programs (excluding effects of 1965 legislation). ¹⁰		15				(.4)
Current expenditures for all programs (including effects of 1965 legislation). ¹⁰		16				
Expenditures for salaries of instructional staff in public elementary and secondary day schools	43					
Average annual salary (including effects of 1965 legislation). ¹⁰			$y' = \$4,478 + \$310(t)^{17}$	0.99	\$172.08	$y' = \$5,139 + \$278(t)$
Total salary						(.8)
Average annual salary (excluding effects of 1965 legislation). ¹⁰			$y' = \$5,872 + \$213(t)$	.99	\$42.77	$y' = \$5,775 + \$217(t)$
Total salary						(.8)
Construction of public elementary and secondary school classrooms and capital outlay	44					
Rooms completed			$y' = 69,486 + 145(t)^{19}$	.02	3,168	$y' = 78,114 - 247(t)$
Capital outlay (school year):						
Total						(.2)
Expenditures for interest by public elementary and secondary schools	45		$y' = \$4,561 + \$852(t)^{21}$	.99	\$31.25	$y' = \$389 + \$57(t)$

Expenditures from current funds and total current fund expenditures by institutions of higher education	46,47				
Expenditures for educational and general purposes:					
Student education:					
Public .....	.90	\$33,838	\$1,366.22+\$22.68(t)		
Nonpublic .....	.99	\$21,443	\$1,219.40+\$73.36(t)		
Organized research:					
Public .....	.99	\$28,665	\$318,087+\$99,695(t)		
Nonpublic .....	.98	\$73,402	\$117,232+\$129,163(t)		
Related activities:					
Public .....	.59	.343	\$9.319+0.1191(t)		
Nonpublic .....	.74	.217	\$8.649+0.086(t)		
Expenditures for auxiliary enterprises:					
Public .....	.06	.799	\$24.828+0.135(t)		
Nonpublic .....	.12	1,880	\$29,984+0.278(t)		
Expenditures for student aid:					
Public .....	.73	.405	\$3,729+0.123(t)		
Nonpublic .....	.74	.217	\$8,649+0.086(t)		
Capital outlay from current funds only:					
Public				32.16.0%	
Nonpublic				32.16.0%	
Capital outlay of institutions of higher education					48
Public:					
Increased capacity					33 \$7,602.57
Major replacement and rehabilitation					34 1.0%

See footnotes at end of table.



Table A-4.—Methodology (Chapters V and VI)—Continued

Item	Text table number	Projection method				
		Constant	Least squares equation (t=years; 1958-59=1)	Index of determination	Standard error	Adjusted equation
						Other
Nonpublic:						
Increased capacity		35, \$16,727.16				
Major replacement and rehabilitation		36, 1.0%				
Estimated average charges per full-time undergraduate resident degree-credit student in institutions of higher education	49, 50					
Tuition and required fees:			(Dollars)	(Dollars)	(Dollars)	
Public			$Y' = 246.14 + 8.27(t)$	0.97	3,210	$Y' = 249.50 + 8.08(t)$
Universities			$Y' = 286.32 + 15.65(t)$	.90	11,818	$Y' = 301.00 + 14.83(t)$
Other 4-year institutions			$Y' = 203.03 + 13.05(t)$	.98	4,194	$Y' = 201.00 + 13.17(t)$
2-year institutions			$Y' = 99.34 + 4.68(t)$	.83	4,734	$Y' = 104.50 + 4.42(t)$
Nonpublic			$Y' = 1,110.43 + 54.36(t)$	.99	12,372	$Y' = 1,006.50 + 54.58(t)$
Universities			$Y' = 1,208.51 + 63.53(t)$	.99	16,918	$Y' = 1,188.00 + 64.67(t)$
Other 4-year institutions			$Y' = 964.24 + 48.99(t)$	.91	34,219	$Y' = 964.00 + 49.00(t)$
2-year institutions			$Y' = 583.65 + 54.80(t)$	1.00	7,425	$Y' = 587.50 + 54.58(t)$
Board:						
Public			$Y' = 507.24 - 2.01(t)$	.51	4,351	$Y' = 507.00 - 2.00(t)$
Universities			$Y' = 522.70 + 1.91(t)$	.13	10,848	$Y' = 516.50 + 2.25(t)$
Other 4-year institutions			$Y' = 486.24 - 6.51(t)$	.88	5,206	$Y' = 492.00 - 6.83(t)$
2-year institutions			$Y' = 427.05 - 3.39(t)$	.93	2,043	$Y' = 427.50 - 3.42(t)$
Nonpublic			$Y' = 562.73 - 2.04(t)$	.57	3,966	$Y' = 559.00 - 1.83(t)$
Universities			$Y' = 594.03 - 0.45(t)$	.06	3,753	$Y' = 596.50 - 0.58(t)$
Other 4-year institutions			$Y' = 553.38 - 3.24(t)$	.61	6,783	$Y' = 547.50 - 2.92(t)$
2-year institutions			$Y' = 492.19 + 5.88(t)$	.49	13,399	$Y' = 491.50 + 5.52(t)$

Room:³⁹

Public	$y' = 265.51 + 9.53(t)$	.94	5.376	$y' = 258.50 + 9.92(t)$
Universities	$y' = 286.51 + 10.53(t)$	.98	2.983	$y' = 282.50 + 10.75(t)$
Other 4-year institutions	$y' = 228.89 + 11.28(t)$	.94	6.154	$y' = 223.50 + 5.64(t)$
2-year institutions	$y' = 169.11 + 9.77(t)$	.94	5.342	$y' = 174.50 + 9.42(t)$
Nonpublic	$y' = 324.55 + 14.70(t)$	.97	5.288	$y' = 331.00 + 14.33(t)$
Universities	$y' = 374.51 + 19.03(t)$	.93	11.736	$y' = 375.00 + 19.00(t)$
Other 4-year institutions	$y' = 299.03 + 13.55(t)$	.97	4.975	$y' = 304.50 + 13.25(t)$
2-year institutions	$y' = 243.62 + 20.74(t)$	.89	16.308	$y' = 255.50 + 20.08(t)$

¹ See method detailed for table 42 in footnotes 9 to 16 of this table (methodology table A-4).

² Ratio of nonpublic school teachers to public school teachers times public school current expenditures.

³ See method detailed for table 44 in footnotes 19 and 20 of this table (methodology table A-4).

⁴ Ratio of nonpublic school teachers to public school teachers times public school capital outlay.

⁵ See method detailed for table 45 in footnote 21 of this table (methodology table A-4).

⁶ Ratio of nonpublic school teachers to public school teachers times public school interest.

⁷ See method detailed for table 45 in footnotes 22 to 31 of this table (methodology table A-4).

⁸ See method detailed for table 48 in footnotes 33 to 36 of this table (methodology table A-4).

⁹ Constant percent = average percent that average daily attendance in public schools was of K-12 enrollment in public schools in 1963-64 through 1968-69.

¹⁰ The Elementary and Secondary Education Act of 1965.

¹¹ y = current expenditure allocated to pupil costs per pupil in average daily attendance.

¹² Average daily attendance times per-pupil cost for each year.

¹³ Current expenditure per pupil increased by \$70 per pupil in average daily attendance.

¹⁴ Average daily attendance times per pupil cost augmented by \$70 per pupil.

¹⁵ Percent that expenditures for all programs were of expenditures allocated to pupil costs in 1967-68. Constant percent times total current expenditures allocated to pupil costs (excluding effects of act) = current expenditures for all programs (excluding effects of act).

¹⁶ Percent that expenditures for all programs were of expenditure allocated to pupil costs in 1967-68. Constant percent times total current expenditures allocated to pupil costs (including effects of act) = current expenditures for all programs (including effects of act).

¹⁷ y = average annual salary of instructional staff in public elementary and secondary schools.

¹⁸ Average annual salary times number of instructional staff in public elementary and secondary schools in each year.

¹⁹ y = number of rooms completed.

²⁰ Projected number of rooms completed (table 44) times capital outlay per room.

²¹ y = annual expenditure for interest in public elementary and secondary schools.

²² y = expenditures for student education per full-time equivalent student in publicly controlled institutions of higher education. (y times projected number of full-time equivalent students in corresponding years (table 11, column 3) = projected expenditures for student education.)

²³ y = expenditures for student education per full-time-equivalent student in nonpublicly controlled institutions of higher education. (y times projected number of full-time equivalent students in corresponding years (table 11, column 4) = projected expenditures for student education.)

(Continued, p. 132.)

- 24 y = total expenditures for organized research in publicly controlled institutions of higher education.
- 25 y = total expenditures for organized research in nonpublicly controlled institutions of higher education.
- 26 y = expenditures for related activities as a percent of expenditures for student education in publicly controlled institutions of higher education. (y times projected expenditures for student education in corresponding year = projected expenditures for related activities.)
- 27 y = expenditures for related activities as a percent of expenditures for student education in nonpublicly controlled institutions of higher education. (y times projected expenditures for student education in corresponding years = projected expenditures for related activities.)
- 28 y = expenditures for auxiliary enterprises as a percent of expenditures for student education in publicly controlled institutions of higher education. (y times projected expenditures for student education in corresponding years = projected expenditures for auxiliary enterprises.)
- 29 y = expenditures for auxiliary enterprises as a percent of expenditures for student education in nonpublicly controlled institutions of higher education. (y times projected expenditures for student education in corresponding years = projected expenditures for auxiliary enterprises.)
- 30 y = expenditures for student aid as a percent of expenditures for student education in publicly controlled institutions of higher education. (y times projected expenditures for student education in corresponding years = projected expenditures for student aid.)
- 31 y = expenditures for student aid as a percent of expenditures for student education in nonpublicly controlled institutions of higher education. (y times projected expenditures for student education in corresponding years = projected expenditures for student aid.)

- 32 Constant percent = 1958-59 to 1968-69 average capital outlay from current funds as percent of capital outlay from all sources. (Projected annual capital outlay from all sources (table 48) times constant percent = projected capital outlay from current funds.)
- 33 Constant dollars = 1958-59 to 1968-69 average capital outlay by publicly controlled institutions divided by average increase in number of full-time equivalent students in these institutions. (Constant dollars times annual increase in projected full-time equivalent students = projected capital outlay for increased capacity. Result smoothed by moving average.)
- 34 Constant percent = estimated percent of value of plant replaced or rehabilitated each year. (Constant percent times projected value of plant in publicly controlled institutions in each year = projected capital outlay for replacement and rehabilitation.)
- 35 Constant dollars = 1958-59 to 1968-69 average capital outlay by nonpublicly controlled institutions divided by average increase in number of full-time equivalent students in these institutions. (Constant dollars times annual increase in projected full-time equivalent students = projected capital outlay for increased capacity. Result smoothed by moving average.)
- 36 Constant percent = estimated percent of value of plant replaced or rehabilitated each year. (Constant percent times projected value of plant in nonpublicly controlled institutions in each year = projected capital outlay for replacement and rehabilitation.)
- 37 y = average charge for tuition and required fees per full-time degree-credit student, calculated separately for each category by type and control of institution.
- 38 y = average charge for board per full-time degree-credit student, calculated separately for each category by type and control of institution with t = 6 held constant to 1978-79 except public universities and nonpublic 2-year.
- 39 y = average charge for room per full-time degree-credit student, calculated separately for each category by type and control of institution.

Estimation Methods

General statement

The basic data for projecting the following educational components were wholly or partially estimated for the years indicated. (A few items which were estimated and explained in the tables are not shown here.)

