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AUTHOR Lewis, Laurie L.; Farris, Elizabeth
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ABSTRACT

The report presents data from a nationwide survey conducted in spring 1988 to obtain information about undergraduate general education and humanities requirements in U.S. colleges and universities for students entering in 1983-84 and 1988-89. Two sections of the report focus on general education requirements at four-year schools and general education requirements at two-year schools. Each section considers presence of requirements in selected academic areas, credit hour requirements, and structure of general education requirements. Highlights of the survey include the following: (1) in 1988, 96% of the baccalaureate-granting four-year U.S. colleges had general education requirements for all undergraduate degrees; (2) students entering four-year colleges in 1988-89 must take an average of 52.1 semester credit hours in general education; (3) in 1988, 90% of associate degree-granting two-year schools required all degree candidates to take some general education courses to graduate; and (4) students entering two-year schools in 1988-89 must take an average of 30.5 semester credit hours in general education. Appended are detailed tables, technical notes concerning higher education surveys, survey methodology, reliability of survey estimates, school type relationships, and the survey questionnaire. (SM)

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UNDERGRADUATE GENERAL EDUCATION AND HUMANITIES REQUIREMENTS

Laurie L. Lewis
Elizabeth Farris
Westat, Inc.

Higher Education Surveys

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Higher Education Surveys Report
Survey Number 7
January 1989

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HIGHLIGHTS

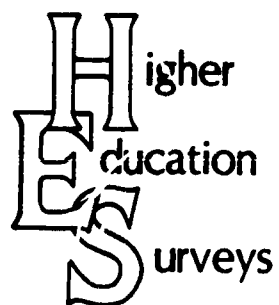
Results of a spring 1983 HES survey offer the following information about undergraduate general education and humanities requirements in U.S. colleges and universities for students entering in 1983-84 and 1988-89.

FOUR-YEAR SCHOOLS

- In 1988, almost all (96%) baccalaureate-granting four-year colleges in the United States had general education requirements for all undergraduate degree candidates.
- Students entering four-year colleges in 1988-89 must take an average of 52.1 semester credit hours in general education, or 41 percent of the total credit hours needed for graduation (125.8). The average humanities requirement is 25.0 credit hours, about half of the required general education hours and about one-fifth of the total hours.
- One-half or more of the four-year colleges and universities require coursework in the following subject areas for students entering in 1988-89: English composition (88%), social sciences (80%), natural and physical sciences (67%), history (62%), mathematics (59%), English or American literature (55%), "other humanities fields, including interdisciplinary humanities courses" (54%), and "unspecified humanities courses, or a combination of humanities courses" (51%).
- The percentage of four-year colleges with requirements in various humanities subjects increased slightly from 1983-84 to 1988-89; the increases in the percentage of schools requiring courses in various nonhumanities subjects are somewhat larger.
- The average minimum credit hour requirements at four-year colleges for students entering in 1988-89 are: "other humanities fields, including interdisciplinary humanities courses" (6.2), social sciences (5.6), English composition (4.6), natural and physical sciences (4.5), "unspecified humanities courses or a combination of humanities courses" (4.3), studio and performing arts (4.1), history (3.4), mathematics (2.5), English or American literature (2.4), "mathematics and/or science" (2.2), foreign languages and literature (2.0), philosophy (1.8), and classics (0.2).

TWO-YEAR SCHOOLS

- In 1988, 90 percent of associate degree-granting two-year schools in the United States required all degree candidates to take some general education courses to graduate.
- Students entering two-year schools in 1988-89 must take an average of 30.5 semester credit hours in general education, or 47 percent of the total credit hours needed for graduation (64.3). The average humanities requirement is 12.6 credit hours, 41 percent of the required general education hours and about one-fifth of the total hours required for graduation.
- At least half of all two-year schools require coursework in the following subject areas for 1988-89 entrants: English composition (94%), social sciences (68%), mathematics (64%), and natural and physical sciences (55%).
- An average of two or more credit hours are required in the following subject areas for students entering two-year colleges in 1988-89: English composition (4.7), social sciences (4.3), natural and physical sciences (3.3), "unspecified humanities courses, or a combination of humanities courses" (2.8), mathematics (2.8), and "mathematics and/or science" (2.1).



UNDERGRADUATE GENERAL EDUCATION AND HUMANITIES REQUIREMENTS

Laurie L. Lewis
Elizabeth Farris
Westat, Inc.

Higher Education Surveys Report
Survey Number 7 January 1989

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INTRODUCTION

In the past several years, a number of national commissions and reports have called for curricular reform among colleges and universities. A common theme running through many of these reports is the need for greater rigor and coherence in the undergraduate curriculum. Anecdotal evidence suggests that some higher education institutions are reexamining their course requirements in light of these calls for reform. There are almost no national data, however, that measure the extent of change in general education requirements or that examine the role the humanities play among these requirements. The purpose of this survey, requested by the National Endowment for the Humanities (NEH) and conducted through the Higher Education Surveys (HES) system, was to collect such data in order to provide reliable national estimates of general education and humanities requirements for undergraduates and to assess changes in requirements from 1983 to 1988.

This survey requested information about:

- The existence of general education requirements at the school, i.e., requirements that all undergraduates must meet, regardless of major;
- The structure of the general education requirements -- the kinds of choices students have in meeting general education requirements;
- The academic years during which college students usually fulfill their general education requirements;
- The total number of credit hours required for graduation, the minimum number of credit hours required in general education, and the minimum number of credit hours required in humanities, for the baccalaureate and associate degrees;
- The minimum number of credit hours required of all degree candidates in specific academic areas;
- The foreign language requirements for all undergraduates; and
- Whether the general education requirements stipulate that a student must take a survey course in certain areas.

To allow for comparisons over time, the majority of survey questions asked for information concerning the institutional requirements for students entering in 1983-84 and 1988-89.

For the purposes of this survey, "general education" is defined as that part of the curriculum that all undergraduates are required to take, regardless of major, in

order to graduate. Often referred to as the "breadth" component of the curriculum, general education is distinct from the "depth" major and from free electives. Some institutions require students to take a specific set or "core" of general education courses. Other institutions adopt a distribution scheme whereby students can select from groups of courses to complete the general education requirements.

The data were collected in spring 1988 from a nationally representative sample of 504 colleges and universities, representing a universe of approximately 2,800 colleges and universities (1,560 four-year schools and 1,245 two-year schools). A 98 percent response rate (496 colleges and universities) was obtained. Appendix B provides a more detailed discussion of the sample and survey methodology. The survey questionnaire is reproduced in Appendix C.

Colleges differ in their approaches to general education requirements. Some schools require all students to take courses from common "core" areas, while other schools tailor general education requirements to specific majors or types of degrees. For this survey, NEH was interested in the minimum requirements that all students at a college or university must meet to obtain a degree. Accordingly, if any group of students (e.g., students in the School of Fine Arts) was exempted from a particular requirement, the college or university was considered as not having that requirement. Thus, the numbers in this report do not reflect what some (or even most) students actually take, but the minimum required for all students.

Because of this approach, doctoral universities, which are composed of several colleges or schools that operate fairly independently, often reported relatively low requirements. Each school or college of a university is more comparable in size and structure to a baccalaureate college than is the entire university. Since each school at a university usually sets its own requirements, the common requirements across the university are usually lower than the common requirements in the more homogeneous baccalaureate schools.

General education requirements refer to general subject areas, not specific courses. For example, if all students are required to take 6 hours of science, but nursing majors take biology and epidemiology, while chemistry majors take chemistry and physics, the school still is considered as having science requirements, because everyone must take 6 hours of science to graduate, regardless of the specific courses taken to fulfill the requirement. However, if most students must take 6 hours of science, but art majors are not required to take any science courses at all, then the school is

considered as not having a science requirement that all students must meet.

One approach to general education requirements encountered frequently in this study was the use of "pool" requirements, a situation where schools allow students to choose a specified number of credit hours from a group of courses in various subject areas. Since "pool" requirements spanned several subject areas, they sometimes created problems for schools when completing the questionnaire. To maintain consistency in reporting, the following coding scheme was developed for "pool" requirements (refer to question 6 on the survey questionnaire, found in Appendix C):

- If all subject areas in the "pool" were humanities subjects, the credit hours were assigned to "unspecified humanities courses, or a combination of humanities courses";
- If the "pool" included both humanities and nonhumanities subjects (e.g., studio and performing arts or social sciences were included with humanities), the credit hours were assigned to "other";
- If the "pool" included multiple nonhumanities subjects, the credit hours were assigned to "other."

Colleges' inclusion of both humanities and nonhumanities subjects in a "pool" requirement served to lower humanities requirements in some instances. For example, colleges often classify history as a social science; therefore, their social science "pool" included history, although history was considered a humanities subject for this survey. Because the humanities-nonhumanities boundary was crossed in such instances, the hours for the entire social science "pool" (which included history) were assigned to the "other" category. Another situation of this type was the inclusion of studio and performing arts courses in a humanities "pool." Again, the humanities-nonhumanities boundary was crossed, so the hours for the entire humanities "pool" were coded into the "other" category. Thus, "pool" structures may underestimate courses taken in humanities.

The discussion of the survey findings is divided into two parts. The first part describes general education requirements for baccalaureate degrees at doctoral, comprehensive, baccalaureate, and four-year specialized schools. The second part describes general education requirements at two-year schools. The data in each section of this report are aggregated as "total" figures, which represent all four-year or two-year colleges grouped together; data for four-year colleges are also disaggregated

by school control and "type." These classifications are defined in Appendix B.

Unless otherwise specified, data reported in the text refer to "total" figures. Where subgroup comparisons are made for four-year colleges, they focus on comparisons between public and private schools and among doctoral, comprehensive, and baccalaureate schools. References to specialized schools are occasionally made, and data for these institutions are provided in the tables and figures. Data for specialized schools are included in the public, private and "total" figures.

Specialized schools are usually quite different from other four year schools. To be eligible for this survey, colleges must enroll undergraduates and award associate or baccalaureate degrees. Almost three-quarters of the colleges found to be ineligible for this survey were specialized schools; these were generally schools of medicine or theology that enrolled only graduate students. Most of the eligible specialized schools were religious schools and schools of studio and performing arts (art, design, music). Because of the nature of these institutions, they have a disproportionate impact on the credit hours required in "other humanities" (which includes religious studies, and the history, criticism, and theory of the arts) and studio and performing arts. This impact is discussed in more detail in footnotes to the section on credit hour requirements.

All analyses except those in Appendix Table A-1 include only those colleges and universities with general education requirements (i.e., those schools who answered "yes" to question 2). Respondents in schools with no general education requirements at the time of the survey completed only the respondent information section. Thus, the numbers should be interpreted with the preface "Of those schools with general education requirements in 1988,..." Since most schools did have general education requirements (see Appendix Table A-1), the numbers are not very different from those that would result if all colleges had been included.

The estimates in this report are based on sample data that have been weighted to produce national estimates. Because these estimates are subject to sampling variability, numbers in the tables, figures, and text have been rounded. Percents, averages, and change scores have been calculated based on the actual estimates rather than the rounded values. All statements of comparison made in the text are significant at the 95 percent confidence level or better.

GENERAL EDUCATION REQUIREMENTS AT FOUR-YEAR SCHOOLS

In 1988, almost all (96%) baccalaureate-granting four-year colleges in the United States required all undergraduate degree candidates to take general education courses to graduate (Appendix Table A-1). The requirement to take general education courses did not vary much among different kinds of four-year colleges, ranging from 93 percent at doctoral schools to 98 percent at baccalaureate schools. The kinds of courses students are required to take, however, do vary by institutional type and control.

Presence of Requirements in Selected Academic Areas

Humanities subjects. The most prevalent humanities requirement is English composition: 88 percent of four-year colleges with general education requirements mandate English composition for students entering in 1988-89 (Appendix Table A-2 and Figure 1). History, which is required in 62 percent of schools, is the second most commonly required subject, followed by English or American literature (55%). About half (54%) of four-year colleges require incoming students to take courses from the category identified in this survey as "other humanities fields,

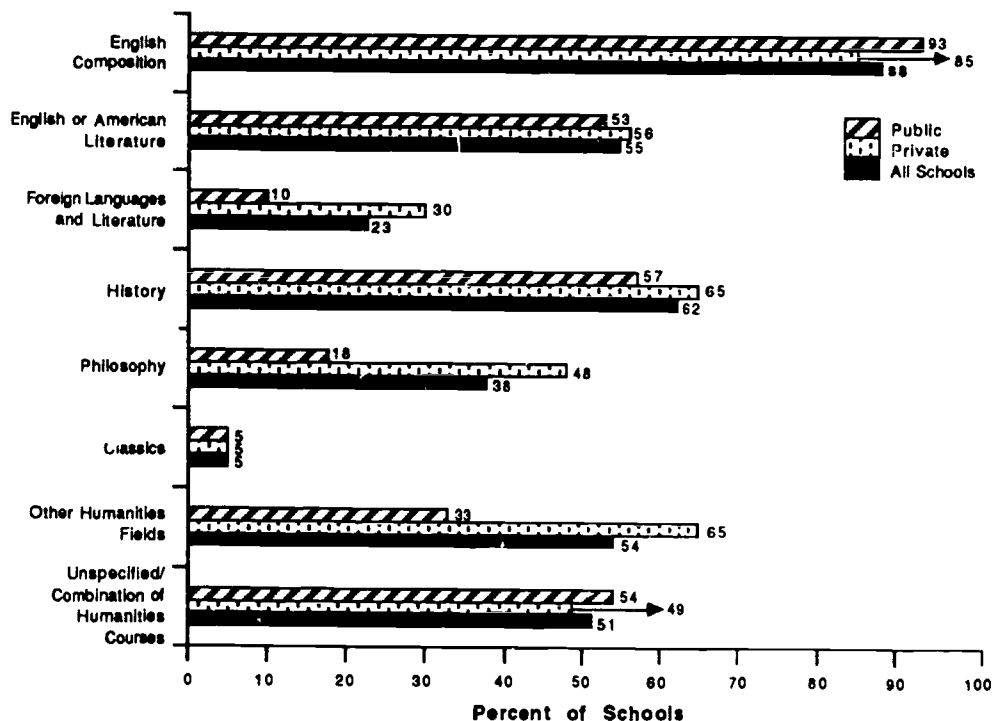
including interdisciplinary humanities courses,"¹ and about the same number have requirements in "unspecified humanities courses, or a combination of humanities courses" (51%). About two out of five schools require philosophy (38%), while one in four requires foreign languages and literature (23%). The classics are the least common humanities requirement, mandated in only 5 percent of four-year institutions.

Private schools are more likely than public schools to require foreign languages and literature, philosophy, and "other humanities fields, including interdisciplinary humanities courses" (Figure 1). The remaining humanities subjects are required in approximately equal proportions of public and private colleges.

¹"Other humanities" include linguistics, archeology, religious studies, jurisprudence, and the history, criticism, and theory of the arts. "Interdisciplinary humanities courses" refer to those whose content is primarily in the humanities, such as American studies.

Figure 1

Percent of Four-year Colleges and Universities with Requirements in Selected Humanities Subjects for Students Entering in 1988-89, by School Control



Reference: Appendix Table A-2

Doctoral schools require English or American literature, history, philosophy, and "other humanities fields, including interdisciplinary humanities courses" less frequently than comprehensive or baccalaureate schools (Figure 2). In addition, doctoral schools are more likely than baccalaureate schools to require "unspecified humanities courses, or a combination of humanities courses," perhaps indicating a greater use of "pool" requirements at doctoral schools. None of the differences between comprehensive and baccalaureate institutions is statistically significant.

The percentage of colleges with requirements in various humanities subjects increased slightly from 1983-84 to 1988-89 (Appendix Tables A-2 and A-3). While the increases are statistically significant in all humanities subjects except English composition and classics, in each instance the size of the increase is small. The largest increase -- 5 percent -- occurred in "other humanities fields, including interdisciplinary humanities courses."

