

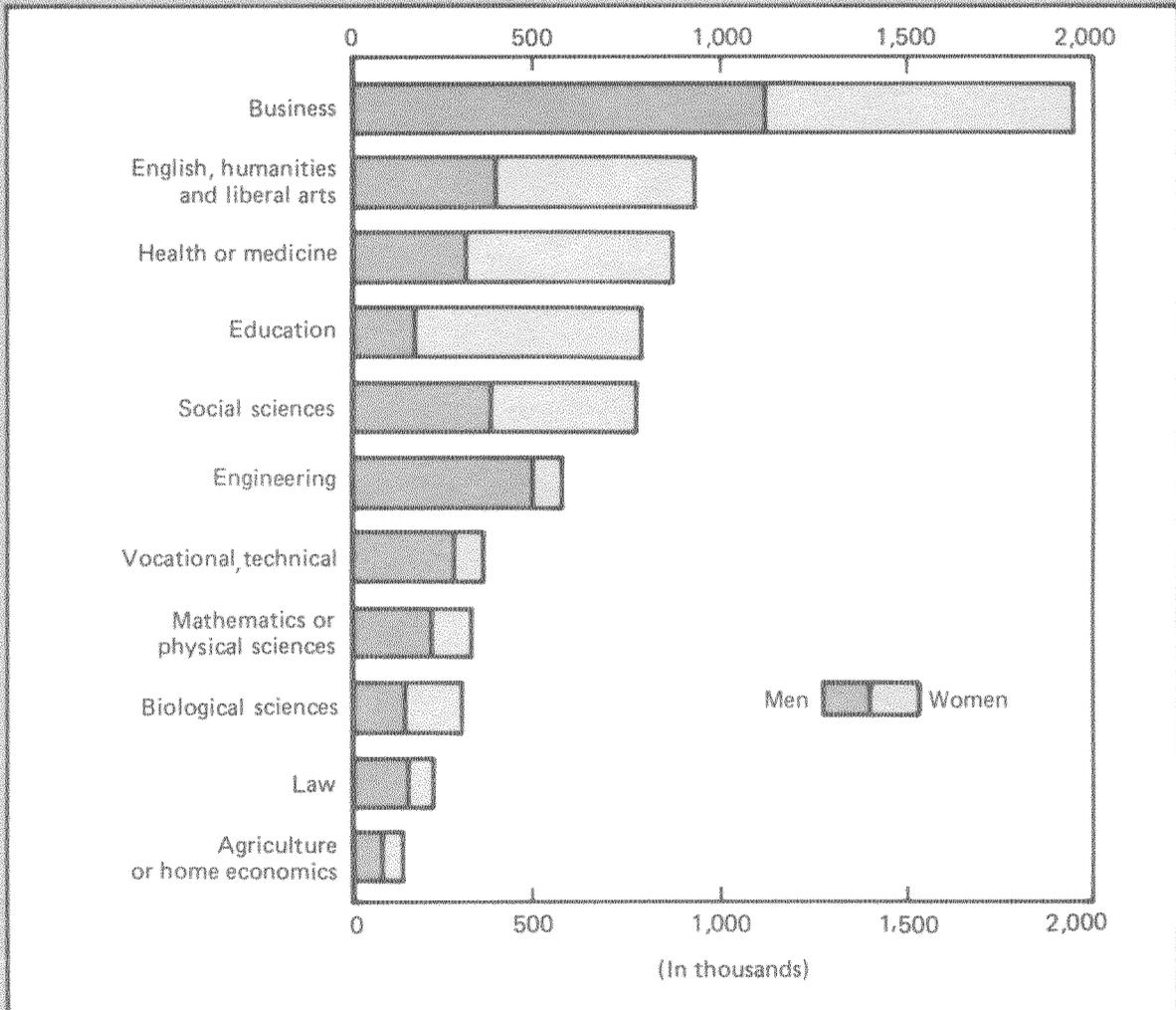
Population Characteristics

U.S. Department of Commerce
BUREAU OF THE CENSUS

Series P-20, No. 351
Issued May 1980

Major Field of Study of College Students: October 1978

Figure 1. Major Field of Study for College Students 14 to 34 Years Old, by Sex: October 1978



Note: Excludes 2.6 million students with unspecified major field.