Degrees, bachelor's and master's—total, library science, social work—1958-59 to 1965-66 (tables 21-24).

Enrollment, first-time degree-credit, 1966 and 1967 (tables 14-16).

Enrollment, first-time degree-credit, by attendance status, 1958-67 (tables 14-16).

Enrollment, resident graduate, 1958-68 (table 17).

Enrollment, resident graduate, by attendance status, 1958-68 (table 17).

Enrollment, total degree-credit and total nondegree-credit, by attendance status and sex, 1966 and 1967 (tables 6-8).

Enrollment, total degree-credit, by attendance status, 1958-61 (tables 6-8).

Enrollment, total nondegree-credit, 1958-62 (tables 9-11).

Enrollment, total nondegree-credit, by attendance status, 1958-67 (tables 9-11).

Enrollment, total nondegree-credit, by attendance status and sex, 1966 and 1967 (tables 9-11).

Enrollment, undergraduate degree-credit, by attendance status, 1958-61 (tables 8, 18, 19).

Enrollment, undergraduate degree-credit, by attendance status, 1962-67 (tables 8, 18, 19).

Population, composite, 1958-78 (table B-2).

Unless otherwise specified, all educational components were estimated separately by type and control of institution and by sex of student. All estimates were adjusted to agree with any published totals. The need for making the estimates, the sources of data for estimating, and the methods used in making the estimates are described in the following sections.

Degrees, bachelor's and master's—total, library science, social work—1958-59 to 1965-69 (tables 21-24)

From 1958-59 to 1964-65, *all master's degrees that were considered first-professional* were reported as first-professional degrees. These were reported with bachelor's degrees in 1958-59 and 1959-60; the same degrees were reported separately as first-professional and later added to bachelor's degrees from 1960-61 to 1964-65. Most library science and social work master's degrees were in this category.

Beginning in 1965-66, all master's degrees *whether or not they were considered first-professional* were reported with master's degrees.

In 1969, in order to obtain comparable series in these two fields as well as for total master's degrees and total bachelor's and first-professional degrees, master's degrees in library science and in social work between 1960-61 and 1964-65 were subtracted from bachelor's and first-professional degrees and added to master's degrees.

For the years 1958-59 and 1959-60, the percentages of total bachelor's and first-professional degrees in library science and in social work that were first-professional in 1960-61 were applied to total bachelor's and first-professional degrees in the corresponding fields in 1958-59 and 1959-60 to estimate the number of master's degrees. These master's degrees were then subtracted from bachelor's and first-professional degrees and added to master's degrees.

Enrollment, first-time degree-credit, by sex, 1966 and 1967 (tables 14-16)

Nondegree-credit first-time enrollment had never been reported prior to the time it was combined with degree-credit first-time enrollment in the 1966 and 1967 opening fall enrollment

reports, and there was available no hand tabulation of degree-credit or nondegree-credit first-time enrollment from the 1966 comprehensive survey. Therefore, degree-credit first-time enrollment was estimated by applying the percentages that were degree-credit and nondegree-credit obtained from the hand tabulation of the 1966 comprehensive degree-credit and nondegree-credit total enrollment. (See section on enrollment, total degree-credit and nondegree-credit, by attendance status and sex, 1966 and 1967, on page 135.)

Degree-credit first-time enrollment by sex was estimated from the 1965 opening fall enrollment report of degree-credit first-time enrollment by sex.

Enrollment, first-time degree-credit by attendance status, 1958-67 (tables 14-16)

Full-time first-time degree-credit enrollment was reported in the 1957, 1959, and 1961 comprehensive enrollment surveys and in the 1968 opening fall enrollment survey. (It was reported in the 1967 opening fall enrollment survey but was combined with full-time first-time nondegree-credit enrollment and was, therefore, unusable.)

The actual full-time percentages from the comprehensive surveys and the 1968 opening fall enrollment survey, together with interpolations of these percentages for the years 1958, 1960, and 1962-1967, were applied to first-time degree-credit opening fall enrollments to estimate full-time first-time degree-credit opening fall enrollment. All estimates were made separately for each category of enrollment by type and control of institution and by sex of student.

For projecting, the 1968 percentages in each of the above categories were rounded to 0.5, either upward or downward according to the trends, and were then held constant to 1978.

Enrollment, resident graduate, by sex 1958-68 (table 17)

Graduate enrollment was not reported in the opening fall enrollment survey until 1967. In both 1967 and 1968, in this survey, it was combined with first-professional enrollment as postbaccalaureate enrollment. In 1967, this postbaccalaureate enrollment excluded extension enrollment and, in 1968, it included extension enrollment.

To get an estimate of graduate enrollment in 1967 and 1968, the 1963 Migration Report was used. (This was the last year in which graduate enrollment was reported.) The 1963 report gave resident graduate, resident first-professional, and resident undergraduate enrollment separately, which supplied a base for separating postbaccalaureate opening fall enrollment into graduate and first-professional enrollment.

The years prior to 1967 were estimated from the comprehensive enrollment survey which gave resident graduate enrollment for the years 1957, 1959, and 1961, and from the 1963 migration survey. This procedure involved the following steps: (1) Calculation of the percentage that resident graduate enrollment was of resident and extension total degree-credit enrollment (in each sex, type, and control of institution category); (2) fitting a linear equation to the percentages in each category as a dependent variable with time as an independent variable; and (3) applying the linear equations obtained to the past and to the projected opening fall resident and extension enrollment data in corresponding enrollment categories. The above procedures produced estimates of resident graduate opening fall enrollments. These equations were updated by using the 1967 and 1968 estimates of resident graduate enrollment from opening fall postbaccalaureate enrollment described previously.

Enrollment, resident graduate, by attendance status, 1958-1968 (table 17)

Resident graduate enrollment by sex and attendance status was reported in the Comprehensive Enrollment Surveys of 1959 and 1961. Enrollment for advanced degrees by attendance status but not by sex was reported annually 1960-1965. Resident undergraduate degree-credit and

first-professional enrollments were reported by sex and attendance status in the Comprehensive Enrollment Surveys of 1957, 1959, and 1961, and in the Residence and Migration Study of 1963. Total resident and extension degree-credit enrollment was reported by sex and attendance status, 1962 through 1965. By balancing all of this information and by using interpolations and extrapolations, full-time resident graduate enrollment by sex was estimated for the years 1958 through 1966. The estimates for 1967 and 1968 were based on Enrollment for Advanced Degrees data, by sex and attendance status for 1966 through 1968, which became available in 1969.

Enrollment, total degree-credit and total nondegree-credit, by attendance status and sex, 1966 and 1967 (tables 6-8)

Degree-credit and nondegree-credit enrollments were estimated for both 1966 and 1967 because they were not reported separately in the 1966 and 1967 Opening Fall Enrollment surveys. To do this, use was made of an existing hand tabulation of degree-credit and nondegree-credit enrollment from the 1966 Comprehensive Survey of Enrollment. (Reports from this survey have never been edited or machine processed, so there is no official source for these data.)

The data had been tabulated for individual institutions by State and grouped into institutional type and control and student attendance-status categories. Data were missing for some institutions. These were estimated from 1965, 1966, and 1967 Opening Fall Enrollment surveys and added to the original tabulation. Degree-credit and nondegree-credit percentages for each category of enrollment in each State were calculated from the complete tabulation and applied to both the 1966 and 1967 total opening fall enrollment data in corresponding categories and States.

Enrollment by sex, which was not given in the 1966 comprehensive survey hand tabulation, was estimated in each category of estimated degree-credit enrollment for 1966 and 1967 from degree-credit enrollment by sex, student attendance status, and institutional type and control in the 1965 Opening Fall Enrollment survey.

Estimates of nondegree-credit enrollment by sex were estimated by taking differences in final enrollment categories between the reported total of degree-credit and nondegree-credit enrollments and the estimated degree-credit enrollment. (The 1965 survey did not give nondegree-credit enrollment by attendance status.) Arbitrary adjustments were made for a few categories with small numbers of enrollments for which the above procedure gave unreasonable results. (The estimates by sex were not made by State.)

Enrollment, total degree-credit, by attendance status, 1958-61 (tables 6-8)

Total degree-credit enrollment by attendance status was not included in the opening fall enrollment survey until 1962.

The years prior to 1962 were estimated from comprehensive enrollment survey data for 1957, 1959, and 1961. These reports gave undergraduate and first-professional enrollment by attendance status. The 1959 and 1961 reports gave graduate enrollment by attendance status. Estimated graduate enrollment by attendance status for 1957 was added to reported undergraduate and first-professional enrollment by attendance status in that year. The years 1958 and 1960 were interpolated.

Enrollment, total nondegree-credit, 1958-62 (tables 9-11)

Nondegree-credit enrollment was not reported in the opening fall enrollment survey until 1963. Data for the years 1958-62 were taken directly from the 1957, 1959, and 1961 comprehensive enrollment surveys and from interpolations of these data. Interpolations were effected by

computing the percentage that nondegree-credit enrollment was of population aged 18-21 years for the reported years 1957, 1959, and 1961; interpolating these percentages for unreported years 1958, 1960, 1962; and applying the interpolated percentages to the population aged 18-21 for corresponding years.

Enrollment, total nondegree-credit, by attendance status, 1958-67 (tables 9-11)

Nondegree-credit enrollment by attendance status was not reported in the opening fall enrollment survey prior to 1968. It was never reported in the comprehensive surveys of enrollment, 1957, 1959, and 1961. It was reported in the 1964 sample *survey* of full-time-equivalent enrollment and credit-hours *survey* (but not available by type and control of institution). (Prior to 1969, this percentage was held constant for estimating and projecting nondegree-credit enrollment by attendance status.)

In 1969, the percentages by sex and by control and type of institution, calculated from the 1968 opening fall enrollment survey, were prorated to equal 40 percent (1964 percent full time) for the total. The prorated percentages for each sex and for control and type of institution were applied as constants to calculate full time for the years 1958 through 1961. For the years 1962 through 1967, the percentages were interpolated between the 1961 and the actual 1968 percentages.

Enrollment, total nondegree-credit, by attendance status and sex, 1966 and 1967 (tables 9-11)

These estimates were a byproduct of the estimates for degree-credit enrollment and for degree-credit enrollment by attendance status and sex. They were similarly adjusted to 1966 and 1967 reported totals. (See section on enrollment, total degree-credit, and nondegree-credit, by attendance status and sex, 1966 and 1967, on page 135.)

Enrollment, undergraduate degree-credit, by attendance status, 1958-61 (tables 8, 18, 19)

Enrollment of resident undergraduate and first-professional degree-credit students by attendance status was reported in the comprehensive enrollment survey, 1957, 1959, 1961. Extension degree-credit enrollment (part time by definition) was also reported. The percentage that full-time resident undergraduate and first-professional enrollments were of total resident and extension degree-credit enrollments was calculated for 1957, 1959, and 1961; the percentages for 1958 and 1960 were interpolated; and the percentages thus arrived at for the years 1958 through 1960 were applied to total opening fall enrollment in corresponding years to obtain undergraduate opening fall enrollment by attendance status.

Enrollment, undergraduate degree-credit, by attendance status, 1962-67 (tables 8, 18, 19)

Undergraduate and first-professional degree-credit enrollment by attendance status was calculated by taking the difference between full-time opening fall degree-credit enrollment (reported 1962 to 1965 and in 1968 and estimated for 1966 and 1967) and estimated full-time graduate enrollment. Part-time undergraduate degree-credit enrollment was similarly computed.

In 2-year institutions, no computation was necessary.