Specific areas of history. Few schools with general education requirements in 1988 have requirements in

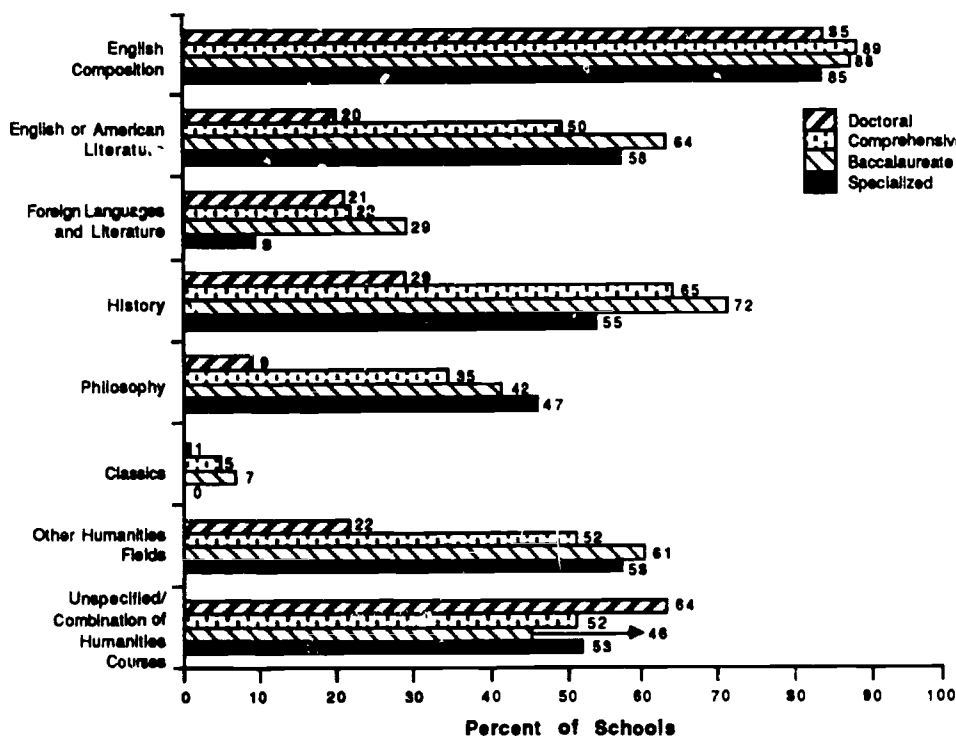
specific areas of history (Figure 3). Only 22 percent of four-year colleges and universities mandate Western civilization, the most frequently cited specific area of history, while 17 percent require American history. Another 17 percent specified "other areas of history," and 5 percent require non-Western civilization.

Private colleges, more often than public, require coursework in Western civilization (Figure 3). Baccalaureate and comprehensive schools are more likely than doctoral schools to require Western civilization and "other areas of history" (Figure 4). Proportionately more comprehensive schools than either baccalaureate or doctoral schools require American history.

The only significant increase in "total" percentages from 1983-84 to 1988-89 was in non-Western civilization (not shown in the tables). In 1983-84, 3.6 percent of colleges required non-Western civilization; in 1988-89, the percentage had increased to 5.1, still substantially lower than those for any of the other areas of history specified in the questionnaire.

Figure 2

Percent of Four-year Colleges and Universities with Requirements in Selected Humanities Subjects for Students Entering in 1988-89, by School Type



Reference: Appendix Table A-2

Figure 3

Percent of Four-year Colleges and Universities with Requirements in Selected Areas of History for Students Entering in 1988-89, by School Control

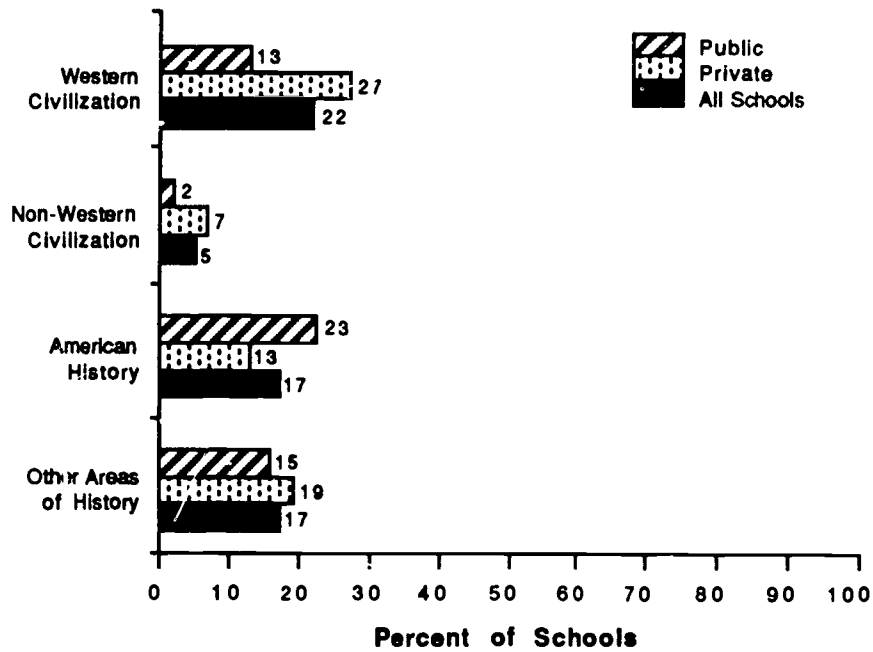
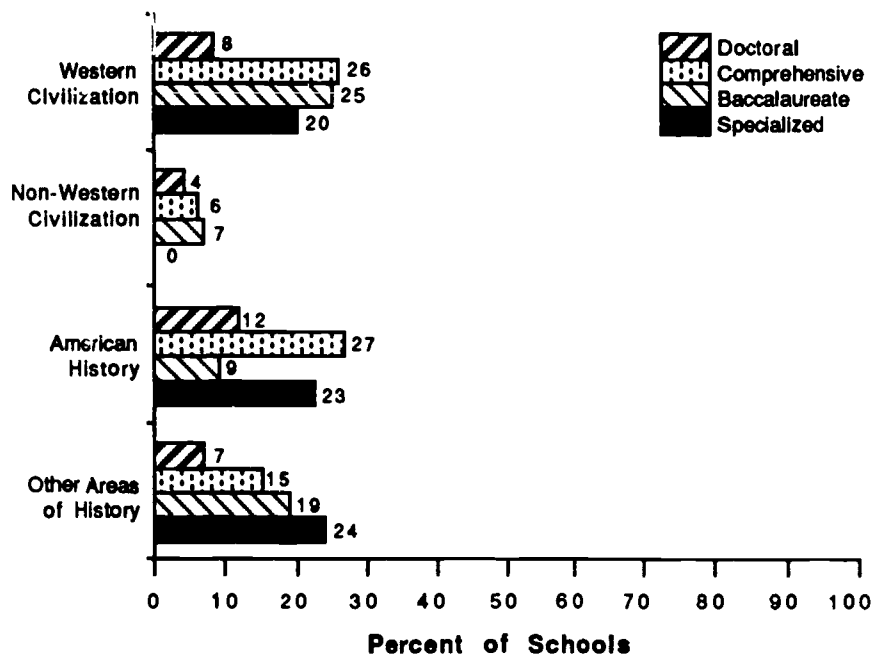


Figure 4

Percent of Four-year Colleges and Universities with Requirements in Selected Areas of History for Students Entering in 1988-89, by School Type



Nonhumanities subjects. Social sciences are the most common nonhumanities requirement, mandated for students entering in 1988-89 by 80 percent of four-year colleges with general education requirements (Appendix Table A-2 and Figure 5). The majority of four-year colleges require courses in natural and physical sciences (67%), "other areas" (62%), and mathematics (59%). In addition, about one in three schools require "mathematics and/or science" (32%), indicating that schools require these subjects individually more often than as a "pool." (Schools with pooled "mathematics and/or science" requirements may also have individual mathematics or science requirements.) The least common nonhumanities requirement is studio and performing arts, a subject area mandated by only 25 percent of four-year colleges.²

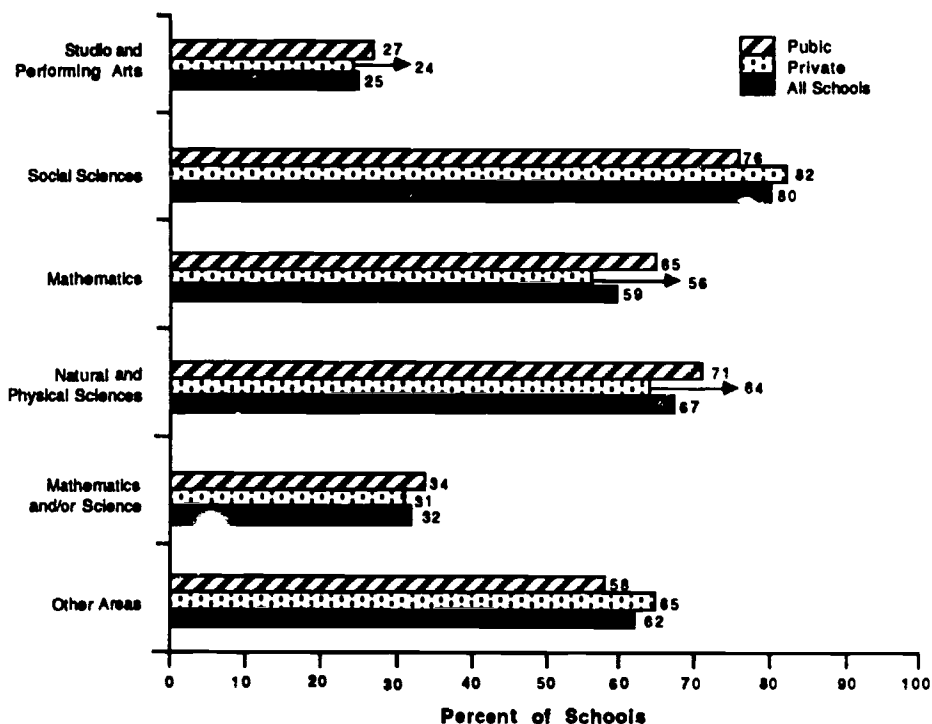
²The category of studio and performing arts was intended to include only requirements in studio and performance courses. Requirements in the history, criticism, and theory of the arts were to be reported in the category "other humanities fields, including interdisciplinary humanities courses." Requirements that allowed students to choose either a studio or performance course or a history, criticism, and theory of the arts course were to be reported in the "other" category, because the requirement crossed the humanities-nonhumanities boundary. However, based on additional information that became available after data collection and analysis were completed, it appears that some schools reported "fine arts" requirements under studio and performing arts, regardless of the kinds of arts courses that could be used to fulfill this requirement.

Approximately equal proportions of public and private institutions have requirements in these nonhumanities subjects (Figure 5). Nonhumanities subjects are required by similar proportions of baccalaureate and comprehensive colleges, but these institutions differ from doctoral colleges on some subjects (Figure 6). Baccalaureate colleges are more likely than doctoral schools to require studio and performing arts, social sciences, and "other areas." Comprehensive schools require social sciences, mathematics, and natural and physical sciences more frequently than doctoral schools.

The percentage of schools requiring courses in various nonhumanities subjects increased from 1983-84 to 1988-89 (Appendix Tables A-2 and A-3). The increases are somewhat larger than those for humanities subjects -- up to 12 percentage points in the case of mathematics. The differences are statistically significant for all nonhumanities subjects except studio and performing arts and "mathematics and/or science."

Figure 5

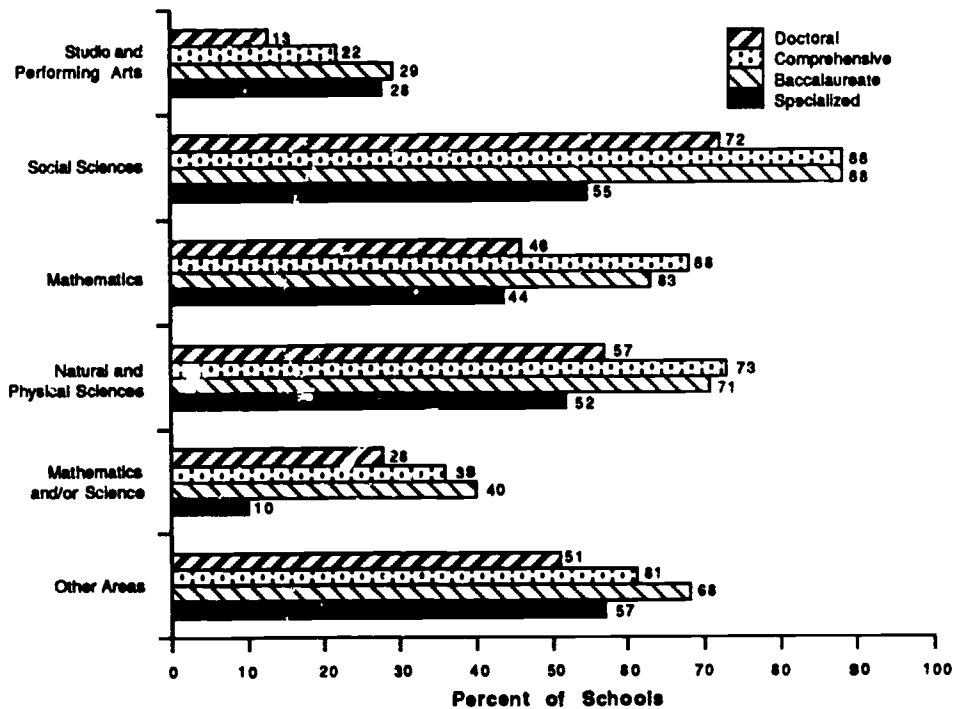
Percent of Four-year Colleges and Universities with Requirements in Selected Nonhumanities Subjects for Students Entering in 1988-89, by School Control



Reference: Appendix Table A-2

Figure 6

Percent of Four-year Colleges and Universities with Requirements in Selected Nonhumanities Subjects for Students Entering in 1988-89, by School Type



Reference: Appendix Table A-2

Credit Hour Requirements³

On average, students seeking a baccalaureate degree who enter in 1988-89 must take a minimum of 52.1 semester credit hours in general education out of a total of 125.8 credit hours required to graduate (Appendix Table A-4). These general education credit hours represent 41 percent of the total hours needed for graduation (Figure 7), up slightly from 38 percent required for students entering in 1983-84.⁴

Humanities credit hours represent about half of the general education hours and about one-fifth of the total hours required for graduation for students entering in 1988-89 (Figure 7). On average, a minimum of 25.0 credit hours are

currently required in humanities subjects (Appendix Table A-4), slightly more than the 23.5 hours required in 1983-84.⁵

Total credit hours required for graduation for 1988-89 entrants do not vary greatly by institutional type and control (Appendix Table A-4). Substantial variation by institutional type and control does occur, however, in the credit hours required in general education and specifically in humanities for 1988-89 entrants (Appendix Table A-4). Private schools require approximately 10 more credits than public schools in both general education and humanities. Comprehensive and baccalaureate colleges are similar to each other in their requirements, and both require more hours in general education and humanities than doctoral schools.

No significant changes occurred from 1983-84 to 1988-89 in the total hours needed for graduation -- either for all four-year colleges and universities grouped together, or within institutional control and type categories (Appendix Table A-4). The picture is different, however, for hours required in general education and humanities. All four-year colleges

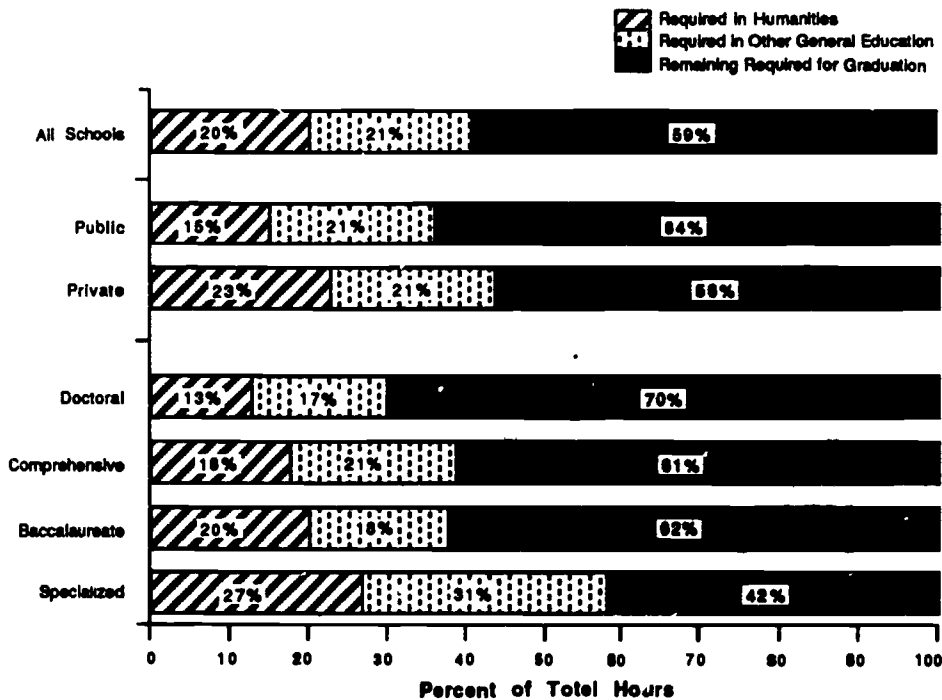
³All credit hour data were converted to semester credit hours. Data from schools on the quarter system were converted to semester hours by multiplying the quarter hours by two-thirds.

⁴If specialized schools are excluded from these calculations, these numbers would be 46.9 hours in general education out of 125.0 hours for graduation in 1988-89, and 43.8 hours in general education out of 124.9 hours for graduation in 1983-84. These general education hours represent 38 percent of total hours in 1988-89, and 35 percent of total hours in 1983-84.