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SYMBOLS USED IN TABLES

—	Represents zero or rounds to zero.
B	Base less than 75,000.
X	Not applicable.
NA	Not available.

Major Field of Study of College Students: October 1978

This report presents data on major fields of study for students enrolled in college in October 1978 by demographic characteristics such as age, race, sex, and marital status. It also includes characteristics of the student's family, such as family income and the education and occupation of the parent, and school related characteristics, such as full-time status, year of college, and type of college. Similar data were collected in the Current Population Survey in October 1966, 1972, and 1974 and are shown in the text tables of this report.

College enrollment grew by about 64 percent between 1966 and 1978. Large increases occurred in the number of students majoring in some fields of study while declines occurred in others, probably because fields chosen by students often reflect their beliefs in future opportunities in the job market. Of course, some students may choose major fields for personal reasons not connected with occupational training needs. There were large gains in the proportion of students majoring in occupational training fields, such as business, health, and biological sciences, while smaller proportions were enrolled in education and the social sciences. The number of students majoring in education

declined, certainly because of the decline in the need for teachers.

WOMEN

In 1978, women dominated the fields of education, health, English, and liberal arts and humanities—fields traditionally dominated by women. But they were also enrolled in other, more male-dominated fields (table B). The two most crucial shifts for women have been in the fields of education and business. The number of women majoring in education dropped significantly in the 1970's. It had been known for well over a decade that elementary school enrollment would decrease dramatically in the 1970's and the need for teachers would decrease, as births began to decline in the early 1960's and the downward trend continued. However, during the late 1960's, the number of women attending college grew so rapidly, both because of the larger eligible population (the post-World War II birth cohort) and an increased proportion of that population attending college, that the number of students majoring in education (potential teachers) remained high. It was not until the mid 1970's that the numbers of women majoring in education actually declined.

Table A. Field of Study of College Students 14 to 34 Years Old: October 1978, 1974, 1972, and 1966

(Numbers in thousands. Civilian noninstitutional population)

Field of study	Number				Percent				Percent change, 1966-78
	1978	1974	1972	1966	1978	1974	1972	1966	
All students.....	9,838	8,827	8,313	5,999	100.0	100.0	100.0	100.0	64.0
Agriculture ¹	144	104	97	73	1.5	1.2	1.2	1.2	97.3
Biological sciences.....	303	327	257	602	3.1	3.7	3.1	10.0	95.2
Health or medical.....	872	801	695		8.9	9.1	8.4		
Business or commerce.....	1,956	1,376	1,157	888	19.9	15.6	13.9	14.8	120.3
Education.....	781	1,158	1,007	1,118	7.9	13.1	12.1	18.6	-30.1
Engineering.....	565	410	357	534	5.7	4.6	4.3	8.9	5.8
English or journalism.....	192	264	291	620	2.0	3.0	3.5	10.3	50.5
Other humanities ²	741	404	455		7.5	4.6	5.5		
Mathematics or statistics.....	142	168	239	236	1.4	1.9	2.9	3.9	-39.8
Physical science.....	193	134	157	226	2.0	1.5	1.9	3.8	-14.6
Social sciences.....	763	771	954	642	7.8	8.7	11.5	10.7	18.8
Law.....	220	271	237	461	2.2	3.1	2.9	7.7	356.0
Vocational or technical...	359	232	1,503		3.6	2.6	18.1		
Other fields ³	1,523	1,423		600	15.5	16.1		10.9	10.0
Don't know or not reported	1,085	984	906	600	11.0	11.1	10.9	10.0	

¹Includes home economics in 1978.

²Includes liberal arts in 1978.

