

# Population Characteristics

Series P-20, No. 289  
Issued February 1976

## MAJOR FIELD OF STUDY OF COLLEGE STUDENTS: OCTOBER 1974

U.S. DEPARTMENT OF COMMERCE  
BUREAU OF THE CENSUS





**U.S. Department of Commerce**  
**Elliot L. Richardson, Secretary**  
**James L. Pate, Assistant Secretary**  
for Economic Affairs

**BUREAU OF THE CENSUS**  
**Vincent P. Barabba, Director**  
**Robert L. Hagan, Deputy Director**  
**Daniel B. Levine, Associate Director**  
for Demographic Fields

**POPULATION DIVISION**  
**Meyer Zitter, Chief**

#### ACKNOWLEDGMENTS

This report was prepared by Mark S. Littman, Survey Statistician, under the direction of Larry E. Suter, Chief, Education and Social Stratification Branch. Statistical assistance was provided by Andrea E. Word and Brenda Bigelow. Overall supervision was provided by Charles E. Johnson, Jr., Assistant Division Chief (Demographic and Social Statistics Programs), and Paul C. Glick, Senior Demographer, Population Division.

#### SUGGESTED CITATION

U.S. Bureau of the Census, Current Population Reports, P-20, No. 289, "Major Field of Study of College Students: October 1974," U.S. Government Printing Office, Washington, D.C. 1976.

# CURRENT POPULATION REPORTS

## Population Characteristics

### MAJOR FIELD OF STUDY OF COLLEGE STUDENTS: OCTOBER 1974

---

#### CONTENTS

|                       | Page |
|-----------------------|------|
| Introduction .....    | 1    |
| Related reports ..... | 4    |

#### TEXT TABLES

| Table |   | Page |
|-------|---|------|
| A.    | Field of study of college students 14 to 34 years old: October 1974, 1972, and 1966 .....   | 1    |
| B.    | Major field of study of college students 14 years old and over by age: October 1974 .....   | 2    |
| C.    | Percent female by major field of study for college students 14 to 34 years: October 1974, 1972, and 1966 .....                        | 3    |
| D.    | Major field of study of two-year college students compared with four-year college students 14 to 34 years old: October 1974 .....     | 3    |
| E.    | Family income of college students 18 to 24 years old who are dependent family members by selected fields of study: October 1974 ..... | 4    |

#### DETAILED TABLES

| Table |   | Page |
|-------|---|------|
| 1.    | Field of study of college students 14 years old and over by age, race, Spanish origin, sex, and year of enrollment: October 1974 .....  | 7    |
| 2.    | Field of study of college students 14 years old and over, by sex and age: October 1974 .....  | 10   |
| 3.    | Field of study of college students 14 years old and over by age, race, region of residence, type of college, attendance status, marital status, and living arrangements: October 1974 ..... | 12   |
| 4.    | Field of study of college students 18 to 24 years old in primary families, by years of school completed by family head, and sex of student: October 1974 .....                              | 26   |
| 5.    | Field of study of college students 18 to 24 years old and over in primary families, by major occupation group of family head: October 1974 .....  | 28   |
| 6.    | Field of study of college students 18 to 24 years old in primary families by family income, and sex: 1974 ..  | 30   |

CONTENTS—Continued

APPENDIX

|  | Page |
|--|------|
| Definitions and explanations. . . . .            | 33   |
| Source and reliability of the estimates. . . . . | 34   |

APPENDIX TABLES

|   |    |
|---|----|
| A-1. Standard errors for estimated numbers of persons, total or white population. . . . .   | 35 |
| A-2. Standard errors for estimated percentages of persons, total or white population. . . . .   | 36 |
| A-3. Standard errors for estimated numbers of persons, Negro and other races. . . . .   | 36 |
| A-4. Standard errors for estimated percentages of persons, Negro and other races . . . . .  | 37 |
| A-5. Factors to be applied to tables A-1 through A-4 to estimate standard errors for the various characteristics<br>in this report. . . . . | 38 |

# MAJOR FIELD OF STUDY OF COLLEGE STUDENTS: OCTOBER 1974

## INTRODUCTION

Data on major field of study of college students in 1966, 1972, and 1974 are presented in this report. Such data may be useful in showing whether greater opportunities for occupational choices have affected the fields of college study for women and also throw light on the extent to which students from different economic backgrounds tend to major in fields which would move them into an economic status similar to, or different from, that of their parents.

This report presents data on the major field of study of college students who were enrolled in October 1974, based on the Census Bureau's Current Population Survey (CPS). The tables offer cross-classifications of data on major field of study by such characteristics of the students as age, race, year of college in which enrolled, type of college (two-year or four-year), and family income. Similar data were collected in the October 1972 and October 1966 Current Population Surveys.