⁵If specialized schools are excluded from these calculations, these numbers would be 22.7 hours required specifically in humanities in 1988-89, and 21.1 hours required specifically in humanities in 1983-84.

Figure 7

Average Hours Required in Humanities and Other General Education as a Percentage of Total Hours Required for Graduation in Four-year Colleges and Universities in 1988-89, by School Characteristics



Reference: Appendix Table A-4

and universities, except specialized schools, showed small but statistically significant increases from 1983-84 to 1988-89 in the hours required in both general education and humanities.

Humanities subjects. The average minimum credit hour requirements⁶ at four-year colleges is greatest for "other humanities fields, including interdisciplinary humanities courses": 6.2 credit hours⁷ are required for students entering in 1988-89 (Appendix Table A-5 and Figure 8). English composition, with 4.6 credit hours, is next highest, followed closely by "unspecified humanities courses, or a combination of humanities courses" (4.3 hours). History, at

3.4 hours, trails these two subject areas by about 1 credit hour.

English or American literature, foreign languages and literature, and philosophy fall into the next cluster of humanities requirements, with average credit hours ranging from 2.4 to 1.8. The classics have the smallest average requirement (0.2 hours).

Private colleges require more credit hours than public colleges in foreign languages and literature, philosophy, and "other humanities fields, including interdisciplinary humanities courses" (Figure 8). Public schools, however, require more credit hours than private schools in English composition. In the remaining humanities subjects, public and private institutions require about the same number of credits.

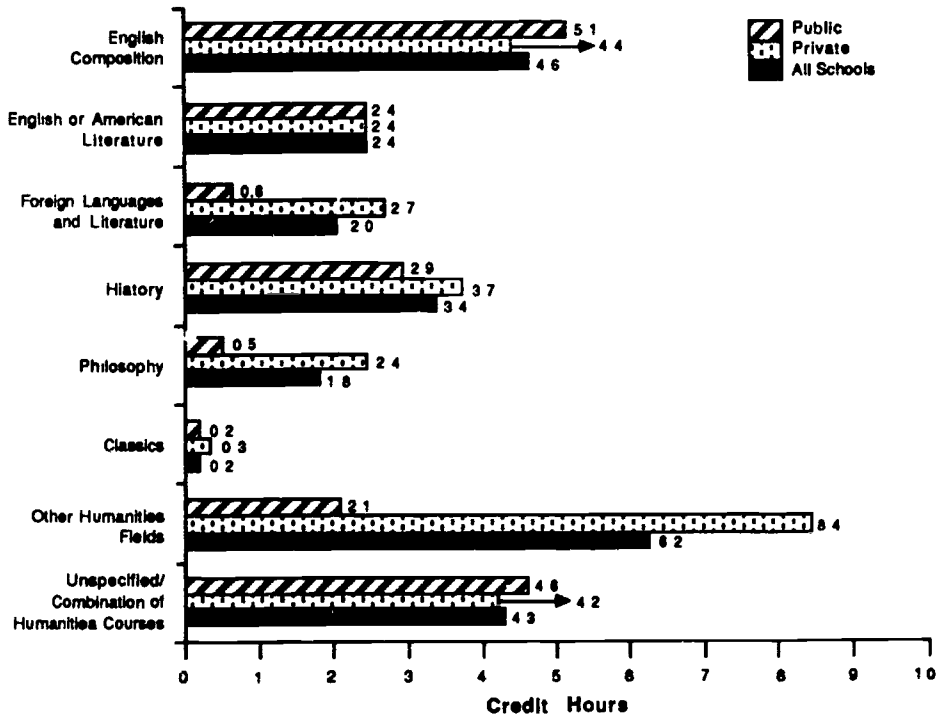
Doctoral schools require fewer credit hours than either comprehensive or baccalaureate schools in English or American literature, history, philosophy, and "other humanities fields, including interdisciplinary humanities

⁶The credit hour requirements are based on all schools with general education requirements, including those schools with zero credit hours required in a particular subject. If zeros were removed from the calculations, the credit hours required would be higher, especially in those subject areas required by few schools.

⁷If specialized schools are excluded from these calculations, this number would be 4.2 credit hours. The hours required in public schools would decrease from 2.1 to 1.7 credit hours. The hours required in private schools would decrease from 8.4 to 5.7 credit hours. The differences are due to credit hours in religious studies, and in the history, criticism, and theory of the arts.

Figure 8

Average Minimum Credit Hour Requirements in Selected Humanities Subjects at Four-year Colleges and Universities for Students Entering in 1988-89, by School Control



Reference: Appendix Table A-5

courses" (Figure 9). Comprehensive and baccalaureate schools differ from each other only on "other humanities fields, including interdisciplinary humanities courses," where baccalaureate colleges require more credit hours than comprehensive colleges. The number of required credit hours in the remaining humanities subjects are about equal in doctoral, comprehensive, and baccalaureate schools.

From 1983-84 to 1988-89, there were slight increases in credit hour requirements for some of the humanities subjects (Appendix Table A-5). For all four-year institutions grouped together, increases were found for foreign languages and literature, history, philosophy, and "other humanities fields, including interdisciplinary humanities courses." Although these increases are statistically significant, they are very small, the largest being 0.3 credit hours.

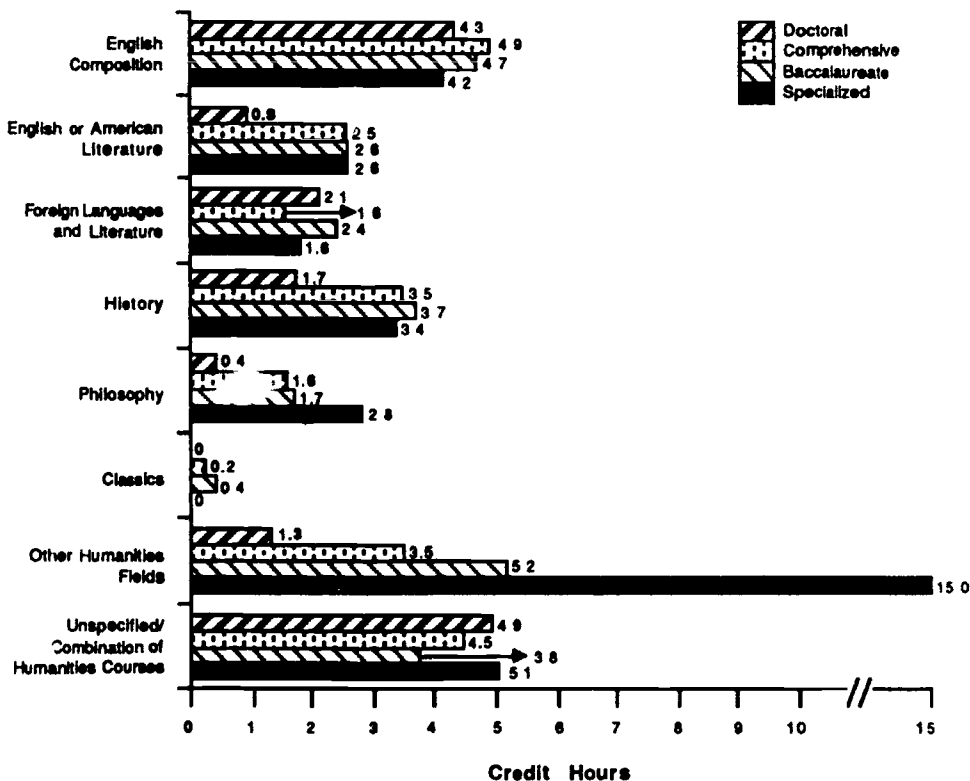
Specific areas of history. The average minimum credit hour requirements in specific areas of history are low,

ranging from 0.4 credit hours in non-Western civilization to 2.1 credit hours in Western civilization (Figure 10). Since average requirements are based on all schools including those with no requirements in a particular subject, these low averages reflect the small percentage of schools that require coursework in specific areas of history (Figure 3). If averages are calculated only for schools that have a requirement in the subject, the required credit hours would be substantially higher.

Public and private colleges vary in credit hour requirements for specific areas of history. Private schools require twice as many credit hours in Western civilization as public schools (Figure 10), while public schools require twice as many credit hours in American history as private schools. American history requirements also differ by type of college; doctoral and comprehensive schools require twice as many credit hours as baccalaureate schools (Figure 11). Changes from 1983-84 to 1988-89 in credit hours mandated in all specific areas of history were not statistically significant.

Figure 9

Average Minimum Credit Hour Requirements in Selected Humanities Subjects at Four-year Colleges and Universities for Students Entering in 1988-89, by School Type



Reference: Appendix Table A-5

Figure 10

Average Minimum Credit Hour Requirements in Selected Areas of History at Four-year Colleges and Universities for Students Entering in 1988-89, by School Control

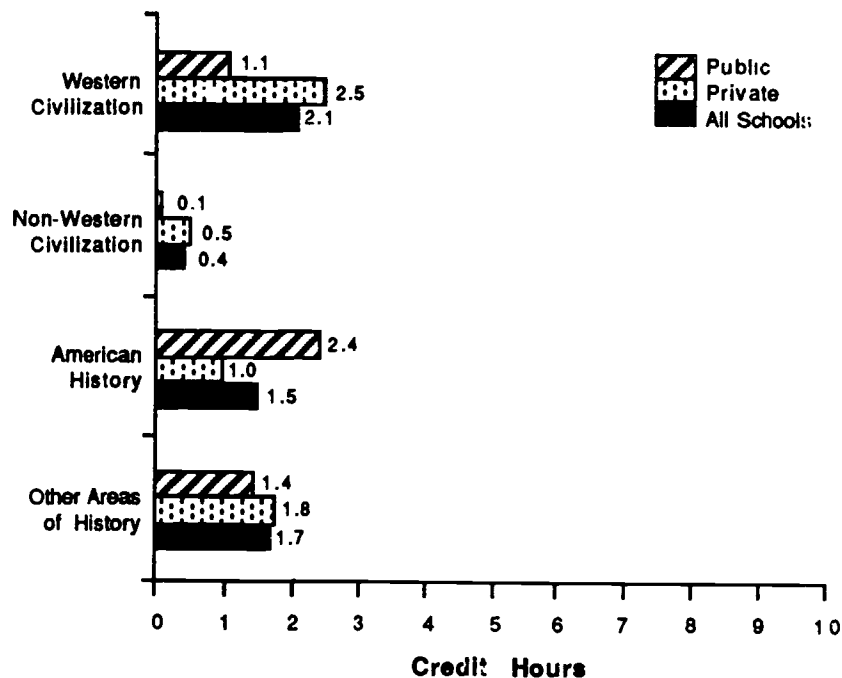
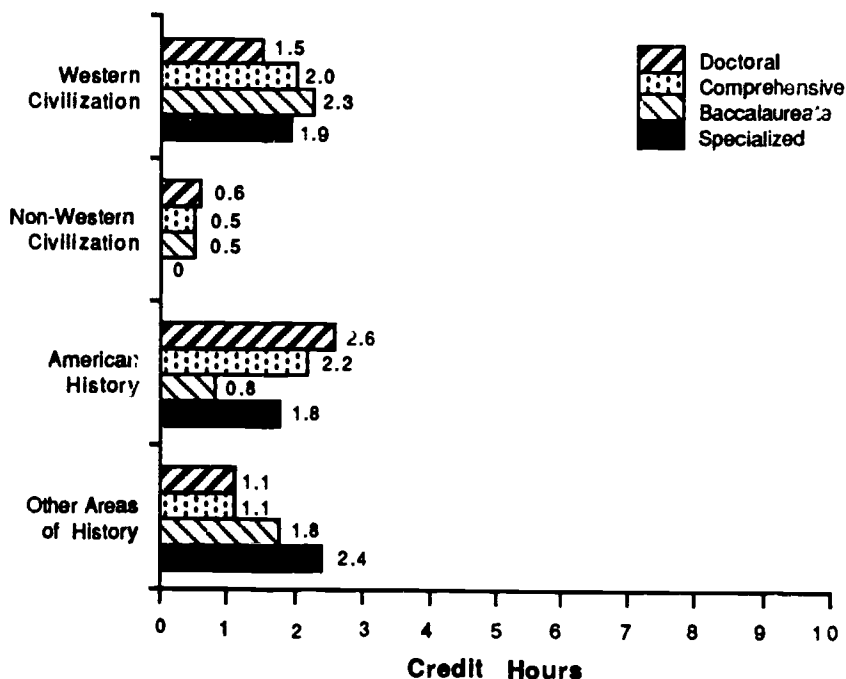


Figure 11

Average Minimum Credit Hour Requirements in Selected Areas of History at Four-year Colleges and Universities for Students Entering in 1988-89, by School Type



Nonhumanities subjects. The average minimum credit hour requirements for students entering in 1988-89 are highest for social sciences (5.6 hours), followed closely by "other areas," with 5.3 hours required (Appendix Table A-5 and Figure 12). Next highest requirements are in the natural and physical sciences (4.5 hours) and studio and performing arts (4.1 hours).⁸ The lowest requirements are in mathematics (2.5 hours), and "mathematics and/or science" (2.2 hours).

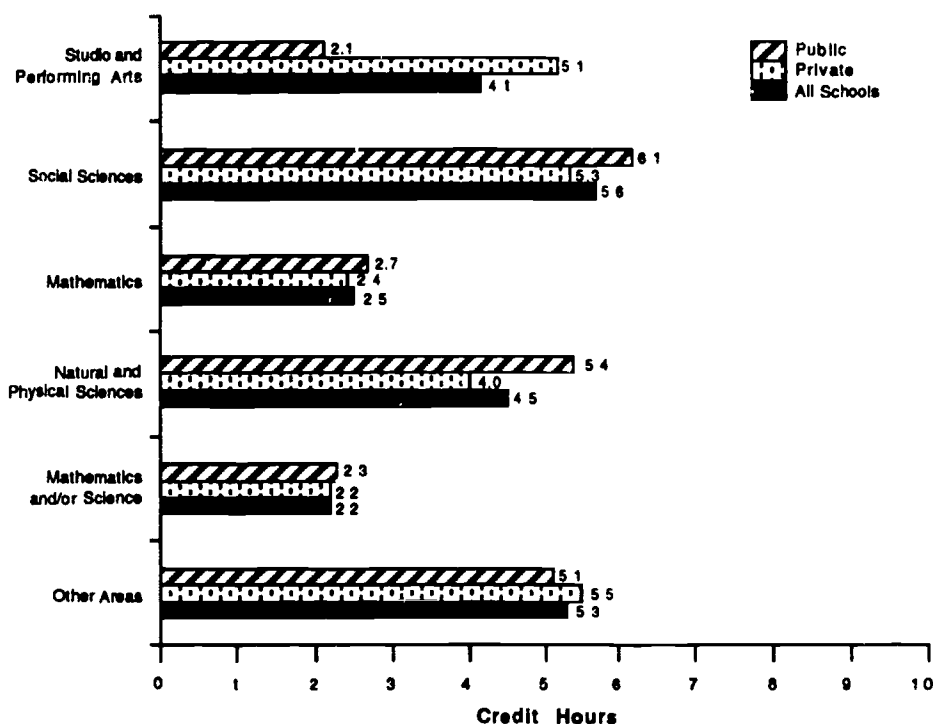
The average required credit hours in nonhumanities subjects do not vary greatly by institutional type and control. More credit hours are required in public schools than private schools in natural and physical sciences (Figure 12).

In studio and performing arts, baccalaureate schools have higher requirements than doctoral schools (Figure 13); in social sciences, the requirements in comprehensive schools exceed those in doctoral schools. Average requirements in the remaining nonhumanities subjects are similar in public and private colleges, and in doctoral, comprehensive, and baccalaureate colleges.

Slight increases occurred from 1983-84 to 1988-89 in the number of credit hours required for some of the nonhumanities subjects (Appendix Table A-5). The increases were statistically significant for social sciences, mathematics, and natural and physical sciences. However, these increases are small, the largest being 0.5 credit hours.

⁸If specialized schools are excluded from these calculations, the number for studio and performing arts would be 1.0 credit hours. The hours required in public schools would decrease from 2.1 to 1.1 credit hours. The hours required in private schools would decrease from 5.1 to 1.0 credit hours.