Population, composite, 1958-78 (table B-2)

At the suggestion of Dr. Abbott L. Ferriss, then at the National Science Foundation, the 18-year-old population used previously for projecting degrees by level was replaced by a composite population. This population is not only more representative of the actual ages of the recipients but tends to smooth out any rough year-to-year changes in population.

For this purpose, the percentage distributions of ages at graduation from college found by Laure M. Sharp in the 1958 survey "Two Years After the College Degree" was taken as base. These percentage distributions, kept separate for men and for women, were detruncated to avoid too many age classes and then restored to 100 percent by prorating, with the following result:

Percent of graduates		
Age	Men	Women
21	10	21
22	43	61
23	15	8
24	15	7
25	9	2
26	8	1

To obtain the composite population for a given year, the above percentages were applied to the corresponding age-specific populations in that year and the products summed.

The timelags for each level were kept the same as in previous projections. These timelags were 2 years from the bachelor's degree to the master's degree, and 3 years from the master's degree to the doctorate.

A comparison of the fits obtained from equations based on the 18-year-old population and from equations based on the composite population showed that the latter produced a higher index of determination.

Classification of Degrees by Field of Study

[Individual fields listed in 1967-68 report of bachelor's and higher degrees conferred]

I. Natural sciences and related professions

Mathematics¹

Mathematics

Statistics

Computer science and systems analysis

Data processing

Computer science

Systems analysis

Computer science and systems analysis, other fields

Computer science and systems analysis, field not identified

Engineering¹

Physical sciences¹

Astronomy

Chemistry

Chemistry

Pharmaceutical chemistry

Earth sciences

Earth sciences, general²

Geology

Geophysics (including seismology)

Oceanography

Earth sciences, other fields

Meteorology

Physics

Other physical sciences

Physical sciences, general

Metallurgy (excluding metallurgical engineering)

Physical sciences, other fields

Physical sciences, field not identified

Biological sciences¹

Anatomy and histology

Bacteriology, virology, mycology, parasitology, and microbiology

Biochemistry

Biology, general

Botany

Botany, general

Plant pathology

Plant physiology

Entomology

Physiology

See footnotes at end of list.

Classification of degrees by field of study—Continued

Zoology, general	Science, general program (without major field) ¹
Other biological sciences	
Premedical, preidental, and preveterinary sciences	
Biophysics	II. Social sciences, humanities, and related professions
Cytology	Fine arts ¹
Ecology	Architecture
Embryology	Architecture ³
Genetics	City planning ⁴
Nutrition	Music
Optometry (preprofessional degree)	Music education
Pathology (excluding plant pathology)	Music including sacred music
Pharmacology (excluding pharmacy)	Speech and dramatic arts
Biological sciences, other fields	Speech and hearing
Biological sciences, fields not identified	Speech and dramatic arts
Agriculture and forestry ¹	Other fine and applied arts
Animal science	Art education
Animal, dairy, and poultry science	Art, general
Other agriculture	Fine and applied arts, other fields
Agriculture, general	Fine and applied arts, field not identified
Agriculture, business	Philosophy and religion ¹
Agronomy, field crops	Philosophy
Farm management (excluding agricultural economics)	Scholastic philosophy
Fish and game, or wildlife management	Religious education, Bible
Food science	Other religious fields
Horticulture (fruit and vegetable production)	Religion, liberal arts curriculum, nonsectarian
International agriculture	Religion, other fields
Ornamental horticulture	Religion, field not identified
Soil science	English and journalism ¹
Agriculture, other fields	English
Agriculture, field not identified	Journalism
Agricultural education	Foreign languages
Forestry	Latin, classical Greek
Health professions ¹	French
Dentistry, D.D.S. and D.M.D. only ³	German
Medicine, M.D. only ³	Russian and other Slavic languages
Nursing and/or public health nursing	Russian
Optometry (excluding preprofessional degrees) ³	Other Slavic languages
Osteopathy ³	Spanish
Pharmacy ³	Other languages and language programs
Public health	Linguistics (including phonetics and semantics)
Veterinary medicine, D.V.M. only ³	Italian
Other health professions	Portuguese
Chiropody or podiatry ³	Philology and literature of Romance languages
Dental hygiene	Other Germanic languages
Hospital administration	Philology and literature of Germanic languages
Medical technology	Arabic
Occupational therapy	Chinese
Physical therapy, physiotherapy	Hebrew
Radiologic technology	Hindi and/or Urdu
Clinical dental, medical, and veterinary medical sciences (advanced degrees only)	Japanese
Health professions, other fields	Foreign languages, other fields
Health professions, field not identified	Foreign languages, field not identified
	Teaching English as a foreign language

See footnotes at end of list.

Classification of degrees by field of study—Continued

- Modern languages (combination of 3 or more)²
- Psychology¹
 - General psychology
 - Clinical psychology
 - Counseling psychology
 - Social psychology
 - Rehabilitation counselor training⁴
 - Educational psychology⁵
 - Psychology, other fields
 - Psychology, field not identified
- Social sciences¹
 - Anthropology
 - Economics
 - Agricultural economics
 - Economics
 - Geography
 - History
 - American studies, American civilization, American culture
 - History
 - International relations
 - Political science, government
 - Public administration
 - Sociology
 - Other social sciences
 - Social sciences, general
 - Area studies, regional studies
 - Folklore
 - Foreign service programs (consular and diplomatic service)
 - Industrial relations
 - Basic social sciences, other fields
 - Applied social sciences, other fields
 - Social sciences, field not identified
- Education¹
 - Physical education
 - Physical education (including non-teaching)
 - Health education
 - Recreation education
 - Industrial arts
 - Industrial arts education (nonvocational)
 - Trade and industrial education (vocational)
 - Other specialized teaching fields
 - Education of exceptional children
 - Education of the partially sighted
 - Education of the blind
 - Education of the mentally retarded
 - Education of the emotionally disturbed
 - Education of the deaf
 - Education of the crippled
 - Education of exceptional children, all other
 - Specialized teaching fields, other fields
- General teaching fields
 - Nursery, kindergarten education
 - Early childhood education
 - Elementary education
 - Secondary education (including junior high school)
 - Combined elementary and secondary education
 - Adult education
 - General teaching fields, other fields
- Other education fields
 - Education specialist²
 - Educational administration, supervision, or finance
 - Counseling and guidance
 - Rehabilitation counselor training⁶
 - History, philosophy, and theory of education, and comparative education
 - Curriculum and instruction
 - Education, general
 - Preprofessional bachelor's degrees
 - Other education fields
 - Education, field not identified
- Library science¹
- Social work, social administration, social welfare¹
- Other¹
 - Business and commerce
 - Accounting
 - Other business and commerce
 - Finance, banking²
 - Hotel and restaurant administration
 - Marketing²
 - Real estate and insurance²
 - Secretarial studies
 - Transportation²
 - Business and commerce, other fields
 - Business and commerce, field not identified
 - Business education, commercial education
 - Distributive education, retail selling
 - Home economics
 - Home economics education
 - Home economics, general
 - Child development, family relations
 - Clothing, textiles
 - Foods and nutrition
 - Institution management, institutional administration
 - Home economics, other fields
 - Home economics, field not identified
 - Law (L.L.B., J.D., or higher degrees)³
 - Military, naval, or air force science
 - Merchant marine (deck officer only)

See footnotes at end of list.

Classification of degrees by field of study—Continued

Military, naval, or air force science	Arts, general program (without major field)
Theology	Arts and sciences, general program
Theology (first-professional degree) ³	Interarea and interfields of study
Theology (master's and doctor's degrees)	Records management
Miscellaneous and unclassified fields	Fields of study not listed
Trade and industrial training	Field of study not identified

¹ Projected in tables 22, 23, and 24.

² Added item, 1967-68 report.

³ First-professional degree reported in Part A, 1967-68 report.

⁴ See also "Education."

⁵ Includes similar listing from education, 1967-68 report.

⁶ See also "Psychology."

Changes in Degree-Level Definitions

Prior to 1960-61	1960-61 through 1964-65	1965-66
BACHELOR'S DEGREES		
Number of years of work not specified. First-professional degrees included.	Number of years of work specified as less than 5. First-professional degrees excluded.	Number of years of work specified as less than 6. First-professional degrees excluded.
FIRST-PROFESSIONAL DEGREES		
Included with bachelor's degrees.	5 or more years of work required. Includes first-professional degrees such as degrees in dentistry, law, medicine, and theology. Includes master's degree such as degrees in business administration, hospital administration, law, library science, social work, and theology.	6 or more years of work required. Includes first-professional degrees such as degrees in dentistry, law, medicine, and theology. Excludes all master's degrees.
MASTER'S DEGREES		
	Includes all master's degrees except some considered first-professional. Includes second-professional degrees below level of doctorate.	Includes all master's degrees including those considered first-professional prior to 1965-66. Includes second-professional degrees below level of doctorate.
DOCTOR'S DEGREES		
Includes Ph.D. in any field and such degrees as doctor of education, doctor of juridical science, and doctor of public health (preceded by professional degree in medicine or sanitary engineering).	No change.	No changes.

Glossary

Courses

Adult education courses

Group instruction in courses which are designed for, or attended principally by, persons who have terminated their formal education.

Degree-credit courses

Courses which carry credit toward a bachelor's or higher degree.

Individual lessons

Lessons in music, art, speech, etc.

Nondegree-credit courses

Courses extending not more than 3 years beyond high school and designed to prepare students for immediate employment in an occupation or cluster of occupations at the technical and/or semiprofessional level (engineering-related or non-engineering-related), or at the craftsman-clerical level (artisans, skilled workers, and clerical workers).

Short courses

Courses that carry no credit toward a degree because of less than prescribed length.

Degrees

Bachelor's or first-level degrees

Lowest degree conferred by college, university, or professional school, requiring 4 or more years of academic work. For changes in Office of Education classification, see appendix A, "Changes in Degree-Level Definitions."

Doctor's degrees (except first-professional)

Highest academic degree conferred by a university; includes Ph.D. in any field; includes doctor of education, doctor of juridical science, and doctor of public health (preceded by professional degree in medicine or sanitary engineering).

First-professional degrees

Beginning 1965-66, Office of Education classification includes the following degrees only: Law (LL.B. or J.D. only); dentistry (D.D.S. or D.M.D. only); medicine (M.D. only); veterinary medicine (D.V.M. only); chiropody or podiatry (D.S.C. or D.P.); optometry (O.D.); osteopathy (D.O.); and theology (B.D. only). For changes in Office of Education classification, see appendix A, "Changes in Degree-Level Definitions."

Master's or second-level degrees

An academic degree higher than a bachelor's but lower than a doctor's. Beginning 1965-66, Office of Education classification includes all master's degrees. For changes in Office of Education classification, see appendix A, "Changes in Degree-Level Definitions."

Expenditures, elementary and secondary

Current expenditures, regular elementary and secondary day schools

Includes current expenditures for administration, instruction, plant operation and maintenance, fixed charges (retirement, social security, insurance, etc.), and other school services

(pupil transportation, food services, health services, attendance services, and miscellaneous school services).

Current expenditures, total

Includes current expenditures for regular elementary and secondary day school programs and current expenditures for other school programs including summer schools, adult education, community colleges, and community services.

Expenditures, total

Includes total current expenditures for all programs, capital outlay, and interest on school debt.

Expenditures, general

Capital outlay

An expenditure for land or existing buildings, improvement of grounds, construction of buildings, additions to buildings, and initial or additional equipment. Includes replacement and rehabilitation and installment or lease payments (excluding interest) which have a terminal date and result in the acquisition of property.