Changes between 1966 and 1974. Since 1966, the number of college students 14 to 34 years of age has increased by about 47 percent, from 6 million to about 8.8 million in October 1974. This increase has not occurred equally in all major fields of study and some fields which had increases in enrollment between 1966 and 1972 declined in popularity between 1972 and 1974 (see table A). For example, the number of students majoring in the social sciences increased from about 640,000 to 950,000 between 1966 and 1972, but declined to 770,000 by 1974. The apparent declines since 1972 in the humanities, including English and journalism, and the physical sciences were not statistically significant. Some of the fields showing increases since 1972 were: the biological sciences, perhaps in part as a result of recent concerns for environmental issues; business and commerce, which continues as in 1972 to be the most popular major with about 16 percent of all college students enrolled in this field; and education, which increased to about its 1966 level numerically by 1974.

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

(Numbers in thousands)

| Major field of study            | 1974  | 1972  | 1966  | Percent change between-- |         |                 |
|---------------------------------|-------|-------|-------|--------------------------|---------|-----------------|
|                                 |       |       |       | 1972-74                  | 1966-72 | 1966-74         |
| Total enrolled.....             | 8,827 | 8,313 | 5,999 | 6.2                      | 38.6    | 47.1            |
| Agriculture and forestry.....   | 104   | 97    | 73    | 7.2                      | (B)     | 42.5            |
| Biological sciences.....        | 327   | 257   | 602   | 27.2                     | 58.1    | <del>33.1</del> |
| Health or medical profession... | 801   | 695   |       | 15.3                     |         | <del>33.1</del> |
| Business or commerce.....       | 1,376 | 1,157 | 888   | 18.9                     | 30.3    | <del>18.9</del> |
| Education.....                  | 1,158 | 1,007 | 1,118 | 15.0                     | -9.9    | 3.6             |
| Engineering.....                | 410   | 357   | 534   | 14.8                     | -33.1   | -23.2           |
| English or journalism.....      | 264   | 291   | 620   | -9.3                     | 20.3    | 7.7             |
| Other humanities.....           | 404   | 455   |       | -11.2                    |         |                 |
| Law.....                        | 271   | 237   | (NA)  | 14.3                     | (NA)    | (NA)            |
| Math or statistics.....         | 168   | 239   | 236   | -29.7                    | 1.3     | -28.8           |
| Physical sciences.....          | 134   | 157   | 226   | -14.6                    | -30.5   | -40.7           |
| Social sciences.....            | 771   | 954   | 642   | -19.2                    | 48.6    | 20.1            |
| Other.....                      | 1,580 | 1,503 | 461   | 5.1                      | 226.0   | 242.7           |
| None and not reported.....      | 984   | 906   | 600   | 8.6                      | 51.0    | 64.0            |

B Base less than 75,000.

NA Not available.

**Age and major field of study.** Except for the field of education, there were few large differences by age in the proportion of students majoring in each field of study, although a higher proportion of younger than older students had no major or did not report a field of study (table B). About 21 percent of college students over 35 years of age were majoring in education, compared with only 12 percent of students under 22 years of age. This is at least in part due to the requirement of some school districts that teachers pursue some graduate degrees or credits while no such requirement is made for persons in most other occupations. The lack of large differences in the proportion of students by age who were majoring in the other major fields of study seems to indicate that older students do **not** necessarily opt for fields of study that are more occupationally-oriented (e.g. nursing, business, etc.) than younger students as a result of their presumably increased exposure to the labor market. This contention is supported as well by data relating major field of study to year of college in which enrolled (see table 1).

**Major field of study of women.** Women increased from 38 percent of the total college enrollment in 1966 to about 44 percent by 1974. However, the proportion of students in each major field who were women varied a great deal from 7 percent of engineering majors to a high of 73 percent of students majoring in education in 1974 (table C). Most fields remained disproportionately

filled by members of one sex in 1974, although some fields came closer to representing the sexual composition of the total college student body than was the case in 1966. Women increased from 23 percent to 32 percent of business and commerce majors for example. However, women were still overrepresented in such fields as education, the humanities, and the health fields; and underrepresented in such fields as engineering, law, the physical sciences, and agriculture (although there is some evidence to suggest that women increased from 3 to 14 percent of persons majoring in this field between 1966 and 1974).

**Two-year and four-year college students.** There were few large differences in the proportion of two-year college students and first and second year students at four-year colleges majoring in each field in 1974 (table D). However, a higher proportion of two-year college students (21 percent) were majoring in business or commerce than first and second year students at four-year colleges (13 percent), and more two-year college students (7 percent) were majoring in technical or vocational fields than were freshmen and sophomores at four-year institutions (2 percent). Two-year college students were more likely than four-year students to major in non-traditional ("other" in table D) fields. There were no large differences in the proportions majoring in the other specific fields shown in table D between two-year college students and first and second year students at four-year schools.