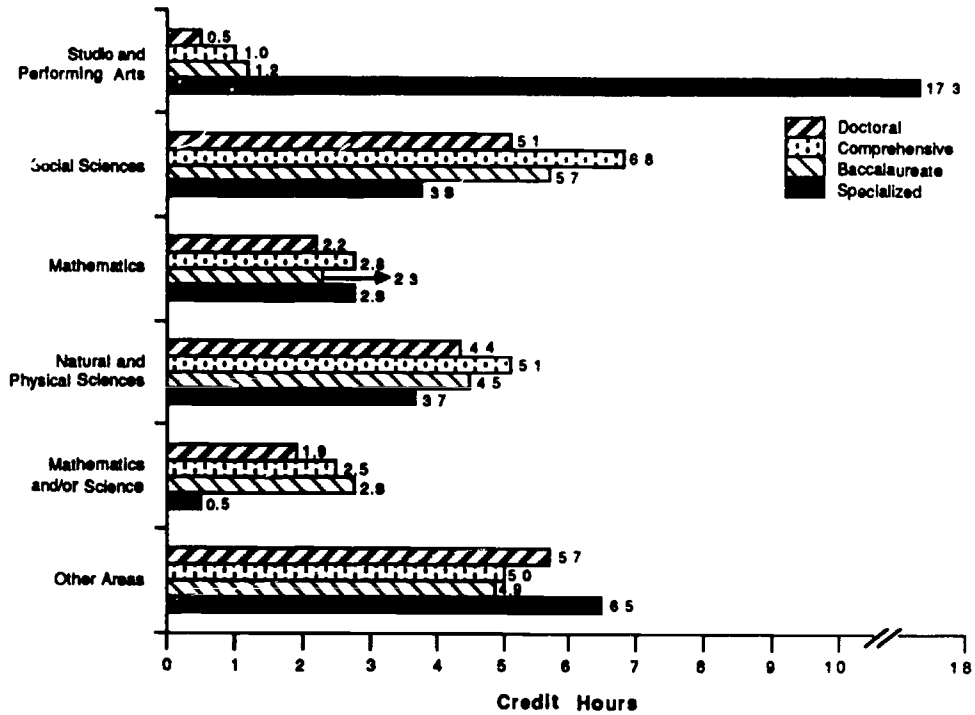
Figure 12
Average Minimum Credit Hour Requirements in Selected Nonhumanities Subjects at Four-year Colleges and Universities for Students Entering in 1988-89, by School Control



Reference: Appendix Table A-5

Figure 13

Average Minimum Credit Hour Requirements in Selected
Nonhumanities Subjects at Four-year Colleges and Universities
for Students Entering in 1988-89, by School Type



Reference: Appendix Table A-6

Structure of General Education Requirements

Respondents were asked to indicate how their institutions' general education requirements are currently structured, and how they were structured for students entering in 1983-84 (see survey question 3 in Appendix C). Most four-year colleges (86%) require students entering in 1988-89 to fulfill their general education requirements by choosing from a limited range of courses⁹ (Appendix Table A-6 and Figure 14). Three-fourths (77%) require students to take specified departmental courses, and 46 percent require students to take specified interdisciplinary or interdepartmental courses. Only 13 percent of four-year schools allow students to choose from a virtually unlimited range of courses.

Baccalaureate and comprehensive colleges are more likely than doctoral colleges to require that students take specified departmental courses and specified interdisciplinary or

⁹ Respondents were asked to indicate all structures that applied to their school's general education requirements. Since students can fulfill requirements in different academic areas in different ways, the percentages sum to more than 100 percent.

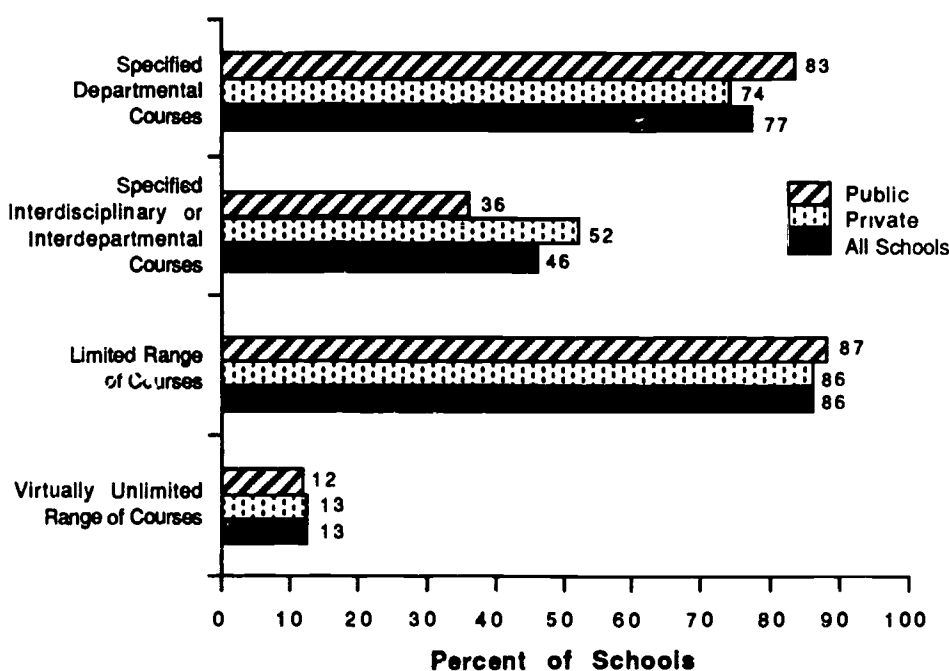
interdepartmental courses (Figure 15). These are the only statistically significant differences among the various types of colleges.

The percentages of schools that require specified departmental courses, specified interdisciplinary or interdepartmental courses, and choice from a limited range of courses have increased significantly from 1983-84 to 1988-89 (Appendix Table A-6). In contrast, the percentage of colleges that allow students to fulfill their general education requirements by choosing from a virtually unlimited range of courses has decreased significantly.

In about two-thirds (65%) of four-year colleges and universities, students usually complete their general education requirements in either the upper or lower division (Appendix Table A-7 and Figure 16). In most of the remaining institutions (33%), such coursework is generally completed in the lower division. Students in public schools are more likely than those in private schools to complete their general education requirements in the lower division; in contrast, students in private schools are more likely than those in public schools to complete these course requirements across all four years of college (i.e., in either the upper or lower division).

Figure 14

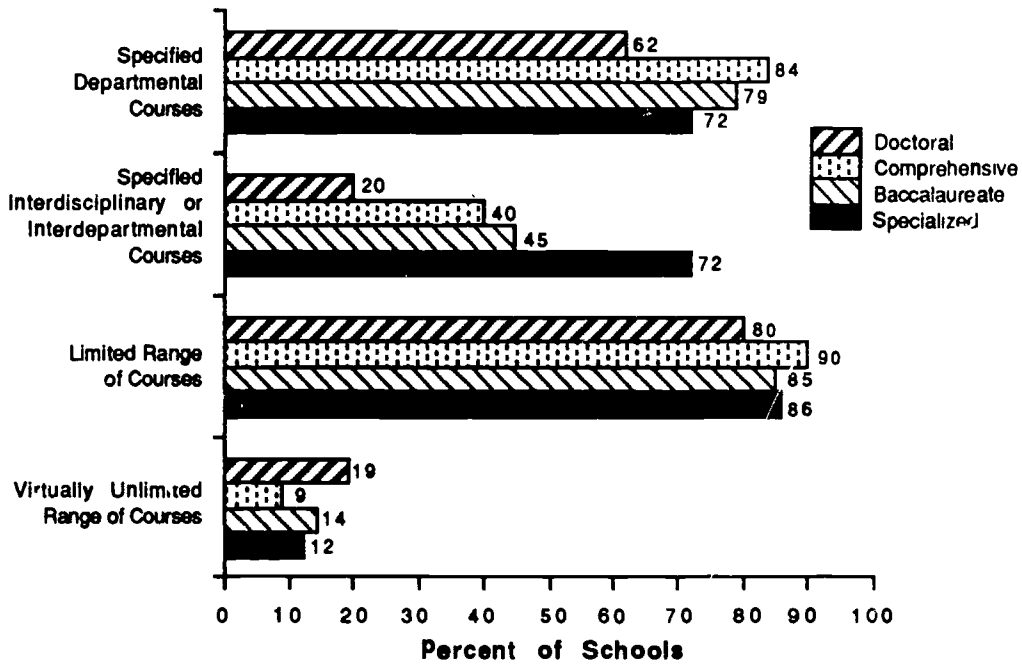
Percent of Four-year Colleges and Universities with Each Structure of General Education Requirements for Students Entering in 1988-89, by School Control



Reference: Appendix Table A-6

Figure 15

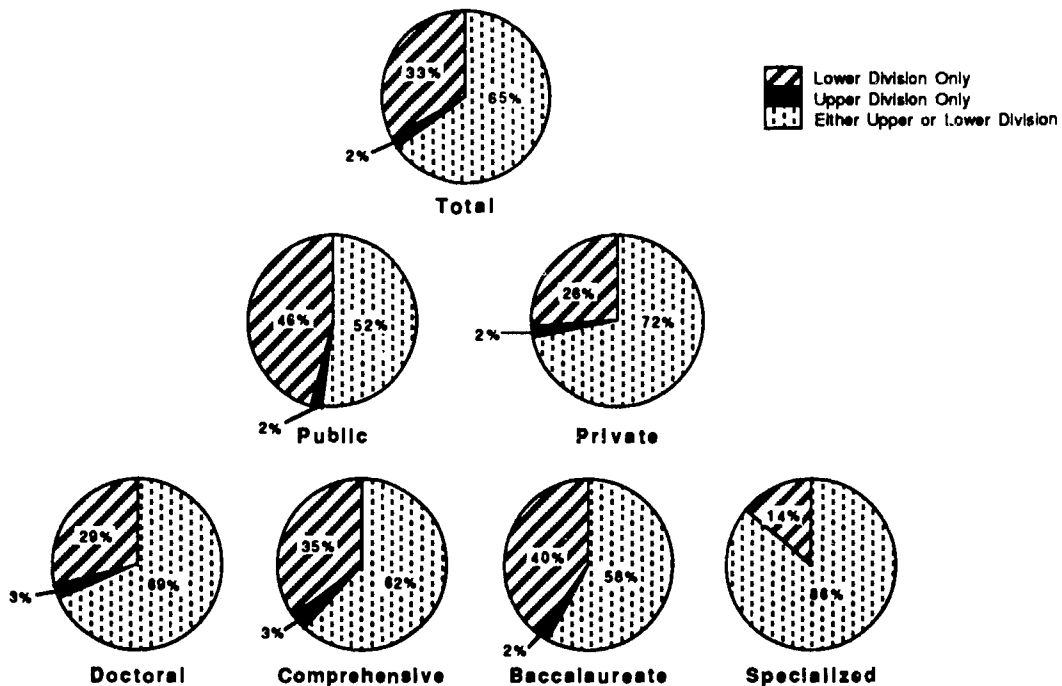
Percent of Four-year Colleges and Universities with Each Structure of General Education Requirements for Students Entering in 1988-89, by School Type



Reference: Appendix Table A-6

Figure 16

Percent of Four-year Colleges and Universities in Which Students Usually Complete Their General Education Requirements in Lower Division Only, Upper Division Only, or in Either Upper or Lower Division for Students Entering in 1988-89, by School Characteristics



Reference: Appendix Table A-7

Foreign language requirements.¹⁰ Over three-quarters (77%) of four-year colleges and universities do not have a foreign language requirement for all undergraduates entering in 1988-89 (Appendix Table A-8). Private schools are more likely to require foreign language instruction than are public schools. In colleges with a foreign language requirement, the requirement is satisfied about half the time by students reaching a specified language proficiency level, and about 40 percent of the time by students completing a specified number of courses.

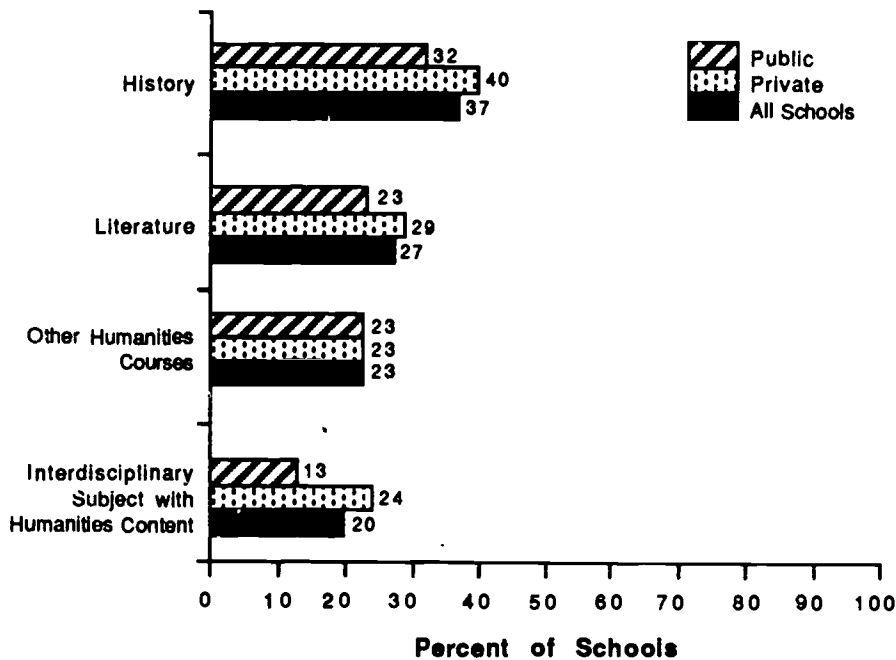
Survey courses. Colleges were also asked whether their general education requirements for 1988-89 entrants stipulated survey courses in various humanities areas. A survey course was defined as a course that is organized chronologically and shows the connection of texts and events through time. Slightly more than one-third (37%) of four-year schools require a survey course in history, 27 percent in literature, 23 percent in other humanities subjects, and 20 percent in an interdisciplinary subject whose content is primarily in the humanities (Appendix Table A-9 and Figure 17).

Baccalaureate colleges are more likely than doctoral colleges to require survey courses in all of the specified areas (Figure 18), while comprehensive schools are more likely than doctoral schools to require survey courses in history and literature.

¹⁰If a school had a foreign language requirement that applied to all students, respondents had the option of indicating more than one type of foreign language requirement (see survey question 7 in Appendix C). Thus, percentages sum to more than 100 percent.

Figure 17

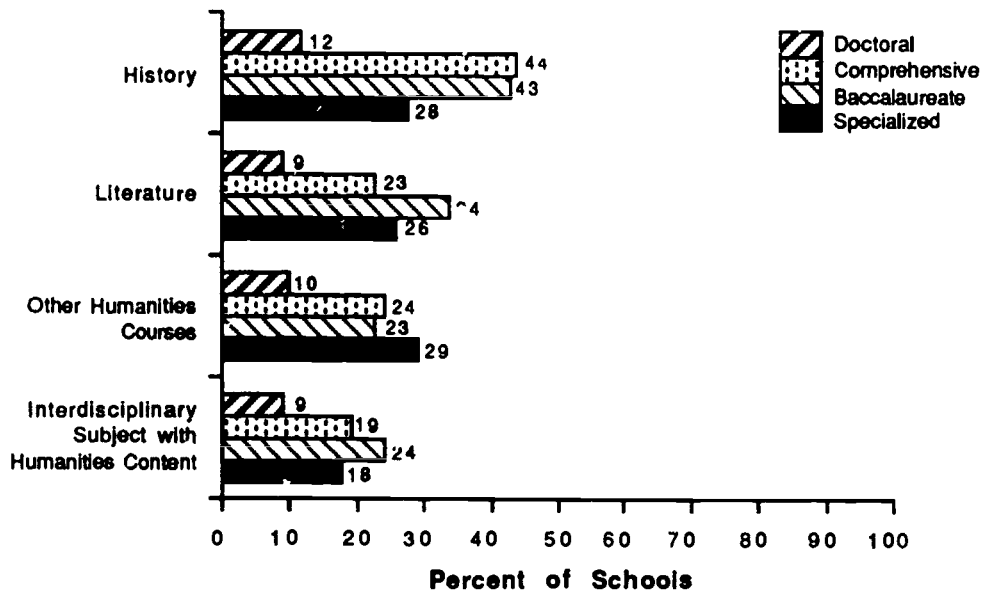
Percent of Four-year Colleges and Universities that Require a Survey Course in Selected Academic Areas for Students Entering in 1988-89, by School Control



Reference: Appendix Table A-9

Figure 18

Percent of Four-year Colleges and Universities that Require a Survey Course in Selected Academic Areas for Students Entering in 1988-89, by School Type



Reference: Appendix Table A-9

GENERAL EDUCATION REQUIREMENTS AT TWO-YEAR SCHOOLS

In 1988, 90 percent of associate degree-granting two-year schools in the United States required all degree candidates to take some general education courses to graduate (Appendix Table A-1). Equal proportions of public and private two-year schools had general education requirements.

Presence of Requirements in Selected Academic Areas¹¹

Two-year schools that had general education requirements in 1988 were asked to describe requirements in specific academic areas for students entering in 1988-89. The most common requirement is English composition, which is required by 94 percent of two-year schools (Appendix Table A-10 and Figure 19). About two-thirds of two-year colleges

mandate courses in the social sciences (68%) and mathematics (64%). The next most prevalent requirements are "other areas" (57%), the natural and physical sciences (55%), and "unspecified humanities courses, or a combination of humanities courses" (49%).