³Includes no major (461,000) in 1978.

Women began to move out of the traditional fields of study and into more lucrative male-dominated fields, such as business, but it took a long time for these women to respond to market pressures. There are several possible reasons for this. The educational process has directed women toward only a few areas dominated by women. In fields such as nursing and teaching, that do not necessarily lead to career ladder positions as business and the sciences do, women have been able to work for a short time then stop to raise a family and later return to work if they prefer to do so or if it becomes necessary. These fields have not always led to significant career advancement, however. For success in business and the sciences, long-term commitments are required which women have not made in the past. Female college students have begun to move into the business field in large numbers although their enrollment in the traditional education and health fields still remains high.

Business was the largest major field of study among women in 1978. The proportion of female students majoring in education over the period dropped from 33 percent in 1966, to 21 percent in 1972, and to 13 percent in 1978. During the entire period, the number of women majoring in business quadrupled to 819,000—a rise from 9 to 17 percent of all female students. Also, women grew from 23 percent to 42 percent of all business majors in the survey period. In the 12-year period, women also made considerable gains in engineering and the biological and health sciences. Yet,

the number of women in engineering remained small, and it is the area in which they are most severely under-represented.

BLACK COLLEGE STUDENTS

College enrollment tripled for Blacks between 1966 and 1978. There was a large increase in the number of Black students enrolled in several fields, but no significant rise in the number enrolled in mathematics, physical sciences, or agriculture (table C). The dominant major fields changed radically for Blacks; in 1966, about 40 percent of Black students were majoring in education or the social sciences, and only 15 percent were majoring in business. In 1978, the proportion of Black students in education or social science fields dropped to about 17 percent and the proportion in business rose to about 22 percent.¹

A higher proportion of Black students was majoring in business than in any other field in 1978. Black students were less likely than other students to major in English and liberal arts. Because of the large increases in Black college enrollment, the changes in number of Black students in particular fields is impressive. In business, enrollment grew from 41,000 to 220,000, in biology and the health and medical fields the number increased from 27,000 to 113,000, and in engineering the number rose from 12,000 to 41,000.

¹ The differences between 15, 17, and 22 percent were not statistically significant.

Figure 2.

Major Field of Study for Undergraduates in 4-Year Colleges: October 1978, 1972, and 1966

(Numbers in thousands)