**Table B. Major Field of Study of College Students 14 Years Old and Over by Age: October 1974**

| Major field of study              | Under<br>22 years | 22 to<br>34 years | 35 years<br>and over |
|-----------------------------------|-------------------|-------------------|----------------------|
| Total.....(thousands)..           | 5,098             | 3,729             | 1,029                |
| Percent.....                      | 100.0             | 100.0             | 100.0                |
| Agriculture and forestry.....     | 1.3               | 1.0               | 0.6                  |
| Biological sciences.....          | 4.3               | 2.9               | 1.2                  |
| Business or commerce.....         | 14.0              | 17.7              | 16.5                 |
| Education.....                    | 12.4              | 14.1              | 20.7                 |
| Engineering.....                  | 4.3               | 5.1               | 1.9                  |
| English or journalism.....        | 3.1               | 2.9               | 1.7                  |
| Other humanities.....             | 4.7               | 4.4               | 7.1                  |
| Health or medical profession..... | 10.3              | 7.4               | 6.7                  |
| Law.....                          | 2.0               | 4.5               | 1.8                  |
| Math or statistics.....           | 2.2               | 1.5               | 1.6                  |
| Physical sciences.....            | 1.4               | 1.7               | 0.6                  |
| Social sciences.....              | 8.1               | 9.7               | 11.1                 |
| Vocational-technical studies..... | 2.6               | 2.6               | 3.7                  |
| Computer science.....             | 0.8               | 0.9               | 1.9                  |
| Other.....                        | 14.1              | 16.9              | 17.8                 |
| None and not reported.....        | 14.3              | 6.8               | 5.2                  |

Table C. Percent Female by Major Field of Study for College Students 14 to 34 Years:  
October 1974, 1972, and 1966

| Major field of study              | Percent female in-- |      |        |
|-----------------------------------|---------------------|------|--------|
|                                   | 1974                | 1972 | 1966   |
| Total enrolled.....               | 44.2                | 41.6 | 38.2   |
| Agriculture and forestry.....     | 13.5                | 11.3 | 2.6    |
| Biological sciences.....          | 41.0                | 36.6 | } 44.5 |
| Health or medical profession..... | 64.2                | 56.5 |        |
| Business or commerce.....         | 31.7                | 23.2 | 23.0   |
| Education.....                    | 72.6                | 72.3 | 67.9   |
| Engineering.....                  | 6.8                 | 2.0  | 1.9    |
| English or journalism.....        | 59.1                | 51.5 | } 50.9 |
| Other humanities.....             | 48.0                | 47.3 |        |
| Law.....                          | 23.2                | 17.7 | (NA)   |
| Math or statistics.....           | 44.6                | 34.3 | 36.5   |
| Physical sciences.....            | 26.9                | 27.4 | 11.1   |
| Social sciences.....              | 44.4                | 47.5 | 37.6   |
| Vocational-technical studies..... | 25.4                | (NA) | (NA)   |
| Computer science.....             | 20.0                | (NA) | (NA)   |
| Other.....                        | 41.0                | 39.7 | 27.4   |
| None and not reported.....        | 44.7                | 41.9 | 41.9   |

NA Not available.

Table D. Major Field of Study of Two-Year College Students Compared With Four-Year College Students 14 to 34 Years Old: October 1974

| Major field of study              | Two-year college | Four-year college    |                           |
|-----------------------------------|------------------|----------------------|---------------------------|
|                                   |                  | Total undergraduates | 1st and 2nd year students |
| Total.....(thousands)..           | 2,076            | 5,261                | 2,667                     |
| Percent.....                      | 100.0            | 100.0                | 100.0                     |
| Agriculture and forestry.....     | 1.1              | 1.3                  | 1.6                       |
| Biological sciences.....          | 2.0              | 4.6                  | 4.6                       |
| Business or commerce.....         | 20.6             | 14.6                 | 12.7                      |
| Education.....                    | 7.0              | 13.4                 | 10.2                      |
| Engineering.....                  | 4.2              | 4.7                  | 5.4                       |
| English or journalism.....        | 1.6              | 3.5                  | 3.0                       |
| Other humanities.....             | 4.2              | 4.9                  | 5.4                       |
| Health or medical profession..... | 8.6              | 9.1                  | 11.1                      |
| Law.....                          | 1.8              | 1.8                  | 1.8                       |
| Math or statistics.....           | 1.4              | 2.2                  | 2.0                       |
| Physical sciences.....            | 1.0              | 1.7                  | 1.3                       |
| Social sciences.....              | 5.5              | 9.7                  | 7.2                       |
| Vocational-technical studies..... | 7.1              | 1.3                  | 1.6                       |
| Computer science.....             | 1.4              | 0.6                  | 0.7                       |
| Other.....                        | 20.4             | 13.4                 | 11.8                      |
| None and not reported.....        | 11.9             | 13.3                 | 19.6                      |

