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ABSTRACT

The Survey on Remedial Education in Higher Education Institutions was designed to provide current national estimates about the extent of remediation on college campuses. The study examined participation in college-level remedial education, characteristics of remedial courses and programs, and policies or laws that affect remedial education. Data were collected in Fall 1995 from 3,060 two-year and four-year higher education institutions that enroll freshmen. Seventy-eight percent of the institutions offered at least one remedial course. Remedial reading courses were offered by 57 percent and mathematics courses were offered by about 75 percent of responding institutions. The average number of courses offered was 2.1 for reading, 2.0 for writing, and 2.5 for mathematics. Public two-year institutions offered a much higher average number of remedial courses than other types of institutions. Twenty-nine percent of first-time freshmen enrolled in at least one remedial reading, writing, or mathematics course. Students were most frequently selected by freshmen placement tests. Seventeen tables provide data on the following aspects: participation in college-level remedial education, characteristics of remedial courses and programs, policies or laws affecting remedial education, changes in remedial education since 1983-84 and 1989. A detailed description of the survey and statistical methodologies are provided. The survey questionnaire is appended. (JLS)

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Statistical Analysis Report

October 1996

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Remedial Education at Higher Education Institutions in Fall 1995

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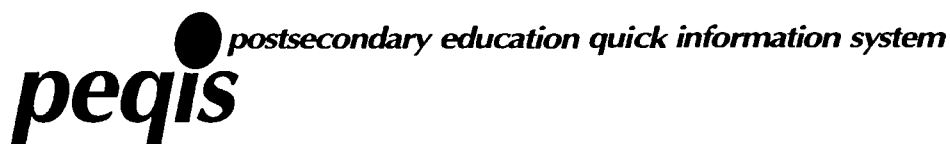
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Remedial Education at Higher Education Institutions in Fall 1995



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Highlights

The Survey on Remedial Education in Higher Education Institutions was requested by the Planning and Evaluation Service of the Office of the Under Secretary within the U.S. Department of Education. This survey was designed to provide current national estimates about the extent of remediation on college campuses. The study examined participation in college-level remedial education, characteristics of remedial courses and programs, and policies or laws that affect remedial education. Institutions provided information about their remedial program if they provided any remedial reading, writing, or mathematics courses in fall 1995. For purposes of this study, remedial courses were defined as courses in reading, writing, or mathematics for college students lacking those skills necessary to perform college-level work at the level required by the institution. Thus, what constituted remedial courses varied from institution to institution. Data were collected in fall 1995 from 2-year and 4-year higher education institutions that enroll freshmen and were weighted to provide national estimates.

- About three-quarters (78 percent) of higher education institutions that enrolled freshmen offered at least one remedial reading, writing, or mathematics course in fall 1995 (table 1). Remedial courses were especially common at public 2-year institutions (100 percent) and institutions with high minority enrollments (94 percent). Public 4-year institutions also were important providers of remediation, with 81 percent providing at least one remedial reading, writing, or mathematics course.
- Remedial reading courses were offered by 57 percent and remedial writing and mathematics courses by about three-quarters of higher education institutions that enrolled freshmen (table 1). Almost all (99 percent) public 2-year institutions offered remedial courses in each subject area.
- Most institutions that offered remedial reading, writing, or mathematics courses offered one or two different courses in a subject area in fall 1995 (figure 1). The average (mean) number of courses offered was 2.1 for reading, 2.0 for writing, and 2.5 for mathematics (table 2). Public 2-year institutions offered a much higher average number of courses than other types of institutions.