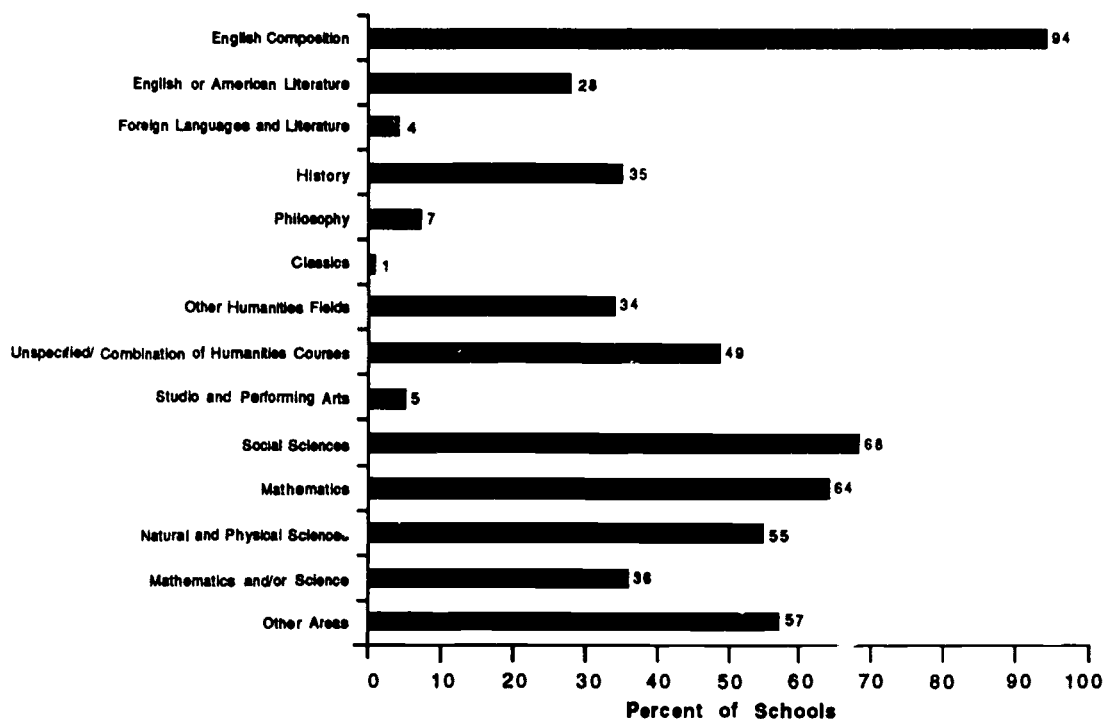
About one out of three schools requires "mathematics and/or science" (36%), history (35%), and "other humanities fields, including interdisciplinary humanities courses" (34%). Slightly fewer (28%) require English or American literature. The remainder of the academic areas specified on the questionnaire are required by fewer than 10 percent of two-year colleges.

The percentage of schools with course requirements increased from 1983-84 to 1988-89 for some subject areas (Appendix Table A-10), with mathematics exhibiting the greatest percentage increase (10%). The changes are statistically significant for "other humanities fields, including interdisciplinary humanities courses," "unspecified humanities courses, or a combination of humanities courses," mathematics, natural and physical sciences, and "other areas."

¹¹This section, and the following section on credit hour requirements, are based on those two-year schools that reported for two-year programs in question 6. Some schools that HEGIS classified as two-year have some four-year programs. Since question 6 instructed respondents to provide responses for four-year programs if the institution offered four-year programs, a small number of two-year schools answered question 6 with regard to a four-year program. These schools have been dropped from all analyses involving question 6, reducing the weighted number of respondents from 1,120 to 969. Analyses of all other items include all two-year schools with general education requirements.

Figure 19

**Percent of Two-year Colleges with Requirements
in Selected Subjects for Students Entering in 1988-89**



Reference: Appendix Table A-10

Credit Hour Requirements

On average, students entering two-year colleges in 1988-89 must take a minimum of 30.5 semester credit hours in general education out of a total of 64.3 semester credit hours required to graduate (Appendix Table A-11).¹² These general education credit hours represent 47 percent of the total hours needed for graduation, up slightly from 45 percent required for students entering in 1983-84.

Required hours in humanities represent 41 percent of the general education hours and about one-fifth of the total hours needed for graduation for students entering in 1988-89 (Appendix Table A-11). In 1988-89, two-year schools require an average of 12.6 credit hours in humanities subjects, a slight increase from the 1983-84 requirements of 12.0 hours.

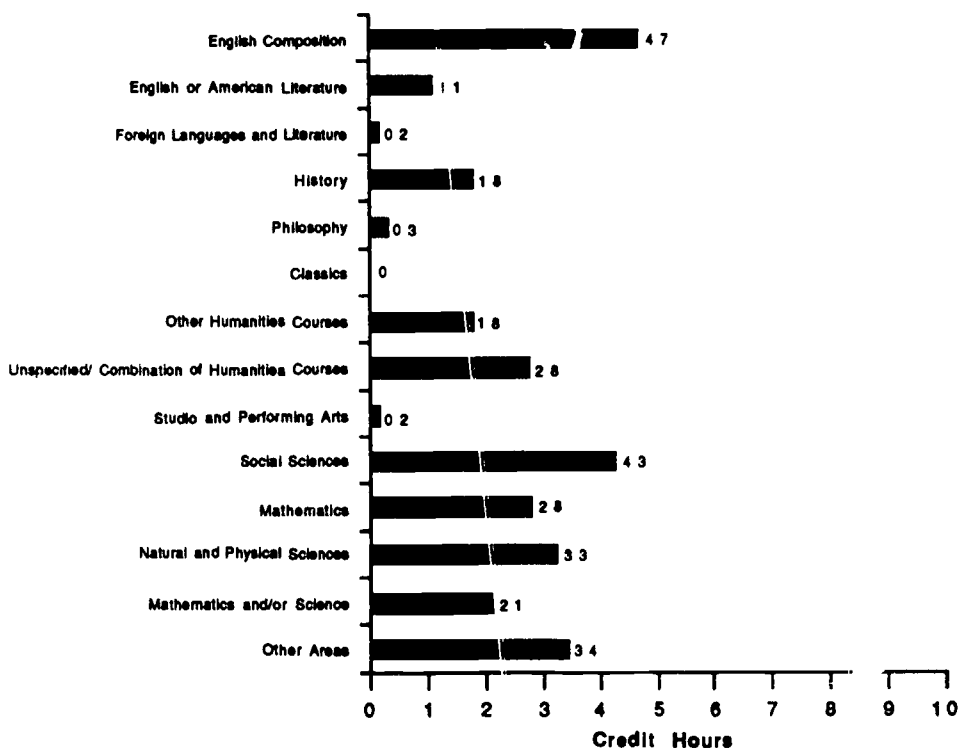
¹²Both two-year and four-year colleges that offer associate degrees responded to the items for credit hours required to graduate, in general education, and specifically in humanities. The data for associate degree programs in four-year schools are presented in Appendix Table A-11. The requirements for an associate degree in four-year schools are similar to the requirements in two-year schools.

Credit hours in selected academic areas. The average minimum credit hour requirements for students entering two-year schools in 1988-89 are highest for English composition (4.7 hours), followed closely by social sciences (4.3 hours). The next largest requirements are in "other areas" (3.4 hours), natural and physical sciences (3.3 hours), mathematics (2.8 hours), "unspecified humanities courses, or a combination of humanities courses" (2.8 hours), and "mathematics and/or science" (2.1 hours). Less than 2 credit hours, on average, are required in the remaining subject areas specified in the questionnaire (Appendix Table A-12 and Figure 20).

Statistically significant increases occurred from 1983-84 to 1988-89 in credit hour requirements for English composition, "other humanities field; including interdisciplinary humanities courses," "unspecified humanities courses, or a combination of humanities courses," mathematics, and natural and physical sciences (Appendix Table A-12). However, like credit hour increases in four-year schools, those in two-year schools are very small -- 0.3 credit hours at most.

Figure 20

Average Minimum Credit Hour Requirements in Selected Subjects at Two-year Colleges for Students Entering in 1988-89



Reference: Appendix Table A-12

Structure of General Education Requirements

Most two-year colleges (83%) require students entering in 1988-89 to fulfill their general education requirements by choosing from a limited range of courses, and 87 percent require specified departmental courses (Appendix Table A-13). About one-third (36%) of the schools require students to take specified interdisciplinary or interdepartmental courses. In contrast, only 13 percent of two-year colleges allow students to choose from a virtually unlimited range of courses. Changes from 1983-84 to 1988-89 in the percentage of schools with the various structures of general education requirements were not statistically significant.

Foreign language requirements. Almost all (97%) two-year colleges reported no foreign language requirement for all undergraduates entering in 1988-89 (Appendix Table A-14). In the few schools that have a foreign language requirement, the requirement is typically satisfied by completing a specified number of courses or by substituting other courses.

Survey courses. Few two-year colleges require survey courses in various humanities areas as part of their general education requirements for students entering in 1988-89. Only 25 percent of two-year schools require a survey course in history, 21 percent in literature, 19 percent in other humanities subjects, and 14 percent in an interdisciplinary subject whose content is primarily in the humanities (Appendix Table A-15).

SUMMARY

In 1988, almost all (96%) baccalaureate-granting four-year colleges in the United States had general education requirements for all undergraduate degree candidates. Students entering college in 1988-89 must take an average of 52.1 semester credit hours in general education, or 41 percent of the total credit hours needed for graduation (125.8). The average humanities requirement in four-year schools is 25.0 credit hours, about half of the required general education hours and about one-fifth of the total hours.

One-half or more of the four-year colleges and universities require coursework in the following subject areas for students entering in 1988-89: English composition (88%), social sciences (80%), natural and physical sciences (67%), history (62%), "other areas" (62%), mathematics (59%), English or American literature (55%), "other humanities fields, including interdisciplinary humanities courses" (54%), and "unspecified humanities courses, or a combination of humanities courses" (51%).

The percentage of colleges with requirements in various humanities subjects increased slightly from 1983-84 to 1988-89. While the increases are statistically significant in all humanities subjects except English composition and classics, in each instance the size of the increase is small (5 percent or less). The increases in the percentage of schools requiring courses in various nonhumanities subjects are somewhat larger -- up to 12 percentage points. The differences are statistically significant for all nonhumanities subjects except studio and performing arts and "mathematics and/or science."

The average minimum credit hour requirements at four-year colleges for students entering in 1988-89 are: "other humanities fields, including interdisciplinary humanities courses" (6.2), social sciences (5.6), "other areas" (5.3),

English composition (4.6), natural and physical sciences (4.5), "unspecified humanities courses, or a combination of humanities courses" (4.3), studio and performing arts (4.1), history (3.4), mathematics (2.5), English or American literature (2.4), "mathematics and/or science" (2.2), foreign languages and literature (2.0), philosophy (1.8), and classics (0.2).

In 1988, 90 percent of associate degree-granting two-year schools in the United States required all undergraduate degree candidates to take general education courses to graduate. On average, a minimum of 30.5 semester credit hours in general education are required out of a total of 64.3 credit hours needed to graduate for students entering in 1988-89. These general education credit hours represent 47 percent of the total hours needed for graduation for 1988-89 entrants. On average, a minimum of 12.6 credit hours are required in humanities subjects. These hours in humanities represent 41 percent of the general education hours, and about one-fifth of the total hours required for graduation.

At least half of all two-year schools require coursework in the following subject areas for 1988-89 entrants: English composition (94%), social sciences (68%), mathematics (64%), "other areas" (57%), and natural and physical sciences (55%).

An average of two or more credit hours are required in the following subject areas for 1988-89 entrants to two-year colleges: English composition (4.7), social sciences (4.3), "other areas" (3.4), natural and physical sciences (3.3), "unspecified humanities courses, or a combination of humanities courses" (2.8), mathematics (2.8), and "mathematics and/or science" (2.1).

APPENDIX A

Detailed Tables

Table A-1.—Number and percent of colleges and universities with general education requirements in 1988, by school characteristics

| School characteristic | Number of schools | Number of schools with general education requirements | Percent of schools with general education requirements |
|--------------------------|-------------------|---|--|
| All schools..... | 2,807 | 2,623 | 93.5 |
| Two-year schools | | | |
| Total..... | 1,245 | 1,120 | 89.9 |
| Control | | | |
| Public..... | 907 | 814 | 89.8 |
| Private..... | 338 | 306 | 90.3 |
| Four-year schools | | | |
| Total..... | 1,562 | 1,504 | 96.3 |
| Control | | | |
| Public..... | 535 | 509 | 95.1 |
| Private..... | 1,027 | 995 | 96.9 |
| Type | | | |
| Doctoral..... | 164 | 152 | 92.6 |
| Comprehensive..... | 410 | 390 | 95.0 |
| Baccalaureate..... | 696 | 681 | 97.8 |
| Specialized..... | 292 | 282 | 96.6 |

NOTE.—The estimates in this report are based on sample data that have been weighted to produce national estimates. Because these estimates are subject to sampling variability, they have been rounded for presentation in the text and tables. Percents and averages have been calculated based on the actual estimates rather than the rounded values.

Table A-2.—Number and percent of four-year colleges and universities with requirements in selected academic areas for students entering in 1988-89, by academic area and school characteristics

| Academic area | Total | Control | | Type | | | |
|--|-------|---------|---------|----------|---------------|---------------|-------------|
| | | Public | Private | Doctoral | Comprehensive | Baccalaureate | Specialized |
| English composition | | | | | | | |
| Number of schools..... | 1,316 | 475 | 841 | 129 | 347 | 601 | 238 |
| Percent of schools..... | 87.5 | 93.3 | 84.6 | 85.4 | 89.0 | 88.4 | 84.6 |
| English or American literature | | | | | | | |
| Number of schools..... | 824 | 268 | 555 | 30 | 194 | 436 | 164 |
| Percent of schools..... | 54.8 | 52.7 | 55.8 | 19.7 | 49.8 | 64.0 | 58.2 |
| Foreign languages and literature | | | | | | | |
| Number of schools..... | 346 | 50 | 296 | 32 | 87 | 200 | 26 |
| Percent of schools..... | 23.0 | 9.8 | 29.8 | 21.4 | 22.4 | 29.4 | 9.3 |
| History | | | | | | | |
| Number of schools..... | 940 | 291 | 648 | 44 | 253 | 488 | 155 |
| Percent of schools..... | 62.5 | 57.3 | 65.2 | 29.0 | 64.9 | 71.7 | 54.9 |
| Philosophy | | | | | | | |
| Number of schools..... | 566 | 91 | 475 | 14 | 137 | 284 | 131 |
| Percent of schools..... | 37.7 | 18.0 | 47.7 | 9.3 | 35.1 | 41.7 | 46.7 |
| Classics | | | | | | | |
| Number of schools..... | 72 | 25 | 47 | 2 | 19 | 51 | 0 |
| Percent of schools..... | 4.8 | 4.9 | 4.7 | 1.3 | 4.9 | 7.4 | 0.0 |
| Other humanities fields | | | | | | | |
| Number of schools..... | 814 | 170 | 644 | 34 | 201 | 416 | 163 |
| Percent of schools..... | 54.1 | 33.3 | 64.7 | 22.4 | 51.6 | 61.1 | 57.7 |
| Unspecified humanities courses or a combination of humanities courses | | | | | | | |
| Number of schools..... | 764 | 276 | 488 | 98 | 204 | 313 | 150 |
| Percent of schools..... | 50.8 | 54.2 | 49.1 | 64.4 | 52.2 | 45.9 | 53.2 |

Table A-2.—Number and percent of four-year colleges and universities with requirements in selected academic areas for students entering in 1988-89, by academic area and school characteristics (continued)

| Academic area | Total | Control | | Type | | | |
|--------------------------------------|-------|---------|---------|----------|---------------|---------------|-------------|
| | | Public | Private | Doctoral | Comprehensive | Baccalaureate | Specialized |
| Studio and performing arts | | | | | | | |
| Number of schools..... | 377 | 139 | 238 | 20 | 85 | 195 | 78 |
| Percent of schools..... | 25.1 | 27.3 | 23.9 | 13.0 | 21.7 | 28.6 | 27.7 |
| Social sciences | | | | | | | |
| Number of schools..... | 1,207 | 389 | 818 | 110 | 343 | 599 | 155 |
| Percent of schools..... | 80.2 | 76.4 | 82.2 | 72.4 | 88.0 | 88.0 | 55.0 |
| Mathematics | | | | | | | |
| Number of schools..... | 883 | 331 | 552 | 70 | 264 | 426 | 123 |
| Percent of schools..... | 58.7 | 65.0 | 55.5 | 46.0 | 67.6 | 62.6 | 43.7 |
| Natural and physical sciences | | | | | | | |
| Number of schools..... | 1,002 | 360 | 641 | 86 | 286 | 485 | 145 |
| Percent of schools..... | 66.6 | 70.8 | 64.5 | 56.5 | 73.3 | 71.2 | 51.6 |
| Mathematics and/or science | | | | | | | |
| Number of schools..... | 485 | 174 | 311 | 42 | 139 | 274 | 30 |
| Percent of schools..... | 32.2 | 34.1 | 31.3 | 27.7 | 35.7 | 40.3 | 10.5 |
| Other areas | | | | | | | |
| Number of schools..... | 939 | 294 | 645 | 78 | 236 | 465 | 161 |
| Percent of schools..... | 62.5 | 57.9 | 64.8 | 51.2 | 60.6 | 68.3 | 57.1 |

NOTE.—The estimates in this report are based on sample data that have been weighted to produce national estimates. Because these estimates are subject to sampling variability, they have been rounded for presentation in the text and tables. Percents and averages have been calculated based on the actual estimates rather than the rounded values.