Table E. Family Income of College Students 18 to 24 Years Old Who Are Dependent Family Members by Selected Fields of Study: October 1974

| Major field of study              | Number (thousands) | Percent | Under \$10,000 | \$10,000 to \$11,999 | \$12,000 to \$14,999 | \$15,000 to \$24,999 | \$25,000 or more | Not reported |
|-----------------------------------|--------------------|---------|----------------|----------------------|----------------------|----------------------|------------------|--------------|
| Total.....                        | 4,575              | 100.0   | 19.0           | 6.8                  | 14.6                 | 30.8                 | 19.4             | 9.4          |
| Biological sciences.....          | 184                | 100.0   | 6.0            | 10.9                 | 10.3                 | 27.7                 | 37.5             | 7.6          |
| Business or commerce.....         | 652                | 100.0   | 20.1           | 6.4                  | 13.7                 | 28.7                 | 19.8             | 11.3         |
| Education.....                    | 585                | 100.0   | 20.0           | 7.2                  | 15.2                 | 32.3                 | 18.1             | 7.4          |
| Engineering.....                  | 216                | 100.0   | 14.8           | 9.7                  | 14.8                 | 38.9                 | 14.8             | 6.9          |
| English or journalism.....        | 146                | 100.0   | 19.2           | 8.9                  | 15.1                 | 24.0                 | 23.3             | 9.6          |
| Other humanities.....             | 204                | 100.0   | 19.1           | 9.3                  | 10.8                 | 38.7                 | 19.1             | 3.4          |
| Health or medical profession..... | 418                | 100.0   | 19.1           | 5.7                  | 14.8                 | 34.2                 | 19.9             | 6.0          |
| Law.....                          | 116                | 100.0   | 11.2           | 4.3                  | 14.7                 | 25.9                 | 28.4             | 14.7         |
| Math or statistics.....           | 108                | 100.0   | 25.0           | 4.6                  | 23.1                 | 28.7                 | 17.6             | 0.9          |
| Social sciences.....              | 367                | 100.0   | 19.6           | 6.5                  | 12.3                 | 30.5                 | 22.6             | 8.4          |
| Vocational-technical studies..... | 118                | 100.0   | 32.2           | 6.8                  | 19.5                 | 28.8                 | 10.2             | 2.5          |

**Family income and major field of study.** About 4.6 million of the Nation's college students 18 to 24 years old were dependent family members, generally sons and daughters of the household head. There was considerable variation by major field of study in the family income distributions of these students (table E). Fields with high proportions of students with family income over \$25,000 were biological sciences (about 38 percent) and law (28 percent), whereas some of those with low proportions with correspondingly high family income were vocational and technical studies (10 percent) and engineering (15 percent). In the remaining fields, around 20 percent of the students came from families with income of \$25,000 or more.

### RELATED REPORTS

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

Data on school enrollment for October 1974 were presented in "Social and Economic Characteristics of Students: October 1974," **Current Population Reports**,

Series P-20, No. 286. Statistics on school enrollment for October of the years prior to 1974 have been published in other reports in Series P-20.

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 Subject Reports of the 1970 census, especially in PC(2)-5A, **School Enrollment**.

Figures on school enrollment from the October Current Population Survey differ from decennial census data for reasons in addition to the difference in the dates. In the first place, the survey data exclude the institutional population and members of the Armed Forces. These two groups were included in the census. Second, there were differences in field work. The small group of Current Population Survey enumerators were more experienced and had more intensive training and supervision than the large number of temporary census enumerators and may have more often obtained more accurate answers from respondents. Third, the census was taken in April and relates to enrollment since February 1, whereas the surveys were taken in October and relate to enrollment in the current term. This difference in months of the year affects not only the extent of school enrollment (through "dropouts" during the school year, etc.) but also the level of school in which persons of a given age are enrolled.



**Data from school systems.** Information on college enrollment is also collected and published by Federal, State, and local governmental agencies, and by independent research organizations. This information is generally obtained from reports of school systems and institutions of higher learning, and from other surveys and censuses. These data are only roughly comparable with

data collected by the Bureau of the Census by household interviews, however, because of differences in definitions, subject matter covered, and enumeration methods. The census data are subject to sampling variability, which may be relatively large where numbers for specific age or population groups, or for given school categories, are small.