Constant dollars (1968-69)

Expenditure data which have been adjusted by means of price and cost indexes to equal the purchasing power of 1968-69 dollars. This eliminates inflationary factors and allows direct comparison between past years, current year (1968-69), and projected years.

Current dollars

Expenditure data which have not been adjusted to compensate for inflation. (Projection of unadjusted expenditure data has been limited to 2 years.)

Current expenditures

Any expenditure except for capital outlay and debt service. If accounts are kept on the accrual basis, current expense includes total charges incurred, whether paid or unpaid. If accounts are kept on the cash basis, it includes only actual disbursements.

Debt service

Includes payment for retirement of debt and for use of long-term loans (not repaid in the year in which made).

Interest

Any payment for use of money.

Expenditures, higher education

Current expenditures, total

The term used for total expenditure from current funds less expenditures from current funds which are used for capital outlay (about 16 percent).

Current fund expenditures, total

Includes expenditures for auxiliary enterprises, organized research, related activities, student aid, and student education. Approximately 16 percent of total current fund expenditures in institutions of higher education are defined as capital outlay expenditures.

Auxiliary enterprises.—Expenditures for services to students, faculty, or other staff for which a fee is charged that is directly related to, but not necessarily equal to, the cost of service. For example, dormitories, food service, and student stores.

Organized research.—Expenditures for all sponsored research and all separately budgeted research. Excludes expenditures for research carried on as part of the regular instructional services departmental research which is included with expenditures for student education.

Related activities.—Expenditures for activities which exist to provide instructional or laboratory experience for students and which incidentally create goods or services that may be sold on the campus or to the general public. Expenditures are incurred in addition to those necessary solely for the educational benefit of the students. Expenditures from current funds which could not be reported under "student education" or "organized research" are here included under "related activities."

Student aid.—Expenditures for assistance to students through scholarships, fellowships, and prizes. Recipients are not required to repay, either through services or monies.

Student education.—Expenditures for those components of educational and general expenditures which are most closely related to instruction. Includes instruction and research which is part of regular instructional services (departmental research), extension and public service, libraries, physical plant operation and maintenance, general administration, and other sponsored activities.

Expenditures, total

Includes expenditures for capital outlay, debt service including interest, and total current expenditures.

Student charges

Student charges include charges for tuition, required fees, room, and board. Required fees are those for matriculation, laboratory, library, health, etc. They do not include books. Student charges as reported in this circular are based on full-time, resident (in-State or in-District) students.

Schools

Elementary schools

Schools with teaching organized by grades, composed of a span of grades not above grade 8.

Independent nursery and kindergarten schools

Schools that offer nursery and/or kindergarten instruction only.

Other schools :

Other schools include residential schools for exceptional children (public and nonpublic), Federal schools for Indians, federally operated schools on Federal installations, and subcollegiate departments of public and private institutions of higher education.

Regular schools

Schools for normal children that satisfy the requirements of the State education laws and offer at least one grade beyond kindergarten.

Residential schools for exceptional children

Residential schools for the handicapped (outside the regular public and private school systems) include public and private residential schools for the deaf, blind, mentally deficient, epileptic, and delinquent. (Most handicapped children are in special classes within the regular public and private school systems.)

Secondary schools

Schools with teaching organized by subject matter taught, composed of junior high and high schools.

Special schools

Special schools are schools not in the regular school system, such as trade schools or business colleges.

Students**Advanced-degree students**

Students who have attained at least one standard degree and have been accepted as candidates for master's or doctor's degrees.

Extension students

Students who most commonly take instruction away from main campus; also students receiving on-campus instruction offered by an extension division.

First-professional students

See first-professional degrees.

First-time students

Freshmen not previously enrolled in any institution of higher education.

Full-time students

Students enrolled in courses with credits equal to at least 75 percent of the normal full-time semester course load.

Full-time-equivalent students

The estimated number of full-time students equal to a given number of part-time students. (For degree-credit students the percentage of part-time equal to full-time is estimated at 33 percent; for nondegree-credit students, 28 percent.)

Graduate students

Students who have attained at least one standard degree and are or might be candidates for a master's or doctor's degree (except first-professional).

Occupational students

See nondegree-credit courses.

Postbaccalaureate students

Students who have attained at least one standard degree and are or might be candidates for a first-professional, master's, or doctor's degree.

Resident students (enrollment)

Students who attend classes on a main campus or a branch campus. Students' living quarters (whether on or off campus) and their legal domicile (whether in-State or out-of-State) are irrelevant.

Resident students (student charges)

Students with legal domicile in-State or in-District.

Unclassified students

Students who are not candidates for a degree, diploma, certificate, or equivalent award, although taking courses in regular classes with other students.

Undergraduate students

Degree-credit or nondegree-credit students who have not received formal recognition as having completed the prescribed degree-credit or nondegree-credit requirements of an accredited institution of higher education.

APPENDIX B
Statistical Tables

Table B-1.—School-age population (U.S. Census projection series B, C, and D), ages 5, 6, 7, and 5-13 years: United States, 1958 to 1979¹

[Ages as of October 1, populations in thousands]

Year (fall)	Age 5			Age 6			Age 7			Age 5-13		
	B	C	D	B	C	D	B	C	D	B	C	D
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1958	3,802			3,694			3,632			30,932		
1959	3,897			3,789			3,721			32,074		
1960	3,964			3,887			3,811			33,664		
1961	4,012			3,972			3,894			33,461		
1962	4,100			4,020			3,979			34,111		
1963	4,119			4,107			4,026			34,781		
1964	4,132			4,125			4,113			35,446		
1965	4,167			4,136			4,130			36,035		
1966	4,248			4,174			4,143			36,619		
1967	4,165			4,255			4,181			36,997		
1968	4,103			4,172			4,262			37,224		
PROJECTED												
1969	4,023			4,110			4,179			37,286		
1970	3,829			4,030			4,117			37,108		
1971	3,722	3,676	3,637	3,826			4,038		36,737	36,691	36,650	
1972	3,879	3,672	3,498	3,730	3,684	3,644	3,843		36,499	36,246	36,036	
1973	4,057	3,759	3,502	3,886	3,679	3,506	3,737	3,690	3,652	36,428	35,876	35,408
1974	4,240	3,852	3,512	4,064	3,766	3,509	3,893	3,686	3,513	36,502	35,563	34,754
1975	4,427	3,950	3,529	4,247	3,860	3,519	4,071	3,773	3,516	36,682	35,267	34,038
1976	4,608	4,054	3,560	4,434	3,958	3,536	4,254	3,866	3,526	37,127	35,158	33,432
1977	4,768	4,165	3,618	4,614	4,061	3,567	4,441	3,964	3,543	37,792	35,220	32,947
1978	4,925	4,282	3,689	4,774	4,172	3,625	4,621	4,069	3,574	38,689	35,479	32,616
1979	5,080	4,405	3,773	4,932	4,290	3,697	4,781	4,179	3,633	39,943	36,054	32,560

¹In projecting the number of children to be born, the Census Bureau uses the cohort-fertility method and several different assumptions as to completed fertility of women in the childbearing ages (15-45 years). These different series of population projections correspond roughly to the following assumptions:

Series B average completed fertility rate of 3,100 children per 1,000 women presumes a modest drop from the levels of fertility experienced in the midfifties;

Series D average completed fertility rate of 2,450 children per 1,000 women presumes a substantial drop from the levels of fertility experienced in the midfifties;

Series C fertility rate of 2,775 children per 1,000 women is an average of rates B and D.

For a detailed explanation of the methods used by the Census and the implications of each assumption, see the following source, pages 1-49;

U.S. Department of Commerce, Bureau of the Census, "Current Population Reports, Population Estimates: Projections of the Population of the United States, by Age, Sex, and Color to 1990, with Extensions of Population by Age and Sex to 2015," Series P-25, No. 381, Dec. 18, 1967.

SOURCES: Office of Education estimates are based on published and unpublished Bureau of the Census population data by age as of July 1. Population data used are consistent with projection data in U.S. Department of Commerce, Bureau of the Census "Current Population Reports: Population Estimates, Summary of Demographic Projections," Series P-25, No. 388, March 14, 1968.

Table B-2.—High school- and college-age population: United States, 1958 to 1979¹

[Ages as of October 1, populations in thousands]

Year (fall)	14-17	18		18-21		Composite population ²	
	Total	Men	Women	Men	Women	Men	Women
1958	10,867	1,210	1,188	4,508	4,471	1,066	1,073
1959	11,135	1,301	1,273	4,668	4,612	1,078	1,093
1960	11,411	1,411	1,378	4,897	4,827	1,103	1,121
1961	12,199	1,432	1,400	5,234	5,145	1,124	1,141
1962	12,951	1,405	1,371	5,480	5,377	1,153	1,174
1963	13,693	1,466	1,429	5,652	5,543	1,211	1,245
1964	14,215	1,698	1,650	5,817	5,702	1,293	1,348
1965	14,157	1,830	1,774	6,221	6,078	1,366	1,414
1966	14,371	1,790	1,734	6,612	6,447	1,384	1,396
1967	14,715	1,790	1,735	6,993	6,810	1,421	1,426
1968	15,135	1,818	1,762	7,259	7,062	1,516	1,564
PROJECTED							
1969	15,538	1,872	1,814	7,234	7,036	1,679	1,757
1970	15,882	1,930	1,872	7,341	7,140	1,711	1,742
1971	16,187	1,982	1,926	7,513	7,314	1,759	1,762
1972	16,427	2,026	1,966	7,722	7,524	1,795	1,777
1973	16,599	2,060	1,998	7,927	7,720	1,843	1,822
1974	16,754	2,093	2,032	8,098	7,890	1,873	1,870
1975	16,908	2,120	2,060	8,252	8,041	1,920	1,926
1976	16,957	2,128	2,068	8,375	8,158	1,964	1,971
1977	16,932	2,142	2,080	8,457	8,245	2,011	2,008
1978	16,789	2,177	2,104	8,540	8,321	2,048	2,041
1979	16,371	2,180	2,100	8,624	8,387	2,086	2,075

¹ All ages are in completed years except age 18, which has been calculated to nearest birthday. No fertility assumptions are used in this table because the persons included are already born.

² The composite population (used for projecting degrees for the first time in 1969) was derived by: (1) prorating to 100 percent the truncated percentage distribution of the ages of recipients of bachelor's degrees which had been found by Laure M. Sharp in the 1958 survey "Two Years After the College Degree," and (2) applying these percentages to corresponding age groups which

were consistent with the other populations shown in this table. For further estimating details, see appendix A, "Estimation Methods."

SOURCE: Office of Education estimates are based on published and unpublished Bureau of the Census population data by age as of July 1. Population data used are consistent with projection data in U.S. Department of Commerce, Bureau of the Census "Current Population Reports: Population Estimates, Summary of Demographic Projections," Series P-25, No. 388, March 14, 1968.

Table B-3.—Ratios of population series B and population series D to population series C, by age group: United States, 1971 to 1979¹

[Projections based on series C may be converted to series B and D projections by multiplying the series C projection by the ratio shown in this table for the corresponding age, series, and year]

Year (fall)	Age group 5-17		Age group 5-13		Age group 14-17	
	For converting series C to series B	For converting series C to series D	For converting series C to series B	For converting series C to series D	For converting series C to series B	For converting series C to series D
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1971 . .	1.00	1.00	1.00	1.00	1.00	1.00
1972 . .	1.00	1.00	1.01	.99	1.00	1.00
1973 . .	1.01	.99	1.02	.99	1.00	1.00
1974 . .	1.02	.98	1.03	.98	1.00	1.00
1975 . .	1.03	.98	1.04	.97	1.00	1.00
1976 . .	1.04	.97	1.06	.95	1.00	1.00
1977 . .	1.05	.96	1.07	.94	1.00	1.00
1978 . .	1.06	.95	1.09	.92	1.00	1.00
1979 . .	1.07	.93	1.11	.90	1.00	1.00

¹ For definitions of series B, C, and D, and for sources of population data, see appendix B, table B-2.