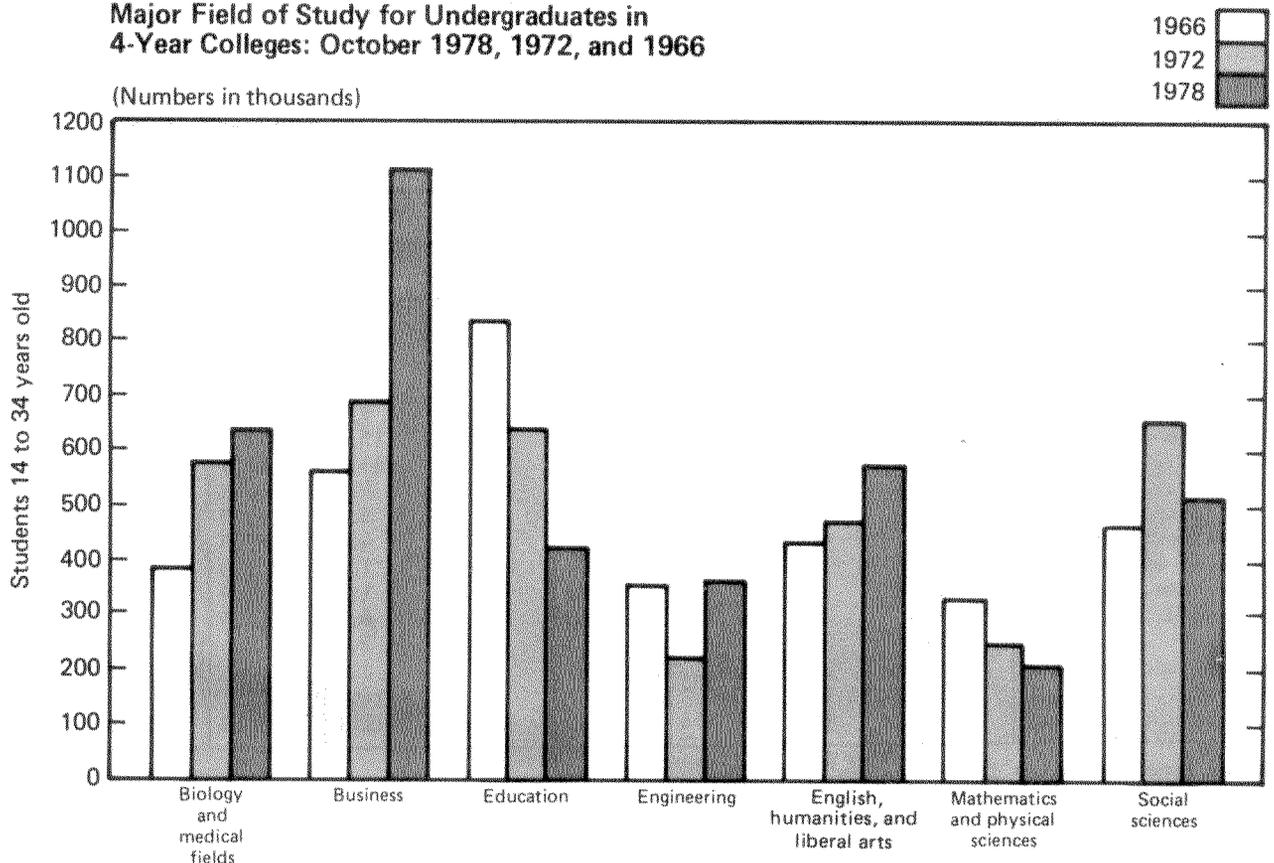


Table B. Field of Study of Female College Students 14 to 34 Years Old: October 1978, 1974, 1972, and 1966
(Numbers in thousands. Civilian noninstitutional population)

Field of study	Number of women enrolled				Percent women of all students			
	1978	1974	1972	1966	1978	1974	1972	1966
All female students.....	4,714	3,901	3,459	2,289	47.9	44.2	41.6	38.2
Agriculture ¹	62	14	11	2	43.1	13.5	11.3	2.7
Biological sciences.....	148	134	94	268	48.8	41.0	36.6	44.5
Health or medical.....	569	514	393		65.3	64.2	56.5	
Business or commerce.....	819	436	268	204	41.9	31.7	23.2	23.0
Education.....	601	841	728	760	77.0	72.6	72.3	68.0
Engineering.....	66	28	7	10	11.7	6.8	2.0	1.9
English or journalism.....	125	156	150	316	65.1	59.1	51.5	51.0
Other humanities ²	416	194	215		56.1	48.0	47.3	
Mathematics or statistics.....	52	75	82	86	36.6	44.6	34.3	36.4
Physical science.....	61	36	43	25	31.6	26.9	27.4	11.1
Social sciences.....	389	342	453	241	51.0	44.4	47.5	37.5
Law.....	70	63	42	126	31.8	23.2	17.7	27.4
Vocational or technical.....	75	59	596		20.9	25.4	39.7	
Other fields ³	756	568	380	251	49.6	39.9	41.9	41.9
Don't know or not reported.....	507	440			46.7	44.7		

¹Includes home economics in 1978.

²Includes liberal arts in 1978.

³Includes no major (237,000) in 1978.