Table A-3.—Number and percent of four-year colleges and universities with requirements in selected academic areas for students entering in 1983-84, by academic area and school characteristics

| Academic area | Total | Control | | Type | | | |
|--|-------|---------|---------|----------|---------------|---------------|-------------|
| | | Public | Private | Doctoral | Comprehensive | Baccalaureate | Specialized |
| English composition | | | | | | | |
| Number of schools..... | 1,309 | 478 | 831 | 122 | 343 | 594 | 251 |
| Percent of schools..... | 87.2 | 94.2 | 83.6 | 80.1 | 88.4 | 87.2 | 89.1 |
| English or American literature | | | | | | | |
| Number of schools..... | 777 | 257 | 521 | 28 | 192 | 399 | 158 |
| Percent of schools..... | 51.8 | 50.6 | 52.3 | 18.4 | 49.6 | 58.6 | 56.1 |
| Foreign languages and literature | | | | | | | |
| Number of schools..... | 295 | 46 | 249 | 32 | 71 | 165 | 26 |
| Percent of schools..... | 19.7 | 9.0 | 25.1 | 21.4 | 18.4 | 24.3 | 9.5 |
| History | | | | | | | |
| Number of schools..... | 867 | 269 | 598 | 34 | 238 | 439 | 156 |
| Percent of schools..... | 57.7 | 53.1 | 60.1 | 22.4 | 61.3 | 64.6 | 55.4 |
| Philosophy | | | | | | | |
| Number of schools..... | 517 | 71 | 446 | 10 | 123 | 255 | 129 |
| Percent of schools..... | 34.4 | 14.1 | 44.8 | 6.7 | 31.7 | 37.4 | 46.0 |
| Classics | | | | | | | |
| Number of schools..... | 50 | 19 | 31 | 2 | 13 | 35 | 0 |
| Percent of schools..... | 3.4 | 3.8 | 3.1 | 1.3 | 3.5 | 5.1 | 0.0 |
| Other humanities fields | | | | | | | |
| Number of schools..... | 736 | 162 | 574 | 28 | 183 | 377 | 148 |
| Percent of schools..... | 49.0 | 31.9 | 57.7 | 18.4 | 47.3 | 55.4 | 52.5 |
| Unspecified humanities courses or a combination of humanities courses | | | | | | | |
| Number of schools..... | 702 | 252 | 450 | 86 | 192 | 287 | 137 |
| Percent of schools..... | 46.8 | 49.7 | 45.2 | 56.6 | 49.5 | 42.2 | 48.6 |

Table A-3.—Number and percent of four-year colleges and universities with requirements in selected academic areas for students entering in 1983-84, by academic area and school characteristics (continued)

| Academic area | Total | Control | | Type | | | |
|--------------------------------------|-------|---------|---------|----------|---------------|---------------|-------------|
| | | Public | Private | Doctoral | Comprehensive | Baccalaureate | Specialized |
| Studio and performing arts | | | | | | | |
| Number of schools..... | 336 | 124 | 212 | 8 | 79 | 171 | 78 |
| Percent of schools..... | 22.4 | 24.4 | 21.4 | 5.2 | 20.4 | 25.1 | 27.7 |
| Social sciences | | | | | | | |
| Number of schools..... | 1,100 | 375 | 726 | 96 | 329 | 546 | 129 |
| Percent of schools..... | 73.3 | 74.0 | 72.9 | 63.2 | 84.8 | 80.3 | 45.9 |
| Mathematics | | | | | | | |
| Number of schools..... | 695 | 266 | 430 | 56 | 218 | 337 | 84 |
| Percent of schools..... | 46.3 | 52.4 | 42.2 | 37.0 | 56.3 | 49.5 | 29.8 |
| Natural and physical sciences | | | | | | | |
| Number of schools..... | 897 | 315 | 582 | 72 | 256 | 436 | 133 |
| Percent of schools..... | 59.7 | 62.2 | 58.5 | 47.4 | 66.1 | 64.1 | 47.1 |
| Mathematics and/or science | | | | | | | |
| Number of schools..... | 479 | 178 | 302 | 42 | 132 | 280 | 26 |
| Percent of schools..... | 31.9 | 35.1 | 30.3 | 27.7 | 34.0 | 41.2 | 9.2 |
| Other areas | | | | | | | |
| Number of schools..... | 842 | 277 | 565 | 66 | 213 | 422 | 142 |
| Percent of schools..... | 56.1 | 54.6 | 56.8 | 43.3 | 54.8 | 62.0 | 50.3 |

NOTE.—The estimates in this report are based on sample data that have been weighted to produce national estimates. Because these estimates are subject to sampling variability, they have been rounded for presentation in the text and tables. Percents and averages have been calculated based on the actual estimates rather than the rounded values.

Table A-4.—Average minimum number of credit hours required for graduation, in general education, and specifically in humanities in baccalaureate programs at four-year colleges and universities, by school characteristics

| Academic area | Total | Control | | Type | | | |
|--|-------|---------|---------|----------|---------------|---------------|-------------|
| | | Public | Private | Doctoral | Comprehensive | Baccalaureate | Specialized |
| Total required for graduation | | | | | | | |
| 1988-89..... | 125.8 | 125.0 | 126.1 | 123.1 | 125.0 | 125.5 | 128.8 |
| 1983-84..... | 125.9 | 125.1 | 126.3 | 123.0 | 125.0 | 125.3 | 130.2 |
| Change in hours..... | -0.1 | -0.1 | -0.2 | 0.1 | * | 0.2 | -1.4 |
| Percent change..... | ** | ** | ** | ** | ** | ** | ** |
| Required in general education | | | | | | | |
| 1988-89..... | 52.1 | 45.5 | 55.4 | 37.4 | 48.2 | 48.2 | 74.4 |
| 1983-84..... | 49.4 | 42.4 | 53.0 | 33.1 | 45.8 | 45.1 | 73.8 |
| Change in hours..... | 2.6 | 3.0 | 2.4 | 4.3 | 2.4 | 3.2 | 0.6 |
| Percent change..... | 5.3% | 7.0% | 4.6% | 13.1% | 5.2% | 7.1% | ** |
| Required specifically in humanities | | | | | | | |
| 1988-89..... | 25.0 | 18.3 | 28.4 | 15.5 | 22.2 | 24.6 | 34.8 |
| 1983-84..... | 23.5 | 17.0 | 26.8 | 14.2 | 21.0 | 22.7 | 33.8 |
| Change in hours..... | 1.5 | 1.3 | 1.6 | 1.3 | 1.1 | 1.9 | 1.0 |
| Percent change..... | 6.2% | 7.4% | 5.8% | 9.2% | 5.5% | 8.2% | ** |

*Less than +/- 0.05.

**Not reported because amount of change in hours is nonsignificant.

NOTE.—The estimates in this report are based on sample data that have been weighted to produce national estimates. Because these estimates are subject to sampling variability, they have been rounded for presentation in the text and tables. Percents and averages have been calculated based on the actual estimates rather than the rounded values. Amount of change and percent change were computed from unrounded data and then rounded to the nearest tenth.

Table A-5.—Average minimum credit hour requirements at four-year colleges and universities, by academic area and school characteristics

| Academic area | Total | Control | | Type | | | |
|---|-------|---------|---------|----------|---------------|---------------|-------------|
| | | Public | Private | Doctoral | Comprehensive | Baccalaureate | Specialized |
| English composition | | | | | | | |
| 1988-89..... | 4.6 | 5.1 | 4.4 | 4.3 | 4.9 | 4.7 | 4.2 |
| 1983-84..... | 4.5 | 5.0 | 4.3 | 4.0 | 4.6 | 4.5 | 4.8 |
| Change in hours..... | 0.1 | 0.1 | * | 0.3 | 0.2 | 0.2 | -0.5 |
| Percent change..... | ** | ** | ** | 8.6% | 4.9% | 3.6% | -11.0% |
| English or American literature | | | | | | | |
| 1988-89..... | 2.4 | 2.4 | 2.4 | 0.9 | 2.5 | 2.6 | 2.6 |
| 1983-84..... | 2.3 | 2.3 | 2.3 | 0.8 | 2.5 | 2.4 | 2.5 |
| Change in hours..... | 0.1 | 0.1 | 0.1 | 0.1 | * | 0.2 | 0.1 |
| Percent change..... | ** | 4.4% | ** | ** | ** | ** | 2.4% |
| Foreign languages and literature | | | | | | | |
| 1988-89..... | 2.0 | 0.6 | 2.7 | 2.1 | 1.6 | 2.4 | 1.8 |
| 1983-84..... | 1.8 | 0.6 | 2.4 | 2.3 | 1.5 | 1.9 | 1.8 |
| Change in hours..... | 0.2 | * | 0.3 | -0.2 | 0.1 | 0.4 | * |
| Percent change..... | 11.4% | ** | 13.0% | ** | ** | 22.8% | -0.8% |
| History | | | | | | | |
| 1988-89..... | 3.4 | 2.9 | 3.7 | 1.7 | 3.5 | 3.7 | 3.4 |
| 1983-84..... | 3.2 | 2.6 | 3.5 | 1.2 | 3.3 | 3.4 | 3.5 |
| Change in hours..... | 0.2 | 0.2 | 0.2 | 0.5 | 0.2 | 0.3 | -0.1 |
| Percent change..... | 6.3% | ** | ** | 37.8% | 7.2% | ** | -3.9% |
| Philosophy | | | | | | | |
| 1988-89..... | 1.8 | 0.5 | 2.4 | 0.4 | 1.6 | 1.7 | 2.8 |
| 1983-84..... | 1.6 | 0.4 | 2.2 | 0.4 | 1.6 | 1.5 | 2.5 |
| Change in hours..... | 0.2 | 0.1 | 0.2 | 0.1 | * | 0.2 | 0.3 |
| Percent change..... | 9.7% | 29.2% | ** | 21.2% | ** | ** | 11.2% |
| Classics | | | | | | | |
| 1988-89..... | 0.2 | 0.2 | 0.3 | * | 0.2 | 0.4 | 0.0 |
| 1983-84..... | 0.1 | 0.1 | 0.1 | * | 0.1 | 0.2 | 0.0 |
| Change in hours..... | 0.1 | * | 0.2 | 0.0 | * | 0.2 | 0.0 |
| Percent change..... | ** | ** | ** | ** | ** | ** | ** |

Table A-5.—Average minimum credit hour requirements at four-year colleges and universities, by academic area and school characteristics (continued)

| Academic area | Total | Control | | Type | | | |
|--|-------|---------|---------|----------|---------------|---------------|-------------|
| | | Public | Private | Doctoral | Comprehensive | Baccalaureate | Specialized |
| Other humanities fields | | | | | | | |
| 1988-89..... | 6.2 | 2.1 | 8.4 | 1.3 | 3.5 | 5.2 | 15.0 |
| 1983-84..... | 5.9 | 1.8 | 8.0 | 1.1 | 3.3 | 5.0 | 14.2 |
| Change in hours..... | 0.3 | 0.2 | 0.4 | 0.2 | 0.2 | 0.2 | 0.8 |
| Percent change..... | 5.6% | ** | ** | ** | 7.1% | ** | 5.8% |
| Unspecified humanities courses or a combination of humanities courses | | | | | | | |
| 1988-89..... | 4.3 | 4.6 | 4.2 | 4.9 | 4.5 | 3.8 | 5.1 |
| 1983-84..... | 4.1 | 4.2 | 4.0 | 4.5 | 4.2 | 3.6 | 4.6 |
| Change in hours..... | 0.3 | 0.4 | 0.2 | 0.3 | 0.3 | 0.2 | 0.5 |
| Percent change..... | ** | 10.4% | ** | ** | ** | ** | 10.7% |
| Studio and performing arts | | | | | | | |
| 1988-89..... | 4.1 | 2.1 | 5.1 | 0.5 | 1.0 | 1.2 | 17.3 |
| 1983-84..... | 4.2 | 1.9 | 5.4 | 0.2 | 0.9 | 1.0 | 18.6 |
| Change in hours..... | -0.1 | 0.2 | -0.3 | 0.3 | 0.1 | 0.1 | -1.3 |
| Percent change..... | ** | 9.6% | ** | 188.0% | ** | ** | -7.1% |
| Social sciences | | | | | | | |
| 1988-89..... | 5.6 | 6.1 | 5.3 | 5.1 | 6.8 | 5.7 | 3.8 |
| 1983-84..... | 5.2 | 5.8 | 4.9 | 4.7 | 6.6 | 5.3 | 3.4 |
| Change in hours..... | 0.4 | 0.3 | 0.4 | 0.4 | 0.2 | 0.5 | 0.4 |
| Percent change..... | 7.3% | 5.0% | 8.7% | 8.1% | ** | 8.7% | 12.2% |
| Mathematics | | | | | | | |
| 1988-89..... | 2.5 | 2.7 | 2.4 | 2.2 | 2.8 | 2.3 | 2.8 |
| 1983-84..... | 2.0 | 2.3 | 1.9 | 1.7 | 2.4 | 1.8 | 2.0 |
| Change in hours..... | 0.5 | 0.4 | 0.5 | 0.5 | 0.4 | 0.4 | 0.8 |
| Percent change..... | 24.1% | 18.7% | 27.4% | 27.9% | 15.9% | 23.2% | 37.8% |
| Natural and physical sciences | | | | | | | |
| 1988-89..... | 4.5 | 5.4 | 4.0 | 4.4 | 5.1 | 4.5 | 3.7 |
| 1983-84..... | 4.1 | 4.7 | 3.7 | 3.7 | 4.7 | 4.1 | 3.4 |
| Change in hours..... | 0.4 | 0.6 | 0.3 | 0.7 | 0.4 | 0.4 | 0.3 |
| Percent change..... | 10.3% | 13.6% | 8.2% | 19.2% | 9.0% | 9.6% | 9.9% |

Table A-5.—Average minimum credit hour requirements at four-year colleges and universities, by academic area and school characteristics (continued)

| Academic area | Total | Control | | Type | | | |
|-----------------------------------|-------|---------|---------|----------|---------------|---------------|-------------|
| | | Public | Private | Doctoral | Comprehensive | Baccalaureate | Specialized |
| Mathematics and/or science | | | | | | | |
| 1988-89 | 2.2 | 2.3 | 2.2 | 1.9 | 2.5 | 2.8 | 0.5 |
| 1983-84 | 2.3 | 2.4 | 2.2 | 2.0 | 2.6 | 2.9 | 0.5 |
| Change in hours..... | -0.1 | -0.1 | * | -0.1 | -0.1 | -0.1 | * |
| Percent change..... | ** | ** | ** | ** | ** | ** | 8.8% |
| Other areas | | | | | | | |
| 1988-89 | 5.3 | 5.1 | 5.5 | 5.7 | 5.0 | 4.9 | 6.5 |
| 1983-84 | 5.0 | 4.5 | 5.3 | 4.7 | 4.4 | 5.0 | 6.2 |
| Change in credit hours..... | 0.3 | 0.6 | 0.1 | 1.0 | 0.6 | * | 0.3 |
| Percent change..... | ** | 14.0% | ** | 21.5% | 13.6% | ** | 4.8% |

*Less than +/- 0.05.

**Not reported because amount of change in hours is nonsignificant.

NOTE.—The estimates in this report are based on sample data that have been weighted to produce national estimates. Because these estimates are subject to sampling variability, they have been rounded for presentation in the text and tables. Percents and averages have been calculated based on the actual estimates rather than the rounded values. Amount of change and percent change were computed from unrounded data and then rounded to the nearest tenth.