Table B-4.—Enrollment in grades K-8 and 9-12 of regular day schools, with projections based on U.S. Census population projection series B, by institutional control: United States, fall 1958 to 1978¹

[In thousands]

Year (fall)	Total public and nonpublic			Public			Nonpublic (estimated) ²		
	K-12	K-8	9-12	K-12	K-8 ³	9-12 ³	K-12	K-8	9-12
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1958 ..	39,581	30,504	9,077	34,081	26,004	8,077	5,500	4,500	1,000
1959 ..	40,782	31,511	9,271	35,182	26,911	8,271	5,600	4,600	1,000
1960 ..	42,181	32,492	9,689	36,281	27,692	8,589	5,900	4,800	⁴ 1,100
1961 ..	43,364	32,895	10,469	37,464	28,095	9,369	5,900	⁴ 4,800	⁴ 1,100
1962 ..	44,849	33,537	11,312	38,749	28,637	10,112	6,100	4,900	1,200
1963 ..	46,487	34,304	12,183	40,187	29,304	10,883	6,300	5,000	⁴ 1,300
1964 ..	47,716	35,025	12,691	41,416	30,025	11,391	6,300	5,000	⁴ 1,300
1965 ..	48,473	35,463	13,010	42,173	30,563	11,610	6,300	⁴ 4,900	⁴ 1,400
1966 ..	49,339	36,045	13,294	43,039	31,145	11,894	6,300	4,900	1,400
1967 ..	49,892	36,242	13,650	43,892	31,642	12,250	6,000	4,600	1,400
1968 ..	50,761	36,640	14,121	44,961	32,240	12,721	5,800	⁵ 4,400	⁵ 1,400
PROJECTED⁶									
1969 ..	51,400	36,800	14,600	45,700	32,500	13,200	5,700	4,300	1,400
1970 ..	51,600	36,600	15,000	46,000	32,400	13,600	5,600	4,200	1,400
1971 ..	51,800	36,300	15,500	46,300	32,200	14,100	5,500	4,100	1,400
1972 ..	51,800	36,000	15,800	46,400	32,000	14,400	5,400	4,000	1,400
1973 ..	52,200	36,000	16,200	46,800	32,000	14,800	5,400	4,000	1,400
1974 ..	52,600	36,100	16,500	47,200	32,100	15,100	5,400	4,000	1,400
1975 ..	53,000	36,300	16,700	47,600	32,300	15,300	5,400	4,000	1,400
1976 ..	53,600	36,800	16,800	48,200	32,800	15,400	5,400	4,000	1,400
1977 ..	54,300	37,400	16,900	48,900	33,400	15,500	5,400	4,000	1,400
1978 ..	55,100	38,300	16,800	49,700	34,300	15,400	5,400	4,000	1,400

¹ Does not include independent nursery schools and kindergartens, residential schools for exceptional children, subcollegiate departments of institutions of higher education, Federal schools for Indians, schools on Federal installations, and other schools not in the regular school system.

² Estimates revised spring 1968 on basis of 1965 Office of Education survey.

³ Fall enrollment in public schools not reported by grade prior to 1962; grade breakdown for years 1958 through 1961 estimated from school year enrollment.

⁴ Actual data from Office of Education surveys.

⁵ Data from the 1968 survey of nonpublic schools were received too late for inclusion in this table.

⁶ The projection of fall enrollment in regular day schools is based on the following assumptions: (1) Enrollment rates of the 5-, 6-, and 7-year-old population in public school kindergarten and grades 1 and 2 will follow the 1958-68 trends; (2) the retention rate of public school grade 7 from grade 6 will remain constant at 104 percent from 1972 through 1978; (3) the retention rates of public school grade 9 from grade 8 will follow the 1958-68 trend with the restriction that the rate cannot exceed 105 percent; (4) the retention

rates of all other public school grades will follow the 1958-68 trends with the restriction that they cannot exceed 100 percent; and (5) enrollment in grades K-8 in regular nonpublic day schools will decrease to 1972 and then remain constant to 1978; grades 9-12 will remain constant at the 1968 level.

NOTE: Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of Public Schools," fall 1964 through 1968; (2) "Enrollment, Teachers, and Schoolhousing," fall 1957 through 1963; (3) "Statistics of State School Systems," biennially, 1957-58 through 1961-62; (4) "Statistics of Nonpublic Elementary and Secondary Schools, 1965-66"; (5) "Nonpublic School Enrollment in Grades 9-12, Fall 1964, and Graduates, 1963-64"; (6) "Statistics of Nonpublic Elementary Schools, 1961-62"; and (7) "Statistics of Nonpublic Elementary Schools, 1960-61."

Table B-5.—Enrollment in grades K-8 and 9-12 of regular day schools, with projections based on U.S. Census population projection series D, by institutional control: United States, fall 1958 to 1978¹

[In thousands]

Year (fall)	Total public and nonpublic			Public			Nonpublic (estimated) ²		
	K-12	K-8	9-12	K-12	K-8 ³	9-12 ³	K-12	K-8	9-12
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1958 ..	39,581	30,504	9,077	34,081	26,004	8,077	5,500	4,500	1,000
1959 ..	40,782	31,511	9,271	35,182	26,911	8,271	5,600	4,600	1,000
1960 ..	42,181	32,492	9,689	36,281	27,692	8,589	5,900	4,800	⁴ 1,100
1961 ..	43,364	32,895	10,469	37,464	28,095	9,369	5,900	⁴ 4,800	⁴ 1,100
1962 ..	44,849	33,537	11,312	38,749	28,637	10,112	6,100	4,900	1,200
1963 ..	46,487	34,304	12,183	40,187	29,304	10,883	6,200	5,000	⁴ 1,300
1964 ..	47,716	35,025	12,691	41,416	30,025	11,391	6,300	5,000	⁴ 1,300
1965 ..	48,473	35,463	13,010	42,173	30,563	11,610	6,300	⁴ 4,900	⁴ 1,400
1966 ..	49,339	36,045	13,294	43,039	31,145	11,894	6,300	4,900	1,400
1967 ..	49,892	36,242	13,650	43,892	31,642	12,250	6,000	4,600	1,400
1968 ..	50,761	36,640	14,121	44,961	32,240	12,721	5,800	⁵ 4,400	⁵ 1,400
PROJECTED ⁶									
1969 ..	51,400	36,800	14,600	45,700	32,500	13,200	5,700	4,300	1,400
1970 ..	51,600	36,600	15,000	46,000	32,400	13,600	5,600	4,200	1,400
1971 ..	51,700	36,200	15,500	46,200	32,100	14,100	5,500	4,100	1,400
1972 ..	51,500	35,700	15,800	46,100	31,700	14,400	5,400	4,000	1,400
1973 ..	51,400	35,200	16,200	46,000	31,200	14,800	5,400	4,000	1,400
1974 ..	51,100	34,600	16,500	45,700	30,600	15,100	5,400	4,000	1,400
1975 ..	50,700	34,000	16,700	45,300	30,000	15,300	5,400	4,000	1,400
1976 ..	50,400	33,600	16,800	45,000	29,600	15,400	5,400	4,000	1,400
1977 ..	50,100	33,200	16,900	44,700	29,200	15,500	5,400	4,000	1,400
1978 ..	49,800	33,000	16,800	44,400	29,000	15,400	5,400	4,000	1,400

¹ Does not include independent nursery schools and kindergartens, residential schools for exceptional children, subcollegiate departments of institutions of higher education, Federal schools for Indians, schools on Federal installations, and other schools not in the regular school system.

² Estimates revised spring 1968 on basis of 1965 Office of Education survey.

³ Fall enrollment in public schools not reported by grade prior to 1962; grade breakdown for years 1958 through 1961 estimated from school year enrollment.

⁴ Actual data from Office of Education surveys.

⁵ Data from the 1968 survey of nonpublic schools were received too late for inclusion in this table.

⁶ The projection of fall enrollment in regular day schools is based on the following assumptions: (1) Enrollment rates of the 5-, 6-, and 7-year-old population in public school kindergarten and grades 1 and 2 will follow the 1958-68 trends; (2) the retention rate of public school grade 7 from grade 6 will remain constant at 104 percent from 1972 through 1978; (3) the retention rates of public school grade 9 from grade 8 will follow the 1958-68 trend with the restriction that the rate cannot exceed 105 percent; (4) the retention rates of all other public school graduates will fol-

low the 1958-68 trends with the restriction that they cannot exceed 100 percent; and (5) enrollment in grades K-8 in regular nonpublic day schools will decrease to 1972 and then remain constant to 1978; grades 9-12 will remain constant at the 1968 level.

NOTE: Data are for 50 States and the District of Columbia for all years. Because of rounding, detail may not add to totals.

SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education publications: (1) "Statistics of Public Schools," fall 1964 through 1968; (2) "Enrollment, Teachers, and Schoolhousing," fall 1957 through 1963; (3) "Statistics of State School Systems," biennially 1957-58 through 1961-62; (4) Statistics of Nonpublic Elementary and Secondary Schools, 1965-66; (5) "Nonpublic School Enrollment in Grades 9-12, Fall 1964, and Graduates, 1963-64;" (6) "Statistics of Nonpublic Elementary Schools, 1961-62," and (7) "Statistics of Nonpublic Elementary Schools, 1960-61."

Table B-6.—Total degree-credit enrollment in all institutions of higher education, by sex: United States and outlying areas, fall 1958 to 1978¹

[Resident and extension enrollment]

Year (fall)	Degree-credit enrollment		
	Total	Men	Women
(1)	(2)	(3)	(4)
1958	3,258,556	2,110,426	1,148,130
1959	3,402,297	2,173,797	1,228,500
1960	3,610,007	2,270,640	1,339,367
1961	3,891,230	2,423,987	1,467,243
1962	4,206,672	2,603,072	1,603,600
1963	4,528,516	2,789,527	1,738,989
1964	4,987,867	3,051,761	1,936,106
1965	5,570,271	3,396,574	2,173,697
1966 ²	5,930,000	3,577,000	2,353,000
1967 ²	6,396,000	3,824,000	2,572,000
1968	6,983,093	4,145,523	2,837,570
PROJECTED³			
1969	7,143,000	4,214,000	2,929,000
1970	7,436,000	4,361,000	3,076,000
1971	7,806,000	4,549,000	3,256,000
1972	8,223,000	4,765,000	3,459,000
1973	8,642,000	4,982,000	3,660,000
1974	9,038,000	5,182,000	3,855,000
1975	9,421,000	5,376,000	4,045,000
1976	9,774,000	5,552,000	4,222,000
1977	10,090,000	5,703,000	4,386,000
1978	10,405,000	5,858,000	4,547,000

¹ Beginning in 1966, some students previously reported as nondegree-credit are included with degree-credit enrollment.

² The breakdown between degree-credit and nondegree-credit enrollment is estimated. See appendix A, "Estimation Methods."