Table C. Field of Study of Black College Students 14 to 34 Years Old: October 1978, 1974, 1972, and 1966
(Numbers in thousands. Civilian noninstitutional population)

Field of study	Number				Percent			
	1978	1974	1972	1966	1978	1974	1972	1966
All Black students.....	1,021	814	727	282	100.0	100.0	100.0	100.0
Agriculture ¹	5	1	2	2	0.5	0.1	0.3	0.7
Biological sciences.....	22	12	19	27	2.2	1.5	2.6	9.6
Health and medical.....	91	88	67		8.9	10.8	9.2	
Business or commerce.....	220	156	90	41	21.6	19.2	12.4	14.5
Education.....	91	127	90	65	8.9	15.6	12.4	23.0
Engineering.....	41	27	19	12	4.0	3.3	2.6	4.3
English or journalism.....	16	24	17	15	1.6	2.9	2.3	5.3
Other humanities ²	44	14	33		4.3	1.7	4.5	
Mathematics or statistics.....	11	11	12	8	1.1	1.4	1.7	2.8
Physical science.....	11	3	10	12	1.1	0.4	1.4	4.3
Social sciences.....	79	66	103	48	7.7	8.1	14.2	17.0
Law.....	19	15	28	17	1.9	1.8	3.9	6.0
Vocational or technical.....	42	23	99		4.1	2.8	13.6	
Other fields ³	131	128	136	34	12.8	15.7	18.7	12.1
Don't know or not reported.....	197	119			19.3	14.6		

¹Includes home economics in 1978.

²Includes liberal arts in 1978.

³Includes no major (38,000) in 1978.

STUDENTS OF SPANISH ORIGIN

Spanish students² constituted about 4 percent of all college students 14 to 34 years old in 1978. They were more likely than other students to be attending 2-year colleges; one-half of undergraduate students of Spanish origin compared with less than one-third of all other students were enrolled in 2-year colleges (table 1). Also, Spanish students

²Persons of Spanish origin may be of any race and are included in figures for the White and Black populations also.

were more likely than other students to be attending college part time; 4 out of 10 Spanish students attended part time compared with 3 out of 10 other students. In both cases (attending 2-year colleges and attending part time), figures for White and Black students were not significantly different from those for all students or from each other. The distribution of major field of study for Spanish students was similar to that for all students. About 1 out of 5 students of Spanish origin was majoring in business, 1 out of 10 was majoring in education, and a similar proportion was in English or liberal arts.

STUDENTS 35 YEARS OLD AND OVER

A substantial rise in college enrollment of persons 35 years old and over occurred in the 1970's.³ The majority of these 1.3 million students of nontraditional college age in 1978 were women (65 percent). Even among graduate students, a majority were women (60 percent), and the largest group of them was majoring in education. About 35 percent of older female graduate students reported education as their major (table 2), and the vast majority were attending part time; most of them were likely to be current teachers and administrators upgrading their skills or working toward certification required in most States. In fact, of women of all ages majoring in education, 40 percent were graduate students.

About 40 percent of all older students were enrolled in graduate school compared with 17 percent of students under 35 years old. The largest group of men was majoring in business: one-fifth of graduates and one-third of undergraduates. For women, the largest group of undergraduates was in business (one-fourth) and about 15 percent each were in the health fields and liberal arts. Of graduate students, one-third were in education.

TWO-YEAR COLLEGES

Among undergraduates 14 years old and over differences in the fields of study for students in 2-year colleges and freshmen and sophomores in 4-year colleges were slight; however, there were more 2-year than 4-year students majoring in business fields (25 percent compared with 18 percent). More students in 2-year colleges than in 4-year colleges were majoring in vocational and technical studies—9 percent versus 2 percent (table 1). Conversely, slightly more 4-year college freshmen and sophomores were enrolled in biological sciences, education, engineering, and social sciences. About 8 percent of students in 2-year colleges and the first 2 years of 4-year colleges reported they had no major field. Overall, the major fields of study in the two types of colleges were not very different.

FAMILY CHARACTERISTICS

Data on family characteristics presented in tables 5, 6, and 7 show major field of study for dependent family members 18 to 24 years old (usually the son or daughter enumerated as a member of their parents' household) by educational attainment and occupation of the father or mother, referred to here as the householder, and by family income.