Table A-6.—Percent of four-year colleges and universities with each structure of general education requirements for students entering in 1988-89 and 1983-84, by school characteristics

| Structure of general education requirements | Total | Control | | Type | | | |
|---|-------|---------|---------|----------|---------------|---------------|-------------|
| | | Public | Private | Doctoral | Comprehensive | Baccalaureate | Specialized |
| Specified departmental courses | | | | | | | |
| 1988-89 | 77.1 | 83.4 | 73.9 | 61.6 | 83.9 | 78.7 | 72.3 |
| 1983-84 | 72.9 | 77.0 | 70.8 | 53.8 | 79.1 | 72.1 | 76.8 |
| Specified interdisciplinary or interdepartmental courses | | | | | | | |
| 1988-89 | 46.2 | 35.6 | 51.6 | 19.8 | 39.6 | 45.2 | 72.2 |
| 1983-84 | 39.9 | 28.4 | 45.8 | 11.9 | 33.5 | 40.3 | 62.8 |
| Limited range of courses | | | | | | | |
| 1988-89 | 85.9 | 86.6 | 85.6 | 80.2 | 90.4 | 84.6 | 86.1 |
| 1983-84 | 76.9 | 78.7 | 76.0 | 64.6 | 84.0 | 74.6 | 79.3 |
| Virtually unlimited range of courses | | | | | | | |
| 1988-89 | 12.9 | 12.2 | 13.2 | 18.5 | 8.6 | 14.2 | 12.3 |
| 1983-84 | 19.1 | 19.7 | 18.7 | 31.5 | 15.3 | 20.3 | 14.6 |

NOTE.—Respondents were asked to indicate all structures that applied to their school's general education requirements. Thus, columns sum to more than 100 percent for each year.

The estimates in this report are based on sample data that have been weighted to produce national estimates. Because these estimates are subject to sampling variability, they have been rounded for presentation in the text and tables. Percents and averages have been calculated based on the actual estimates rather than the rounded values.

Table A-7.--Percent of four-year colleges and universities in which students usually complete their general education requirements in lower division only, upper division only, or in either upper or lower division for students entering in 1988-89 and 1983-84, by school characteristics

| Division | Total | Control | | Type | | | |
|---------------------------------------|-------|---------|---------|----------|---------------|---------------|-------------|
| | | Public | Private | Doctoral | Comprehensive | Baccalaureate | Specialized |
| Lower division only | | | | | | | |
| 1988-89 | 32.7 | 46.0 | 25.9 | 28.7 | 35.0 | 40.0 | 13.9 |
| 1983-84 | 33.6 | 44.7 | 28.0 | 28.7 | 36.4 | 40.3 | 16.2 |
| Upper division only | | | | | | | |
| 1988-89 | 2.0 | 2.0 | 1.9 | 2.6 | 3.1 | 2.0 | 0.0 |
| 1983-84 | 2.6 | 2.3 | 2.7 | 2.6 | 3.5 | 3.1 | 0.0 |
| Either upper or lower division | | | | | | | |
| 1988-89 | 65.3 | 52.0 | 72.1 | 68.7 | 61.9 | 58.0 | 86.1 |
| 1983-84 | 63.8 | 53.0 | 69.3 | 68.7 | 60.1 | 56.6 | 83.8 |

NOTE.--The estimates in this report are based on sample data that have been weighted to produce national estimates. Because these estimates are subject to sampling variability, they have been rounded for presentation in the text and tables. Percents and averages have been calculated based on the actual estimates rather than the rounded values.

Table A-8.—Percent of four-year colleges and universities with various kinds of foreign language requirements for students entering in 1988-89, by school characteristics

| Foreign language requirement | Total | Control | | Type | | | |
|---|-------|---------|---------|----------|---------------|---------------|-------------|
| | | Public | Private | Doctoral | Comprehensive | Baccalaureate | Specialized |
| Foreign language study is not required..... | 76.5 | 88.8 | 70.2 | 77.2 | 77.2 | 70.1 | 90.7 |
| Specified number of courses required..... | 9.5 | 5.2 | 11.7 | 14.8 | 11.2 | 10.9 | 0.7 |
| Language proficiency examination must be passed..... | 2.9 | 2.0 | 3.4 | 5.4 | 2.6 | 3.7 | 0.0 |
| Specified language proficiency level must be reached..... | 12.7 | 2.0 | 18.2 | 13.4 | 9.2 | 16.2 | 8.6 |
| Computer courses may be substituted..... | 0.1 | 0.0 | 0.2 | 1.4 | 0.0 | 0.0 | 0.0 |
| Other courses may be substituted..... | 4.0 | 3.0 | 4.5 | 2.6 | 2.9 | 6.6 | 0.0 |
| Other foreign language requirements..... | 0.9 | 2.7 | 0.0 | 0.0 | 2.0 | 0.9 | 0.0 |

NOTE.—If a school had a foreign language requirement that applied to all students, then respondents could indicate all of the kinds of requirements at the school. Thus, columns do not sum to 100 percent.

The estimates in this report are based on sample data that have been weighted to produce national estimates. Because these estimates are subject to sampling variability, they have been rounded for presentation in the text and tables. Percents and averages have been calculated based on the actual estimates rather than the rounded values.

Table A-9.—Percent of four-year colleges and universities that require a survey course in selected academic areas for students entering in 1988-89, by school characteristics

| Academic area | Total | Control | | Type | | | |
|--|-------|---------|---------|----------|---------------|---------------|-------------|
| | | Public | Private | Doctoral | Comprehensive | Baccalaureate | Specialized |
| History..... | 37.3 | 52.0 | 40.1 | 11.9 | 43.8 | 43.1 | 28.2 |
| Literature..... | 27.1 | 23.3 | 29.1 | 9.2 | 23.0 | 34.0 | 25.9 |
| Other humanities subjects..... | 22.3 | 23.4 | 23.3 | 10.5 | 24.0 | 23.4 | 29.0 |
| An interdisciplinary subject whose content is primarily in the humanities..... | 20.2 | 13.4 | 23.6 | 9.3 | 18.5 | 24.3 | 18.4 |

NOTE.—The estimates in this report are based on sample data that have been weighted to produce national estimates. Because these estimates are subject to sampling variability, they have been rounded for presentation in the text and tables. Percents and averages have been calculated based on the actual estimates rather than the rounded values.

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Table A-10.—Number and percent of two-year colleges with requirements for an associate degree in selected academic areas for students entering in 1988-89 and 1983-84, by academic area

| Academic area | 1988-89 | 1983-84 |
|--|---------|---------|
| English composition | | |
| Number of schools..... | 907 | 893 |
| Percent of schools..... | 93.6 | 92.2 |
| English or American literature | | |
| Number of schools..... | 271 | 258 |
| Percent of schools..... | 28.0 | 26.7 |
| Foreign languages and literature | | |
| Number of schools..... | 39 | 39 |
| Percent of schools..... | 4.0 | 4.0 |
| History | | |
| Number of schools..... | 335 | 326 |
| Percent of schools..... | 34.6 | 33.6 |
| Philosophy | | |
| Number of schools..... | 72 | 63 |
| Percent of schools..... | 7.4 | 6.5 |
| Classics | | |
| Number of schools..... | 6 | 0 |
| Percent of schools..... | 0.6 | -- |
| Other humanities fields | | |
| Number of schools..... | 326 | 275 |
| Percent of schools..... | 33.6 | 23.4 |
| Unspecified humanities courses or a combination of humanities courses | | |
| Number of schools..... | 471 | 406 |
| Percent of schools..... | 48.6 | 41.9 |

Table A-10.—Number and percent of two-year colleges with requirements for an associate degree in selected academic areas for students entering in 1988-89 and 1983-84, by academic area (continued)

| Academic area | 1988-89 | 1983-84 |
|--------------------------------------|---------|---------|
| Studio and performing arts | | |
| Number of schools..... | 51 | 13 |
| Percent of schools..... | 5.3 | 1.3 |
| Social sciences | | |
| Number of schools..... | 663 | 610 |
| Percent of schools..... | 68.5 | 63.0 |
| Mathematics | | |
| Number of schools..... | 623 | 528 |
| Percent of schools..... | 64.3 | 54.5 |
| Natural and physical sciences | | |
| Number of schools..... | 537 | 482 |
| Percent of schools..... | 55.5 | 49.8 |
| Mathematics and/or science | | |
| Number of schools..... | 351 | 327 |
| Percent of schools..... | 36.3 | 33.8 |
| Other areas | | |
| Number of schools..... | 554 | 499 |
| Percent of schools..... | 57.2 | 51.5 |

NOTE.—The estimates in this report are based on sample data that have been weighted to produce national estimates. Because these estimates are subject to sampling variability, they have been rounded for presentation in the text and tables. Percents and averages have been calculated based on the actual estimates rather than the rounded values.

Table A-11.--Average minimum number of credit hours required for graduation, in general education, and specifically in humanities in associate degree programs at two-year and four-year colleges

| Requirements | Two-year colleges | Four-year colleges |
|--|-------------------|--------------------|
| Total required for graduation | | |
| 1988-89..... | 64.3 | 62.8 |
| 1983-84..... | 64.4 | 62.8 |
| Change in hours..... | -0.1 | 0.1 |
| Percent change..... | ** | ** |
| Required in general education | | |
| 1988-89..... | 30.5 | 28.0 |
| 1983-84..... | 28.8 | 26.1 |
| Change in hours..... | 1.7 | 1.8 |
| Percent change..... | 6.0% | 6.7% |
| Required specifically in humanities | | |
| 1988-89..... | 12.6 | 13.1 |
| 1983-84..... | 12.0 | 11.7 |
| Change in hours..... | 0.6 | 1.3 |
| Percent change..... | 4.7% | 10.7% |

**Not reported because amount of change in hours is nonsignificant.

NOTE.--The estimates in this report are based on sample data that have been weighted to produce national estimates. Because these estimates are subject to sampling variability, they have been rounded for presentation in the text and tables. Percents and averages have been calculated based on the actual estimates rather than the rounded values. Amount of change and percent change were computed from unrounded data and then rounded to the nearest tenth.

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Table A-12.—Average minimum credit hour requirements for an associate degree at two-year colleges, by academic area

| Academic area | Credit hours required | | Change in credit hours required | Percent change in credit hours required |
|---|-----------------------|---------|---------------------------------|---|
| | 1988-89 | 1983-84 | | |
| English composition..... | 4.7 | 4.5 | 0.2 | 4.2% |
| English or American literature..... | 1.1 | 1.1 | * | ** |
| Foreign languages and literature | 0.2 | 0.2 | 0.0 | ** |
| History | 1.8 | 1.8 | * | ** |
| Philosophy | 0.3 | 0.3 | * | ** |
| Classics..... | * | 0.0 | * | ** |
| Other humanities fields | 1.8 | 1.5 | 0.3 | 16.9% |
| Unspecified humanities courses or a combination of humanities courses | 2.8 | 2.5 | 0.3 | 11.2% |
| Studio and performing arts | 0.2 | 0.1 | 0.1 | ** |
| Social sciences..... | 4.3 | 4.1 | 0.2 | ** |
| Mathematics.. .. | 2.8 | 2.5 | 0.3 | 12.1% |
| Natural and physical sciences | 3.3 | 3.1 | 0.2 | 8.1% |
| Mathematics and/or science..... | 2.1 | 1.9 | 0.1 | ** |
| Other areas..... | 3.4 | 3.2 | 0.2 | ** |

*Less than +/- 0.05.

**Not reported because amount of change in hours is nonsignificant.

NOTE.—The estimates in this report are based on sample data that have been weighted to produce national estimates. Because these estimates are subject to sampling variability, they have been rounded for presentation in the text and tables. Percents and averages have been calculated based on the actual estimates rather than the rounded values. Amount of change and percent change were computed from unrounded data and then rounded to the nearest tenth.

Table A-13.--Percent of two-year colleges with various structures of general education requirements for students entering in 1988-89 and 1983-84

| Structure of general education requirements | 1988-89 | 1983-84 |
|---|---------|---------|
| Specified departmental courses..... | 86.9 | 81.5 |
| Specified interdisciplinary or interdepartmental courses... | 36.0 | 34.2 |
| Limited range of courses..... | 82.6 | 78.4 |
| Virtually unlimited range of courses..... | 13.4 | 13.4 |

NOTE.--Respondents were asked to indicate all structures that applied to their school's general education requirements. Thus, columns sum to more than 100 percent.

The estimates in this report are based on sample data that have been weighted to produce national estimates. Because these estimates are subject to sampling variability, they have been rounded for presentation in the text and tables. Percents and averages have been calculated based on the actual estimates rather than the rounded values.

Table A-14.—Percent of two-year colleges with various kinds of foreign language requirements for students entering in 1988-89

| Foreign language requirement | Percent |
|---|---------|
| Foreign language study is not required..... | 97.3 |
| Specified number of courses required..... | 1.8 |
| Language proficiency examination must be passed..... | 0.0 |
| Specified language proficiency level must be reached..... | 0.0 |
| Computer courses may be substituted..... | 0.0 |
| Other courses may be substituted..... | 1.0 |
| Other foreign language requirement..... | 0.0 |

NOTE.—If a school had a foreign language requirement that applied to all students, then respondents could indicate all of the kinds of requirements at the school. Thus, columns do not sum to 100 percent.

The estimates in this report are based on sample data that have been weighted to produce national estimates. Because these estimates are subject to sampling variability, they have been rounded for presentation in the text and tables. Percents and averages have been calculated based on the actual estimates rather than the rounded values.

Table A-15.—Percent of two-year colleges that require a survey course in selected academic areas for students entering in 1988-89

| Academic area | Percent |
|--|---------|
| History | 25.2 |
| Literature | 21.1 |
| Other humanities subjects..... | 18.5 |
| An interdisciplinary subject whose content is primarily in the humanities..... | 14.2 |

NOTE.—The estimates in this report are based on sample data that have been weighted to produce national estimates. Because these estimates are subject to sampling variability, they have been rounded for presentation in the text and tables. Percents and averages have been calculated based on the actual estimates rather than the rounded values.

Table A-16.--Standard errors for statistics

| Item | Total (4-year) | Control | | Type | | | | |
|---|-------------------|--------------------|---------------------|----------|---------------|---------------|-------------------------|--------------|
| | | Public (4-year) | Private (4-year) | Doctoral | Comprehensive | Baccalaureate | Specialized (4-year) | Two- year |
| Percent of all schools with requirements - 1988-89 | | | | | | | | |
| English composition | 2.1 | 2.5 | 3.0 | 3.1 | 3.2 | 2.9 | 9.5 | 2.2 |
| English or American literature..... | 3.3 | 4.2 | 4.3 | 3.0 | 5.4 | 4.3 | 12.3 | 4.1 |
| Foreign languages and literature..... | 2.9 | 2.1 | 4.2 | 3.3 | 4.0 | 4.1 | 8.6 | 1.6 |
| History..... | 3.5 | 3.8 | 4.6 | 3.5 | 4.9 | 4.2 | 13.9 | 5.3 |
| Philosophy..... | 3.4 | 3.6 | 4.4 | 2.2 | 3.8 | 4.7 | 10.5 | 2.4 |
| Classics..... | 1.5 | 2.3 | 2.0 | 0.9 | 2.0 | 2.8 | -- | 0.6 |
| Other humanities fields... | 3.8 | 4.8 | 4.4 | 3.6 | 4.7 | 3.6 | 12.4 | 4.3 |
| Unspecified humanities courses or a combina- tion of humanities courses..... | 1.9 | 4.0 | 3.7 | 4.1 | 4.7 | 4.1 | 12.1 | 5.0 |
| Studio and performing arts..... | 3.0 | 4.5 | 4.1 | 2.7 | 3.9 | 4.4 | 8.1 | 2.2 |
| Social sciences..... | 2.5 | 3.7 | 3.7 | 3.8 | 2.8 | 3.1 | 11.8 | 4.4 |
| Mathematics..... | 3.5 | 3.2 | 4.6 | 4.0 | 4.5 | 4.6 | 13.1 | 3.8 |
| Natural and physical sciences..... | 3.1 | 3.2 | 4.6 | 3.8 | 4.4 | 4.3 | 12.5 | 4.9 |
| Mathematics and/or science..... | 2.4 | 3.7 | 3.3 | 3.4 | 4.3 | 4.2 | 5.9 | 3.6 |
| Other areas..... | 3.7 | 4.2 | 5.1 | 3.5 | 4.7 | 3.5 | 12.4 | 4.4 |
| Average minimum credit hours required - 1988-89 | | | | | | | | |
| English composition | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.5 | 0.2 |
| English or American literature..... | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.7 | 0.2 |
| Foreign languages and literature..... | 0.3 | 0.1 | 0.5 | 0.3 | 0.3 | 0.4 | 1.7 | 0.1 |
| History..... | 0.3 | 0.2 | 0.4 | 0.2 | 0.4 | 0.3 | 0.9 | 0.3 |
| Philosophy..... | 0.2 | 0.1 | 0.3 | 0.1 | 0.2 | 0.3 | 0.8 | 0.1 |
| Classics..... | 0.1 | 0.1 | 0.2 | * | 0.1 | 0.2 | -- | * |
| Other humanities fields... | 1.4 | 0.4 | 2.1 | 0.3 | 0.4 | 0.5 | 7.5 | 0.3 |
| Unspecified humanities courses or a combina- tion of humanities courses..... | 0.3 | 0.6 | 0.4 | 0.4 | 0.6 | 0.5 | 1.3 | 0.3 |
| Studio and performing arts..... | 1.1 | 0.6 | 1.7 | 0.1 | 0.2 | 0.2 | 6.3 | 0.1 |
| Social sciences..... | 0.2 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 | 1.0 | 0.4 |
| Mathematics..... | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 1.0 | 0.3 |

Table A-16.--Standard errors for statistics (continued)

| Item | Total (4-year) | Control | | Type | | | | |
|--|-------------------|--------------------|---------------------|----------|---------------|---------------|-------------------------|--------------|
| | | Public (4-year) | Private (4-year) | Doctoral | Comprehensive | Baccalaureate | Specialized (4-year) | Two- year |
| Natural and physical sciences..... | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.9 | 0.4 |
| Mathematics and/or science | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 |
| Other areas | 0.6 | 0.6 | 0.8 | 0.7 | 0.8 | 0.4 | 2.5 | 0.4 |
| Average minimum credit hours required for graduation - 1988-89 | 0.5 | 0.3 | 0.7 | 0.5 | 0.5 | 0.5 | 2.3 | 0.7 |
| Average minimum credit hours required in general education - 1988-89 | 2.0 | 1.2 | 3.0 | 1.2 | 1.1 | 1.4 | 9.2 | 1.5 |
| Average minimum credit hours required specifically in humanities - 1988-89 | 1.6 | 0.7 | 2.4 | 0.7 | 1.0 | 1.2 | 8.2 | 0.8 |

*Less than 0.05.