The estimates for 1966 and 1967 differ from the estimates published in the 1968 edition of "Projections of Educational Statistics" because of revisions in the 1966 comprehensive data for 4-year institutions.

³ The projection of total degree-credit enrollment in all institutions by sex and institutional control is based on the assumption that enrollment in these institutions expressed as a percentage of population aged 18-21 years will follow the 1958-68 trend to 1978 in each enrollment category.

Veterans attending college through aid provided by Veterans' Readjustment Benefits Act of 1966 are included in the trend projections.

For further methodological details, see appendix A, table A-1.

NOTE: Because of rounding, detail may not add to totals.

SOURCES: Enrollment data and estimates are based on U.S. Department of Health, Education, and Welfare, Office of Education circulars: "Opening (Fall) Enrollment in Higher Education," annually, 1958 through 1968.

Population on which projections are based is shown in appendix B, table B-2.

**Table B-7.—Earned degrees, by level and sex of student:
United States and outlying areas, 1958-59 to 1978-79**

Year	Bachelor's and first-professional degrees ¹			Master's degrees ¹			Doctor's degrees (except first-professional) ²		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1958-59	382,157	253,896	128,261	72,578	48,380	24,198	9,360	8,371	989
1959-60	391,608	254,435	137,173	77,778	52,006	25,772	9,829	8,801	1,028
1960-61	398,248	254,658	143,590	81,805	55,400	26,405	10,575	9,463	1,112
1961-62	416,886	260,858	156,028	88,488	59,862	28,626	11,622	10,377	1,245
1962-63	446,453	273,300	173,153	95,557	64,394	31,163	12,822	11,448	1,374
1963-64	497,597	298,262	199,335	105,629	70,563	35,066	14,490	12,955	1,535
1964-65	533,925	318,088	215,837	117,200	77,793	39,407	16,467	14,692	1,775
1965-66	555,613	331,122	224,491	140,772	93,184	47,588	18,239	16,121	2,118
1966-67	594,862	355,300	239,562	157,892	103,179	54,713	20,621	18,164	2,457
1967-68	671,591	392,830	278,761	177,150	113,749	63,401	23,091	20,185	2,906
1968-69 ³	760,000	437,000	324,000	189,000	121,800	67,200	26,100	22,800	3,300
PROJECTED⁴									
1969-70	778,000	447,000	331,000	211,900	135,400	76,500	29,000	25,400	3,600
1970-71	807,000	461,000	345,000	244,800	155,900	88,900	30,800	27,100	3,800
1971-72	832,000	473,000	359,000	256,200	165,000	91,300	33,200	29,200	4,000
1972-73	866,000	487,000	379,000	271,200	175,800	95,300	37,200	32,600	4,600
1973-74	897,000	497,000	400,000	285,200	185,800	99,300	43,100	37,700	5,400
1974-75	935,000	512,000	423,000	302,300	197,300	104,900	45,600	40,000	5,600
1975-76	971,000	526,000	445,000	318,300	207,200	111,100	48,700	42,900	5,900
1976-77	1,006,000	540,000	465,000	336,900	219,200	117,700	51,600	45,500	6,100
1977-78	1,038,000	553,000	485,000	355,200	231,200	124,000	55,000	48,400	6,500
1978-79	1,065,000	565,000	500,000	369,200	240,700	128,500	57,000	50,200	6,800

¹ Beginning in 1965-66, all master's degrees, whether considered first-professional or not are reported as master's degrees rather than first-professional degrees.

The following specified degrees are reported as first professional: Dentistry (D.D.S. or D.M.D.), law (LL.B. or J.D.), medicine (M.D.), theology (B.D.), veterinary medicine (D.V.M.), chiropody or podiatry (D.S.C. or D.P.), optometry (O.D.), and osteopathy (D.O.).

² Doctor's degrees include the Ph.D. in any field as well as such degrees as doctor of education, doctor of juridical science, and doctor of public health (preceded by professional degree in medicine or sanitary engineering). They exclude degrees defined as first-professional, such as doctor of jurisprudence, doctor of medicine, doctor of dental surgery, doctor of veterinary medicine, and doctor of divinity.

³ Estimated.

⁴ The projection of earned degrees is based on the assumption that the percentage of degrees to population for each level and sex will continue the 1958-59 to 1967-68 trends. (A composite population representative of age at graduation was used as base for projecting, with a timelag of 2 years from the bachelor's degree to the master's degree; and of 3 additional years from the master's degree to the doctor's degree. For population used and estimation details, see appendix B, table B-2.)

For further methodological details, see appendix A, table A-2.

NOTE: Because of rounding, detail may not add to totals.

SOURCES: Degree data from U.S. Department of Health, Education, and Welfare, Office of Education publications on "Earned Degrees Conferred by Institutions of Higher Education," 1958-59 through 1967-68.

Table B-8.—Constant dollar index

[1968-69 = 100]

July to June	Consumer price index ¹	Construction cost index ²	July to June	Consumer price index ¹	Construction cost index ²
1958-59	81.312	68.543	1966-67	92.394	87.733
1959-60	82.460	70.625	1967-68	95.469	92.403
1960-61	83.533	72.313	1968-69	100.000	100.000
1961-62	84.379	74.001	ESTIMATED ³		
1962-63	85.400	76.027	1969-70	102.955	104.712
1963-64	86.601	78.278	1970-71	105.909	109.424
1964-65	87.716	80.304			
1965-66	89.615	83.118			

¹ The monthly indexes were averaged on a July to June basis to correspond with the school year and converted to 1968-69 = 100. The 1957-59 = 100 index number for 1968-69 was estimated at 124.142.

² The monthly indexes were averaged on a July to June basis to correspond with the school year and converted to 1968-69 = 100. The 1957-59 = 100 index number for 1968-69 was estimated at 148.083.

³ Estimated on 5-year trend, 1964-65 to 1968-69, projected 10 years and fitted to 1968-69 estimate.

SOURCES: The Consumer Price Index, prepared by the Bureau of Labor Statistics, U.S. Department of Labor, and the American Appraisal Company Construction Cost Index, published in Construction Review by the U.S. Department of Commerce.

Table B-9.—Estimated receipts of regular and "other" educational institutions, by institutional level and control, and by source: United States, 1957-58 to 1965-66 and 1966-67¹

Level, control, and source	Amount, in billions of current dollars										Percent				
	1957-58	1959-60	1961-62	1963-64	1965-66	1966-67	1957-58	1959-60	1961-62	1963-64	1965-66	1966-67	(1)	(2)	(3)
All levels:															
Total public and nonpublic	\$21.4	\$25.4	\$30.6	\$36.6	\$46.9		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Federal	1.4	1.9	2.5	3.2	5.0		6.6	7.5	8.2	8.7	10.6	8.2	8.7	10.6	10.6
State	6.3	7.5	9.0	10.9	13.7		29.4	29.5	29.4	29.8	29.2	29.4	29.8	29.2	29.2
Local	8.6	9.8	11.2	12.8	15.6		40.2	38.6	36.6	35.0	33.3	36.6	35.0	33.3	33.3
All other	5.1	6.2	7.9	9.7	12.6		23.8	24.4	25.8	26.5	26.9	25.8	26.5	26.9	26.9
Total public	17.2	20.4	24.0	28.4	36.7		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Federal	1.0	1.4	1.7	2.0	3.6		5.8	6.9	7.1	7.0	9.8	7.1	7.0	9.8	9.8
State	6.3	7.5	8.9	10.8	13.6		36.6	36.8	37.1	38.0	37.1	37.1	38.0	37.1	37.1
Local	8.6	9.8	11.2	12.8	15.6		50.0	48.0	46.7	45.1	42.5	46.7	45.1	42.5	42.5
All other	1.3	1.7	2.2	2.8	3.9		7.6	8.3	9.1	9.9	10.6	9.1	9.9	10.6	10.6
Total nonpublic	4.2	5.0	6.6	8.2	10.2		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Federal	.4	.5	.8	1.2	1.4		9.5	10.0	12.1	14.6	13.7	12.1	14.6	13.7	13.7
State	(²)	(²)	.1	.1	.1		(³)	(³)	(³)	1.5	1.0	(³)	1.2	1.0	1.0
Local	(²)	(²)	(²)	(²)	(²)		(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)
All other	3.8	4.5	5.7	6.9	8.7		90.5	90.0	86.4	84.2	85.3	86.4	84.2	85.3	85.3
Elementary and secondary:															
Total public and nonpublic	15.6	18.4	21.5	24.7	31.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Federal	.6	.8	.9	.9	2.0		3.9	4.3	4.2	3.6	6.5	4.2	3.6	6.5	6.5
State	4.8	5.8	6.8	8.1	9.9		30.8	31.5	31.6	32.8	31.9	31.6	32.8	31.9	31.9
Local	8.4	9.6	11.0	12.5	15.2		53.8	52.2	51.2	50.6	49.0	51.2	50.6	49.0	49.0
All other	1.8	2.2	2.8	3.2	3.9		11.5	12.0	13.0	13.0	12.6	13.0	13.0	12.6	12.6

Total public	13.8	16.3	18.8	21.6	27.2	100.0	100.0	100.0	100.0	100.0	100.0
Federal .....	.6	.8	.9	.9	2.0	4.3	4.9	4.8	4.2	7.4	
State	4.8	5.8	6.8	8.1	9.9	34.8	35.6	36.2	37.5	36.4	
Local	8.4	9.6	11.0	12.5	15.2	60.6	59.2	58.7	57.9	55.9	
All other	(²)	.1	.1	.1	.1	.3	.3	.3	.4	.3	
Total nonpublic	1.8	2.1	2.7	3.1	3.8	100.0	100.0	100.0	100.0	100.0	
Federal											
State											
Local											
All other	1.8	2.1	2.7	3.1	3.8	100.0	100.0	100.0	100.0	100.0	
Institutions of higher education:											
Total public and nonpublic	5.8	7.0	9.1	11.9	15.9	17.6	100.0	100.0	100.0	100.0	100.0
Federal .....	.8	1.1	1.6	2.3	3.0	3.4	13.8	16.2	18.3	20.1	18.9
State	1.5	1.7	2.2	2.8	3.8	4.0	27.0	25.1	24.9	24.0	23.7
Local .....	.2	.2	.2	.3	.4	.5	3.1	2.8	2.6	2.6	2.8
All other	3.3	4.0	5.1	6.5	8.7	9.7	56.1	55.9	54.2	53.3	55.5
Total public	3.4	4.1	5.2	6.8	9.5	10.6	100.0	100.0	100.0	100.0	100.0
Federal .....	.4	.6	.8	1.1	1.6	1.8	12.8	14.7	15.5	16.7	17.1
State	1.5	1.7	2.1	2.7	3.7	3.9	43.3	41.1	40.7	39.4	38.5
Local .....	.2	.2	.2	.3	.4	.5	5.0	4.6	4.2	4.3	4.1
All other	1.3	1.6	2.1	2.7	3.8	4.4	38.9	39.6	39.6	39.6	40.3

See footnotes at end of table.