Educational background has some influence on a student's major field of study. College women in families in which the householder had attended college were more likely to major in English or liberal arts and humanities than those whose

householder did not attend college, and they were less likely to be in health and medical fields (table 5). There is some evidence that women in health fields tended to be from families of lower educational backgrounds, whereas men in those fields were from higher educational backgrounds. Data on college degrees earned show that women were more likely to be in technical fields, training to be therapists, technicians, and nurses, while men tended to be training to be doctors or dentists.⁴ For other major fields, the differences in specific majors of men and women were not so great. If the householder had finished college, the female student was less likely than other women to be majoring in business and more likely than others to be in liberal arts or humanities; if the householder had not completed high school, she was more likely to be in education. Males were more likely than others to be majoring in a health field if they had been reared by a college graduate, but if the householder had completed high school but did not complete 4 years of college, the male student was more likely than others to major in business.

Field of study also varies somewhat by occupation of the parent. About one-fifth of male students who were dependent family members were in families in which the householder was in a professional or technical occupation; about the same proportion were in families of managers and administrators, and one-sixth were in families of clerical and sales workers. Those in families of professional and technical workers were less likely than average to major in business, and those whose parents were in management, clerical positions, or sales were more likely than average to major in business. Men in professional and management households were more likely than others to be in health or medical fields and engineering and less likely to be in vocational fields. The distribution of female students by the occupational factor is not very different from that of their male counterparts. Women, too, were less likely to be majoring in business if they grew up in the home of a professional.

Major field of study is related to family income for dependent family members (table 7). As with education and occupational status of the parent, there is some variation by family income in the students' chosen fields of study. Men from families with incomes of \$20,000 or more were more likely to major in business (about one-fourth) than those from lower income families. Women were more likely to be in liberal arts if their family income was \$20,000 or more.

Therefore, the evidence supports the position that although some persons from each background enter each field, students from lower status backgrounds based on education, occupation, and income status of family tend to choose more direct occupational training (e.g., health fields such as nursing for women) and those from higher status backgrounds tend to choose (or are able to afford) higher status fields (e.g., engineering or health such as medicine for men) or more general educations (English and liberal arts for women).

³Current Population Reports, Series P-20, No. 335, *School Enrollment—Social and Economic Characteristics of Students: October 1978 (Advance Report)*.

⁴Department of Health, Education, and Welfare, National Center for Education Statistics, *Digest of Education Statistics, 1977-78*.

RELATED REPORTS

Data pertaining to the major field of study of college students were last published in Current Population Reports, Series P-20, No. 289, *Major Field of Study of College Students: October 1974*. Similar data for persons enrolled in college were published in Current Population Reports, Series P-20, No. 260, *Social and Economic Characteristics of Students: October 1972*, and Current Population Reports, Series P-20, No. 183, *Characteristics of Students and Their Colleges: October 1966*.

Data on school enrollment for October 1978 were published in Current Population Reports, Series P-20, No. 346, *School Enrollment—Social and Economic Characteristics of Students: October 1978*. Statistics on school enrollment for October in years prior to 1978 have been presented in other reports in the P-20 series.

Statistics on school enrollment for cities, standard metropolitan statistical areas, States, regions, and the United States appear in reports of the decennial censuses. Detailed statistics on school enrollment by age and socioeconomic characteristics for regions and the United States are presented in the subject reports of the 1970 census, especially in PC(2)-5A, *School Enrollment*.

NOTE

In the past the Census Bureau has designated a head of household to serve as the central reference person for the collection and tabulation of data for each member of the household (or family). However, the trend toward recognition of equal status and roles for adult family members makes the term "head" less relevant in the analysis of household and family data. As a result, the Bureau is currently developing new techniques for the enumeration and presentation of data which will eliminate the concept "head." Although the data in this report are based on this concept, methodology for future Census Bureau reports will reflect a gradual movement away from this traditional practice.