APPENDIX B

Technical Notes

Higher Education Surveys (HES)

The Higher Education Surveys (HES) system was established to conduct brief surveys of higher education institutions on topics of interest to Federal policy makers and the education community. The system is sponsored by the National Science Foundation, the U.S. Department of Education, and the National Endowment for the Humanities.

HES questionnaires typically request a limited amount of readily accessible data from a subsample of institutions in the HES panel, which is a nationally representative sample of 1,093 colleges and universities in the United States. Each institution in the panel has identified a HES campus representative, who serves as survey coordinator. The campus representative facilitates data collection by identifying the appropriate respondent for each survey and distributing the questionnaire to that person.

Survey Methodology, General Education and Humanities Requirements Survey

This mail survey on general education and humanities requirements was conducted at the request of the National Endowment for the Humanities (NEH). The information was collected to provide reliable national estimates of general education and humanities requirements for undergraduates and to assess changes in requirements from 1983-84 to 1988-89.

The sample for this survey consisted of half of the HES panel. The questionnaire and cover letter were mailed to institutions on April 8, 1988. During data collection, 42 of these schools were found to be out of scope: 30 had graduate programs only, 2 schools were permanently closed, 1 school had merged with another institution in the panel, 3 schools granted only external degrees, and 6 schools did not offer or award associate or baccalaureate degrees. This resulted in a usable sample size of 504 institutions. Followup was conducted by telephone from late April to early June. Toward the end of data collection, responses were collected by telephone as the respondents completed the questionnaires. Data were adjusted for questionnaire nonresponse and weighted to national totals.

An overall response rate of 98 percent was obtained from the 504 eligible institutions. The response rate among public and private institutions was similar (98 percent and 99 percent, respectively). The response rate by type of

institution also did not vary much, ranging from 97 percent among specialized and two-year schools to 100 percent among doctoral and baccalaureate schools.

Reliability of Survey Estimates

The findings presented in this report are estimates based on the sample from the HES panel and, consequently, are subject to sampling variability. If the questionnaire had been sent to a different sample, the responses would not have been identical; some figures might have been higher, while others might have been lower. The standard error is a measure of the variability due to sampling when estimating a statistic. It indicates how much variability there is in the population of possible estimates of a parameter for a given sample size. Standard errors can be used as a measure of the precision expected from a particular sample. If all possible samples were surveyed under similar conditions, intervals of 1.96 standard errors below to 1.96 standard errors above a particular statistic would include the true population parameter being estimated in about 95 percent of the samples. This is a 95 percent confidence interval. For example, the estimated percentage of schools with requirements in English composition for all four-year schools in 1988-89 is 87.5 percent and the estimated standard error is 2.1. The 95 percent confidence interval for this statistic extends from $87.5 - (2.1 \times 1.96)$ to $87.5 + (2.1 \times 1.96)$, or from 83.4 to 91.6 percent. This means one can be 95 percent confident that this interval contains the true population value. Estimates of standard errors for the estimates were computed using a replication technique known as jackknife replication. Some key statistics and their estimated standard errors are shown in Appendix Table A-16.

School Type Relationships

The data in this report are presented as "total" figures, which represent all kinds of four-year or two-year schools grouped together, and for four-year schools are also broken down by school control and school "type." These classifications are:

- School control
 - Public
 - Private

■ School type (based on the U.S. Department of Education's HEGIS classifications)

- **Doctoral-granting:** schools characterized by a significant level and breadth of activity in and commitment to doctoral-level education as measured by the number of doctorate recipients and the diversity in doctoral-level program offerings.
- **Comprehensive:** schools characterized by diverse postbaccalaureate programs (including first-professional) but which do not engage in significant doctoral-level education.
- **Baccalaureate:** schools characterized by their primary emphasis on general undergraduate, baccalaureate-level education, and which are not significantly engaged in postbaccalaureate education.
- **Specialized:** baccalaureate or post-baccalaureate schools characterized by a programmatic emphasis in one area (plus closely related specialties); programmatic emphasis is measured by the percentage of degrees granted in the program area.

- **Two-year:** schools that confer at least 75 percent of their degrees and awards for work below the bachelor's level.

As can be seen in Figures A-1 and A-2, and in Appendix Table A-1, these school characteristics are related to each other:

- Among doctoral schools, 66 percent are public.
- Among comprehensive schools, 61 percent are public.
- Among baccalaureate schools, 84 percent are private.
- Among specialized schools, 77 percent are private.
- Among two-year schools, 73 percent are public.
- Among four-year public schools, 46 percent are comprehensive.
- Among four-year private schools, 57 percent are baccalaureate.

Figure A-1

Percent of Each Type of Four-year School that are Public and Private

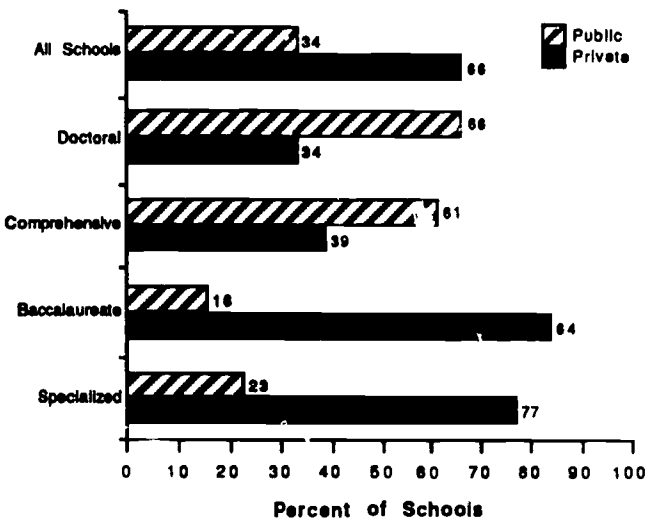
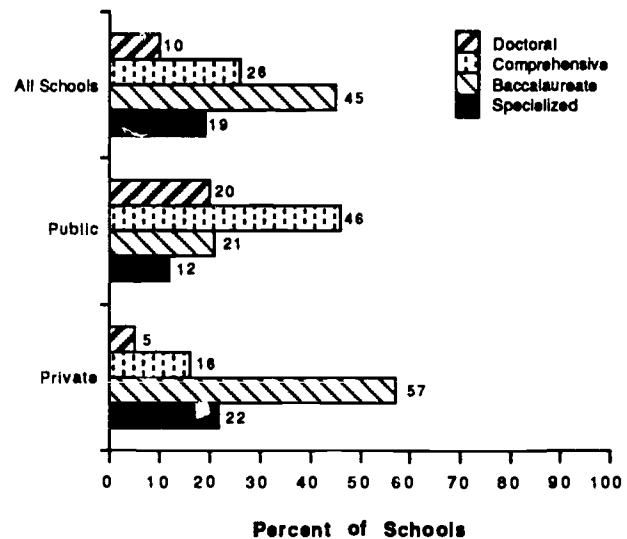


Figure A-2

Percents of Public, Private, and All Four-year Schools that are Doctoral, Comprehensive, Baccalaureate, and Specialized



APPENDIX C

Survey Questionnaire



NATIONAL ENDOWMENT FOR THE HUMANITIES

WASHINGTON, D.C. 20506

THE CHAIRMAN

April 8, 1988

Dear Colleague:

On behalf of the National Endowment for the Humanities (NEH), I request your participation in our Higher Education Survey on *General Education and Humanities Requirements*. In recent discussions I have had with academic officials across the country, many have described a renewed sense of purpose on their campuses. One aspect of this new focus on institutional mission, I am told, is a reexamination of course requirements, of the minimum that is expected of the students who enroll in their institutions. I am interested in how this new emphasis translates into actual general education requirements for all students and what role the humanities play in these requirements. Have general education requirements changed significantly over the last five years in the wake of the many calls for reform? Do the humanities figure prominently in the new (or existing) requirements?

The answers to these questions will assist the Endowment in shaping its programs and policies in the coming years. Your response will be helpful in preparing our Congressionally-mandated report on the state of the humanities that is due this fall. I would be very grateful if you would take a few minutes to complete the attached questionnaire and return it to the appropriate representative of the Higher Education Surveys.

Thank you.

Sincerely,

Lynne V. Cheney
Chairman
National Endowment for the Humanities

GENERAL EDUCATION AND HUMANITIES REQUIREMENTS

Definition: For the purposes of this questionnaire, "general education" is defined as that part of the curriculum that all undergraduates are required to take, regardless of major, in order to graduate. Often referred to as the "breadth" component of the curriculum, general education is distinct from the "depth" major, and from free electives. Some institutions require students to take a specific set or "core" of general education courses. Other institutions adopt a distribution scheme whereby students can select from groups of courses to complete the general education requirements.

Humanities includes modern and classical languages; linguistics; English; literature; history; American studies; philosophy; archaeology; religious studies; jurisprudence, and the history, criticism, and theory of the arts.

1. Does your institution have an undergraduate program? Yes No
2. Are there any course requirements that all undergraduate degree candidates must meet regardless of major? Yes No

If you answered "NO" to either question 1 or 2, please complete only the respondent information section at the end of the questionnaire.

3. Please indicate which of the following conditions describe your current general education requirements (i.e., general education requirements in effect for students entering in the 1988-89 academic year), and whether they were in effect for students who entered in the 1983-84 academic year. (Check all that apply.)

| | <u>1988-89</u> <u>requirements</u> | | <u>1983-84</u> <u>requirements</u> | |
|--|---|--------------------------|---------------------------------------|--------------------------|
| | <u>Yes</u> | <u>No</u> | <u>Yes</u> | <u>No</u> |
| | a. Student must take one or more specified departmental courses, e.g., "History 101" or "Math 125." | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Students must take one or more specified interdisciplinary or interdepartmental courses. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Students must choose from a limited range of courses to fulfill area requirements. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Students may choose from a virtually unlimited range of courses to fulfill area requirements. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

4. Please indicate the years in which students usually complete the general education requirements. (Check appropriate box for each academic year.)

| | Students entering in <u>1988-89</u> | Students who entered in <u>1983-84</u> |
|-------------------------------------|---|--|
| Lower division only | <input type="checkbox"/> | <input type="checkbox"/> |
| Upper division only | <input type="checkbox"/> | <input type="checkbox"/> |
| Either upper or lower division..... | <input type="checkbox"/> | <input type="checkbox"/> |

5. Indicate the minimum number of credit hours required in humanities, in general education, and the *total* number of hours required for graduation from the four-year baccalaureate and two-year associate programs. If there are no credit hour requirements specifically in humanities, please enter zero (0). **DO NOT LEAVE THE LINE BLANK.**

| | Students entering in <u>1988-89</u> | Students who entered in <u>1983-84</u> |
|--|---|--|
| a. Four-year baccalaureate program (check here <input type="checkbox"/> if not applicable) | | |
| Total required for graduation: | _____ hours | _____ hours |
| Required in general education: | _____ hours | _____ hours |
| Required specifically in humanities (part of general education requirements): | _____ hours | _____ hours |
| b. Two-year associate program (check here <input type="checkbox"/> if not applicable) | | |
| Total required for graduation: | _____ hours | _____ hours |
| Required in general education: | _____ hours | _____ hours |
| Required specifically in humanities (part of general education requirements): | _____ hours | _____ hours |
| c. Indicate whether these totals are based on a quarter or semester system. (Check appropriate box for <u>each</u> academic year.) | | |
| | <u>1988-89</u> | <u>1983-84</u> |
| Quarter..... | <input type="checkbox"/> | <input type="checkbox"/> |
| Semester | <input type="checkbox"/> | <input type="checkbox"/> |
| Other (specify):_____ | <input type="checkbox"/> | <input type="checkbox"/> |

CU

The following questions should be answered for four-year programs if your institution offers a four-year program. If your institution offers only a two-year program, check here and provide responses for the two-year program.

6. For each of the following academic areas, indicate the minimum number of credit hours (either quarter or semester) required of all degree candidates entering in 1988-89 and in 1983-84. If there are no credit hour requirements in an academic area, please enter zero (0). DO NOT LEAVE ANY LINES BLANK.

| | | <u>Credit hour requirements</u> | |
|--|---------------------------------------|---|--|
| | | Students entering in <u>1988-89</u> | Students who entered in <u>1983-84</u> |
| The humanities: | | | |
| a. | English composition..... | _____ | _____ |
| b. | English or American literature..... | _____ | _____ |
| c. | Foreign languages and literature..... | _____ | _____ |
| d. | History..... | _____ | _____ |
| If your institution has credit hour requirements in specific areas of history, please indicate them here. If there are no such requirements, enter zero (0). | | | |
| | | <u>1988-89</u> | <u>1983-84</u> |
| | Western civilization | _____ | _____ |
| | Non-Western civilization | _____ | _____ |
| | American history | _____ | _____ |
| | All other areas of history | _____ | _____ |

NOTE: The credit hours indicated in specific areas of history should equal the total credit hours in history (item d above).

| | | | |
|----|---|-------|-------|
| e. | Philosophy..... | _____ | _____ |
| f. | Classics..... | _____ | _____ |
| g. | Other humanities fields, including interdisciplinary humanities courses*..... | _____ | _____ |
| h. | Unspecified humanities courses, or a combination of humanities courses..... | _____ | _____ |

NOTE: The sum of the credit hour requirements in humanities for each year should equal the number of credit hours required in humanities indicated in question 5.

| Other fields: | | | |
|----------------------|------------------------------------|-------|-------|
| i. | Studio and performing arts..... | _____ | _____ |
| j. | Social sciences..... | _____ | _____ |
| k. | Mathematics..... | _____ | _____ |
| l. | Natural and physical sciences..... | _____ | _____ |
| m. | Mathematics and/or science..... | _____ | _____ |
| n. | Other, please specify _____ | _____ | _____ |

**Other humanities" include linguistics, archeology, religious studies, jurisprudence, and the history, criticism, and theory of the arts. "Interdisciplinary humanities courses" refer to those whose content is primarily in the humanities, such as American studies.

7. Which of the following best describe your institution's foreign language graduation requirement for all undergraduates entering in 1988-89? (Check all that apply)

- There are no foreign language requirements of any kind.
- A specified number of courses or hours are required.
- A language proficiency examination must be passed.
- A specified language proficiency level must be reached (e.g., students must complete courses through Introduction to French Literature)
- Computer courses may be substituted for foreign language courses.
- Other courses may be substituted for foreign language courses (specify): _____
- Other foreign language requirement (specify): _____

8. Do your general education requirements for students entering in 1988-89 stipulate that a student must take a survey course in the following areas? (A survey course is a course that is organized chronologically and shows the connection of texts and events through time.)

| | <u>Yes</u> | <u>No</u> |
|---|--------------------------|--------------------------|
| History | <input type="checkbox"/> | <input type="checkbox"/> |
| Literature | <input type="checkbox"/> | <input type="checkbox"/> |
| Other humanities subject(s) | <input type="checkbox"/> | <input type="checkbox"/> |
| An interdisciplinary subject whose content is primarily in the humanities | <input type="checkbox"/> | <input type="checkbox"/> |

Thank you for your assistance. Please return this form by May 4 to:

Higher Education Surveys
WESTAT
1650 Research Boulevard
Rockville, MD 20850

Person completing form:

Name: _____

Title: _____

Telephone: _____

Please keep a copy of this survey for your records.

If you have any questions or problems concerning this survey, please call Laurie Lewis or Elizabeth Farris at (800) 937-3281 (toll-free).