Table B-9.—Estimated receipts of regular and "other" educational institutions, by institutional level and control, and by source: United States, 1957-58 to 1965-66 and 1966-67¹—Continued

Level, control, and source	Amount, in billions of current dollars										Percent				
	1957-58	1959-60	1961-62	1963-64	1965-66	1966-67	1957-58	1959-60	1961-62	1963-64	1965-66	1966-67	(11)	(12)	(13)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Total nonpublic	2.4	2.9	3.9	5.1	6.4	7.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Federal .....	.4	.5	.8	1.2	1.4	1.6	14.0	17.0	20.4	22.9	21.6	22.3	21.6	21.6	22.3
State	(²)	(²)	.1	(²)	(²)	(²)	1.2	1.4	1.4	1.2	1.4	1.4	1.2	1.4	1.4
Local	(²)	(²)	(²)	(²)	(²)	(²)	.2	.1	.2	.2	.2	.2	.2	.2	.4
All other	2.0	2.4	3.0	3.8	4.9	5.3	84.6	81.5	78.0	75.7	76.8	75.9	76.8	75.9	75.9

¹ Includes estimates for "other" elementary and secondary schools such as residential schools for exceptional children, Federal schools for Indians, and federally operated elementary and secondary schools on posts. The annual receipts of "other" elementary and secondary schools were estimated as follows:

Years	Public, Millions	Nonpublic
1957-58 and 1959-60	\$100	Less than \$50 million.
1961-62	200	Less than \$50 million.
1963-64 and 1965-66	200	\$100 million.
² Less than \$50 million.		
³ Less than 0.05 percent.		

NOTE: Data are for 50 States and the District of Columbia for all years. Receipts include revenue and nonrevenue receipts, current and plant-fund receipts, p.

ceeds of loans, less transfers of funds which would result in duplication, and less repayment of loans. All receipts and deductions concerning loans are included in "all other" sources. Deduction of transfers was made from data in "all other" sources.

SOURCE: Recent data from U.S. Department of Health, Education, and Welfare, Office of Education Publications: (1) "Statistics of State School Systems," 1957-58, 1959-60, 1961-62, 1963-64, and 1965-66; (2) "Statistics of Public Schools, All 1964, 1965, 1966, 1967, and 1968"; (3) "Financial Statistics of Higher Education," 1957-58, 1959-60, 1961-62, 1963-64, 1965-66, and 1966-67; (4) "Digest of Educational Statistics," 1968; and unpublished data in the U.S. Office of Education.

Table B-10.—Federal funds for education and related activities: Estimated obligations for fiscal years 1962 to 1967; and estimated outlays for fiscal years 1968 to 1970

[In thousands of dollars]

Type of support, level, and program area	New obligational authority							Outlay		
	1962 (2)	1963 (3)	1964 (4)	1965 (5)	1966 (6)	1967 (7)	1968 (8)	1969 (9)	1970 (10)	
PART I. Federal Funds Supporting Education in Educational Institutions										
Total grants and loans	\$2,173,700	\$2,507,600	\$2,749,300	\$3,908,700	\$6,779,578	\$8,364,855	\$7,771,496	\$8,323,454	\$9,107,894	
Grants, total	1,853,200	2,111,700	2,350,500	3,379,600	6,167,878	7,623,272	7,168,215	7,754,427	8,559,128	
Elementary-secondary education	555,100	600,400	666,300	942,900	2,480,078	3,037,637	2,967,004	2,765,875	3,009,761	
School assistance in federally affected areas	304,900	330,300	323,100	407,600	433,900	469,137	506,372	404,703	454,938	
Economic opportunity programs ¹	53,000	60,900	67,000	123,500	404,300	721,257	628,533	539,124	572,874	
National Defense Education Act - equipment, guidance ²	59,300	58,700	92,900	90,900	104,400	109,200	109,009	89,545	68,601	
Supporting services ³	4,300	4,700	5,200	6,500	173,100	273,551	280,481	250,541	268,341	
Assistance for educationally deprived children ⁴	4,000	6,800	5,100	.....	959,000	1,057,455	1,056,983	1,049,625	1,151,444
Teacher Corps	26,400	26,300	24,900	127,700	6,500	11,324	16,019	19,000	24,243	
Vocational education ⁵	40,500	45,300	61,500	80,500	184,678	194,636	185,224	172,473	180,200	
Dependents' schools abroad	43,500	44,600	48,600	51,500	86,100	87,533	68,220	112,983	141,711	
Public lands revenue for schools	14,800	17,700	32,600	50,200	68,800	50,173	52,294	56,484	58,607	
Assistance in special areas ⁶	.....	.....	.....	.....	.....	56,959	58,286	64,708	78,166
Veterans' education	4,400	5,100	5,400	4,500	5,200	1,294	3,200	3,580	3,900	
Other ⁷	.....	.....	.....	.....	.....	5,108	2,383	3,109	6,736

See footnotes at end of table.

Table B-10.—Federal funds for education and related activities: Estimated obligations for fiscal years 1962 to 1967; and estimated outlays for fiscal years 1968 to 1970—Continued

[In thousands of dollars]

Type of support, level, and program area	New obligational authority						Outlay		
	1962	1963	1964	1965	1966	1967	1968	1969	1970
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Higher education	1,210,300	1,397,800	1,480,400	2,052,600	2,830,400	3,634,494	3,230,030	3,754,515	4,094,908
Basic research in U.S. educational institutions proper ⁶	602,900	691,600	698,600	784,900	940,300	1,032,823	1,044,059	1,153,269	⁹ 1,153,000
Research facilities ⁶	121,800	157,900	133,500	191,700	194,000	250,568	184,591	268,775	⁹ 269,000
Training grants	196,000	234,600	261,200	282,400	365,500	363,608	381,116	432,043	462,762
Fellowships and traineeships	103,900	143,000	181,800	196,900	264,900	350,162	320,303	377,270	433,799
Facilities and equipment	37,100	41,000	56,100	384,100	668,900	822,203	519,382	530,763	634,561
Other institutional support	33,000	43,400	69,500	93,400	163,800	169,925	139,637	197,567	247,687
Other student assistance	103,900	69,900	62,300	100,400	214,200	590,586	608,883	787,414	872,869
Other higher education assistance	11,700	16,400	17,400	18,800	18,800	54,619	2,059	7,414	21,230
Vocational-technical and continuing education (not classifiable by level)	37,900	113,500	203,800	364,100	857,400	951,141	971,181	1,234,037	1,454,459
Vocational-technical education ¹⁰	27,700	74,700	161,900	291,900	432,800	470,752	418,345	479,375	555,101
Economic opportunity programs ¹¹	6,900	8,000	9,100	72,400	385,100	345,823	441,923	586,993	704,013
Veterans' education	49,900	29,000	25,100	10,300	6,300	54,000	79,645	122,741	140,969
General continuing education	400	400	1,900	1,500	19,200	29,200	28,701	40,026	44,289
Training State and local personnel ¹²	2,900	1,400	5,800	8,000	14,000	28,649	.....	.....	.....
National Foundation on the Arts and the Humanities .....	.....	.....	.....	.....	.....	11,989	.....	.....	.....
Other ¹³ .....	.....	.....	.....	.....	.....	10,728	2,567	4,902	10,087

Loans, total (higher education)	320,500	395,900	398,800	529,100	611,700	741,583	603,281	569,027	548,766
Student loan program, National Defense Education Act ¹⁴	74,600	90,700	111,300	160,100	235,900	237,954	226,303	260,752	293,939
College facilities loans ¹⁵	245,900	305,200	287,500	369,000	375,800	503,629	376,978	308,275	254,827
PART II. Other Federal Funds for Education and Related Activities									
Applied research and development ¹⁶	754,700	805,700	906,300	952,300	1,026,600	1,088,150	1,174,412	1,287,641	⁹ 1,288,000
School lunch and milk programs	366,900	379,300	411,700	507,500	421,900	448,005	543,845	622,913	653,466
Training of Federal personnel	1,177,500	1,279,600	1,370,400	1,577,900	1,706,700	1,537,399	1,138,333	1,240,164	1,320,807
Military academies	74,000	75,700	77,400	105,100	137,200	(¹⁷)	(¹⁷)	(¹⁷)	(¹⁷)
Professional training, military	1,072,000	1,172,000	1,245,000	1,399,100	1,487,900	1,442,950	1,065,069	1,154,938	1,224,503
Civilian education and training in non-Federal facilities	31,500	31,900	48,000	73,700	81,600	94,449	73,264	85,226	96,304
Library services	22,200	23,900	25,300	82,900	86,300	141,381	136,099	159,098	154,602
Grants to public libraries	6,900	7,400	7,500	54,900	55,000	76,000	62,017	32,236	63,207
National library services ¹⁸	15,300	16,500	17,800	28,000	31,300	65,381	74,082	96,862	91,395

See footnotes at end of table.

Table B-10.—Federal funds for education and related activities: Estimated obligations for fiscal years 1962 to 1967; and estimated outlays for fiscal years 1968 to 1970—Continued

[In thousands of dollars]

Type of support, level, and program area	New obligational authority						Outlay		
	1962 (1)	1963 (2)	1964 (3)	1965 (4)	1966 (5)	1967 (6)	1968 (7)	1969 (8)	1970 (9)
International education	109,100	116,100	130,000	178,700	232,658	326,742	272,008	323,318	330,481
Educational exchange program	28,100	35,600	38,000	37,400	53,500	44,712	41,670	37,263	31,325
Agency for International Development projects ..	81,000	80,500	84,600	87,800	111,800	203,270	140,000	190,000	200,000
Peace Corps .....	.....	.....	.....	44,300	57,175	41,944	43,641	39,981	39,254
Other international education and training .....	.....	.....	7,400	9,200	10,183	36,816	46,697	56,074	59,902
Other	334,300	318,700	381,900	400,200	403,800	349,861	332,088	351,404	377,007
Agricultural extension service	59,300	63,000	79,400	85,400	90,700	92,824	90,030	96,978	100,575
Educational television facilities .....	.....	.....	5,200	5,100	15,200	3,304	6,737	8,575	12,852
Education in Federal correctional institutions ..	2,100	2,500	2,900	3,500	3,600	6,341	3,662	3,751	4,880
Other education and training ²⁰	7,000	8,300	10,600	11,000	12,800	15,199	6,000	7,000	7,000
Value of surplus property transferred:									
Acquisition cost of personal property	244,900	223,800	268,700	277,300	266,400	215,509	199,383	207,900	222,900
Fair value of real property	21,000	21,100	15,100	17,900	15,100	16,684	26,276	27,200	28,800

¹ Includes Office of Economic Opportunity and Indian education programs.
² Includes small amounts for National Defense Education Act loans to private elementary-secondary schools.
³ Includes supplemental centers, school library materials, strengthening State education agencies, captioned films for the deaf, dissemination of information, school counseling and testing, and American Printing House for the Blind.
⁴ Includes Elementary and Secondary Education Act, title I, handicapped children, dropout prevention, bilingual education, Kendall School for the Deaf, and development facilities in redevelopment areas.
⁵ Estimated secondary school portion.
⁶ Includes District of Columbia, Canal Zone, territories and dependencies, Cuban refugees, and payments in lieu of taxes by the Atomic Energy Commission and the Tennessee Valley Authority.
⁷ Includes elementary-secondary program planning and evaluation, model secondary school, educational exchange, National Science Foundation science education, Peace Corps, National Aeronautics and Space Administration elementary-secondary school program, model school for the deaf, and National Foundation on the Arts and the Humanities.
⁸ Data are from *Federal Funds for Research, Development, and Other Scientific Activities*, annual publication, National Science Foundation. Includes university-operated research centers.
⁹ 1970 estimates not available. Amounts are for 1969.
¹⁰ Includes vocational education except secondary school portion, Manpower Development and Training Act training and subsistence, and technical institute for the deaf.
¹¹ Includes Office of Economic Opportunity programs for vocational-technical and continuing education, Social and Rehabilitation Service, work-incentive activities, Cuban

- refugee assistance, development facilities in redevelopment areas, and Indian education.
- 12] includes Social Security education and training, Public Health Service training for disease prevention and environmental control, training for law enforcement personnel, Atomic Energy Commission nuclear training courses, and Department of Housing and Urban Development Community development program.
- 13] includes National Institutes of Mental Health mental health training; Social and Rehabilitation Service rehabilitation training and rehabilitation facilities and services; Department of Commerce development planning, technical assistance, and research; and Small Business Administration training program. Similar information not available prior to 1967.
- 14] includes National Defense Education Act student loans, insured student loan advances, loans for nurse training and health professions, Cuban refugee loans, and insured vocational education loans.
- 15] includes Department of Housing and Urban Development college housing loans and Office of Education college facilities loans.
- 16] Data derived from *Federal Funds for Research, Development, and other Scientific Activities*, annual publication, National Science Foundation.
- 17] Separate figures are not provided for 1967 and subsequent years but are included in "Professional training, military."

- 18] includes Library of Congress, Smithsonian Institution, General Services Administration, National Archives and Records Service, National Agricultural Library, and Government Printing Office depository library and catalog and index activities.
- 19] includes special foreign currency education research and training, Public Health Service National Center for Health Statistics, English language teaching in Poland, U.S. Information Agency education assistance, National Science Foundation international education activities, Atomic Energy Commission international education activities, and National Aeronautics and Space Administration international education activities.
- 20] includes Department of Labor apprenticeship and training support, Department of Commerce State technical services program, and Department of the Interior mine safety training.

NOTE: Because of the exclusion of some programs and because data are based on Federal disbursements rather than the authority to spend, the figures since 1968 are not strictly comparable with those for earlier years.

SOURCE: Compiled by the National Center for Educational Statistics, Office of Education, U.S. Department of Health, Education, and Welfare, from information collected by the Bureau of the Budget for its report *Special Analyses, Budget of the United States*. Research data are from *Federal Funds for Research, Development, and Other Scientific Activities XVII*, National Science Foundation.

Table B-11.—Office of Education expenditures, by legislative program: Fiscal years 1960 to 1970

[In thousands of dollars]

Legislative program	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969 ¹	1970 ¹
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Total	\$459,936	\$527,554	\$547,610	\$635,602	\$676,735	\$876,591	\$2,032,664	\$3,098,089	\$3,629,408	\$3,472,588	\$3,867,676
Elementary and Secondary Education Act	811	1,095	1,247	1,521	1,648	1,712	816,982	1,252,211	1,335,590	1,295,074	1,410,386
Title I. Educationally deprived children							746,904	1,056,621	1,049,116	1,021,682	1,107,324
Title II. Library resources							47,871	92,505	91,054	62,202	54,407
Title III. Supplementary education centers							10,938	74,951	161,256	157,638	174,279
Title V. Strengthening State departments of education ²	811	1,095	1,247	1,521	1,648	1,712	11,269	28,121	26,297	25,609	30,256
Title VI. Education for the handicapped								3	7,867	24,443	26,520
Title VII. Bilingual education										2,000	7,500
Title VIII. Dropout prevention										1,500	9,600
School assistance in federally affected areas	258,198	278,782	282,909	343,111	334,289	349,671	409,593	447,074	506,372	404,703	454,938
Maintenance and operation	174,850	207,749	226,419	276,869	283,688	311,413	353,851	399,858	470,887	370,474	399,953
Construction	83,348	71,033	56,490	56,242	50,601	38,258	55,742	47,216	35,485	34,229	54,985
Higher Education Act						22,569	35,232	245,046	365,884	403,469	533,287
Title I. University community services							3,926	14,774	9,897	9,134	9,500
Title II. Library programs:											
College library resources								8,380	48,906	478	24,522
Library improvement								6,548	(³)	(³)	(³)
Library training								789	11,381	8,203	8,284
Acquisition and cataloging by Library of Congress							300	3,478	5,478	5,500	7,356

Title III. Strengthening developing institutions	4,919	22,428	28,000	29,500
Title IV. Student assistance:				
Equal opportunity grants	50,916	103,104	127,922	133,787
Work-study program	106,263	111,812	137,100	147,800
Insured loans	15,934	28,947	51,338	117,319
Student loans insurance fund			1,543	12,976
Title V. National teacher corps	362	16,019	19,000	24,243
Title VI. Undergraduate instructional assistance:				
Television and other equipment	20,523	5,415	10,651	12,200
Special programs for disadvantaged—Talent Search	10	2,497	4,600	4,200
Special services for disadvantaged—Upward Bound				1,500
Higher Education Facilities Act	2,988	105,526	276,762	384,895
Title I. Public community colleges and technical institutes	14,097	80,202	50,000	75,900
Other undergraduate facilities	34,642	236,861	191,000	217,078
State administration and planning	1,288	5,066	7,100	6,750
Major disaster areas		147	1,600	376
Title II. Graduate facilities	4,220	37,970	34,000	31,800
Title III. College construction loans	1,700	101,719	97,275	86,827
Construction loans interest subsidization			3,920	10,670
Vocational education	45,179	47,769	55,176	261,080
Vocational Education Act of 1963	(⁴)	(⁴)	175,406	192,928

See footnotes at end of table.

Table B-11.—Office of Education expenditures, by legislative program: Fiscal years 1960 to 1970—Continued

[In thousands of dollars]

Legislative program	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969 ¹	1970 ¹
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
George-Barden and supplemental acts	5,38,021	⁵ 41,497	⁵ 44,615	⁵ 48,032	⁵ 47,386	⁴ 121,190	⁴ 114,211	33,360	36,361	36,000	224,539
Smith-Hughes	7,158	6,272	7,147	7,144	7,117	7,137	4,185	6,300	6,263	6,968	7,161
Work-study programs							10,072	11,097	5,027	6,577	3,500
Cooperative Education						2,727					6,000
Innovative programs in vocational education											5,500
National advisory council											200
Transfer to Department of Labor for manpower projections and studies											2,000
State advisory councils											1,680
Vocational education curriculum development											1,000
Appalachian Regional Development Act							2,547	6,669			
Vocational research						471	7,311	17,122			
Consumer and homemaking education											
Education professions development	8,683	12,750	13,893	14,237	13,969	36,679	42,147	56,407	60,271	74,163	108,090
Preschool, elementary, and secondary training programs	8,683	12,750	13,893	14,237	13,969	36,679	42,147	55,417	58,387	63,990	78,513
Preschool, elementary, and secondary grants to States										7,000	16,000
Encouragement of education career											450
Higher education training programs								990	1,884	3,173	7,127
Library Services and Construction Act	6,056	6,153	6,932	7,345	7,443	26,111	40,915	57,407	62,017	62,236	63,207
Public library services	6,056	6,153	6,932	7,345	7,443	22,376	25,000	32,553	32,391	32,675	34,000
Construction						3,735	15,915	23,923	26,615	24,500	23,700

Interlibrary cooperation	352	1,096	1,947	2,187
State institutional library service	345	1,175	2,006	2,094
Library services to physically handicapped	234	740	1,108	1,226
Educational improvement for the handicapped				
handicapped	380	997	1,191	2,587
4,982	15,327	15,366	26,937	33,088
34,823	44,996			
Teacher education and recruitment	308	814	943	2,337
2,466	12,823	10,448	21,968	24,162
Research and innovation			1,016	1,004
3,227	4,185	8,277	8,765	13,217
Captioned films and media services	72	183	248	250
1,500	1,691	649	2,572	4,450
Early childhood education				500
1,700				
National Defense Education Act	117,965	153,608	158,801	175,154
216,338	232,287	320,172	339,015	370,034
365,291	319,493			
Title II. Student loans and cancellations	40,326	57,491	74,532	91,841
111,729	135,538	177,394	181,000	182,825
185,878	163,550			
Title III. Instructional assistance: Grants and loans ⁸	49,848	56,218	39,510	34,010
56,131	50,615	76,175	69,438	85,916
72,205	53,810			
Title IV. College teacher fellowships	4,620	11,451	17,313	19,604
19,680	20,695	31,974	52,591	60,650
74,968	71,000			
Title V. Guidance, counseling, and testing	12,870	15,686	14,064	15,162
13,710	17,322	22,017	22,779	23,093
17,340	14,791			
Title VI. Language development: Language and area centers, fellowships, and research	10,301	12,762	13,382	14,537
15,088	8,117	12,612	12,207	17,550
16,342				
Research and development	6,004	7,878	7,461	9,910
12,712	17,793	23,924	49,557	79,955
102,346				
Training and research				6,548
4,832	5,600	7,135		

Table E-11.—Office of Education expenditures, by legislative program: Fiscal years 1960 to 1970—Continued

[In thousands of dollars]

Legislative program	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969 ¹	1970 ¹
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Construction								1,171	333	6,419	11,661
Research and development and educational media research and dissemination	6,004	7,878	7,461	9,910	12,712	17,793	23,934	41,838	74,790	64,988	83,550
Major educational demonstration— District of Columbia										500	3,600
Adult basic education				3,146		33,616		28,336	28,701	40,026	44,289
Civil rights activities				1,292		5,291		8,798	7,437	10,758	11,200
Land-grant colleges	5,052	5,052	10,744	14,500	14,500	14,500	14,500	14,500	14,500	21,791	14,720
Special foreign currency program— training, research and study		1	6	20	138	129	500	1,199	857	800	2,024
Educational broadcasting facilities					1,962	3,130	4,663	8,222	6,737	7,575	7,852
Office of Education salaries and expenses, including technical services, planning and evaluation, and computer services	11,608	13,569	12,664	12,041	14,251	17,732	25,901	37,664	40,776	47,004	56,767
Expenditures from funds transferred to the Office of Education by other Federal agencies ¹⁰											
Manpower Development and Training Act: Training ¹¹				30,925	64,777	88,514	69,912	88,302	108,444		

Supervision	992	2,039	3,510	4,753	5,820	5,457
Civil defense adult education program						
Educational television facilities	421	1,575	4,940	2,501	2,872	3,867
International education exchange (foreign currency)			2,871	9,497	7,979	6,589
Fulbright-Hays Act			12 1,237	12 1,114	12 1,000	1,402
Appalachian Regional Development Act ¹³		148	1,356	1,826	2,272	2,240
Cuban Refugee Program:					1,856	21,753
Education aid for Cuban children and adults	551	5,195	7,797	12 7,033	12 10,730	14,052
Loans for Cuban college students			1,358	12 1,881	12 2,442	12 3,144
Institutes				12 218	12 296	125

¹ Estimated.

² Includes title X, National Defense Education Act.

³ Beginning in 1968, library improvement is included under research and development.

⁴ Program expenditures for the Vocational Education Act of 1963 and George-Barden and supplemental acts were combined; separate program amounts are not available.

⁵ Includes amounts for area vocational education, NDEA, title VIII. Absorbed into other vocational education provisions after 1964.

⁶ Beginning in 1968, vocational research is included under research and demonstrations.

⁷ Includes funds for teacher training institutes provided under the National Foundation on the Arts and the Humanities Act and NDEA institutes on subject and guidance.

⁸ Includes assistance under the National Foundation on the Arts and the Humanities Act.

⁹ Includes Fulbright-Hays Act.

¹⁰ These data are excluded from total Office of Education expenditures.

¹¹ Includes amounts for Area Redevelopment Act.

¹² Figures are for "obligations."

¹³ Does not include money transferred to the Office of Education consolidated working fund.

SOURCE: Compiled by the National Center for Educational Statistics and the Office of Administration, Office of Education, U.S. Department of Health, Education, and Welfare.