- Twenty-nine percent of first-time freshmen enrolled in at least one remedial reading, writing, or mathematics course in fall 1995 (table 3). Remedial courses in mathematics were taken by more freshmen than were remedial reading and writing courses. There was a general pattern of higher remedial enrollments and lower remedial pass rates at public 2-year and high minority enrollment institutions. In general, about three-quarters of the students enrolled in remedial courses pass or successfully complete those courses (table 6).
- About half (47 percent) of institutions offering remedial courses indicated that the number of students enrolled in remedial courses at their institution had stayed about the same in the last 5 years, 39 percent said enrollments had increased, and 14 percent said they had decreased (table 4). A greater percentage of public 2-year than of other types of institutions indicated that remedial enrollments had increased.
- At most institutions, students do not take remedial courses for long periods of time: two-thirds of institutions indicated that the average time a student takes remedial courses was less than 1 year, 28 percent indicated that the average time was 1 year, and 5 percent indicated that the average time was more than 1 year (table 5). Students were more likely to take remedial courses for a longer time at certain types of institutions than at others, with fewer public 2-year and high minority enrollment institutions reporting that students take remedial courses for less than 1 year.
- Among the 22 percent of institutions that did not offer remedial reading, writing, or mathematics courses in fall 1995, the most frequent reason given was that remedial courses were not needed by students at the institution (66 percent; figure 3). About a quarter of the institutions indicated that students at the institution who need remediation take remedial courses offered by another institution (22 percent), and/or that institutional policy does not allow the institution to offer remedial courses (27 percent).
- Institutional credit (e.g., credit that counts toward financial aid, campus housing, or full-time student status, but does not count toward degree completion) was the most frequent type of credit given for remedial reading, writing, or mathematics courses, with about 70 percent of institutions giving this type of credit in each subject area (table 7).

- The most frequently used approach for selecting students who need remedial coursework was to give all entering students placement tests to determine the need for remedial coursework; about 60 percent of institutions used this approach in each subject area (table 9).
- Remedial education services/courses were provided to local business and industry by 19 percent of institutions that enroll freshmen (figure 7). However, among these higher education institutions, public 2-year institutions were the primary providers of remedial services/courses to local business and industry: half of public 2-year institutions provided these services, compared with only about 5 percent of other types of institutions.
- A third of institutions offering remedial courses reported that there were state policies or laws that affected the remedial offerings of their institution, with many more public than private institutions reporting that they were affected (57 percent and 40 percent of public 2-year and 4-year institutions compared with less than 10 percent of private institutions; table 13). The major ways in which state policies or laws affected the remedial offerings was to require or encourage institutions to offer remedial education.
- About a quarter of institutions reported that there was a limit on the length of time a student may take remedial courses at their institution (table 14). Time limits on remediation were set by institutional policy at 75 percent of the institutions with time limits, and by state policy or law at 21 percent of the institutions.

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1. Background

The role of remediation in higher education is the subject of ongoing debate. Publications as varied as those from the Southern Regional Education Board and the National Center for Developmental Education, and the *New York Times*, *The Washington Post*, and the *Chronicle of Higher Education* have discussed the appropriateness of remediation on college campuses -- for example, should it be encouraged because it expands educational opportunities to underprepared students, or should it be discouraged because precollege-level courses have no place on college campuses? Recent media reports indicate that numerous states and institutions are considering policies or laws that affect remedial education offerings. Proposals include concentrating remediation in community colleges rather than in 4-year institutions, limiting remedial coursework to the freshman year, limiting the number of remedial courses offered, requiring public school systems to reimburse colleges for remediation needed by public school graduates, and prohibiting the use of state money to pay for remedial coursework. For example:

- The State University of New York, which has both 2-year and 4-year campuses, is considering limiting remedial courses at its 4-year campuses and requiring most students who need remediation to take remedial courses through the community colleges (*Chronicle of Higher Education*, November 3, 1995).
- The City University of New York, which also has both 2-year and 4-year campuses, will no longer accept students at its 4-year colleges who cannot complete remedial courses within the freshman year; any student needing more remediation will have to take it in night school or community college (*New York Times*, June 27, 1995).
- The California State University System, which has only 4-year campuses, will phase out most remedial classes by 2007, with the goal of reducing the number of students who need remediation to 10 percent of the total by 2007 (*Chronicle of Higher Education*, December 15, 1995, and March 1, 1996).
- State legislatures in New Jersey, Montana, and Florida recently have considered measures that would force public school systems to pay for any remedial work a public school

graduate must take in college (*New York Times*, June 7, 1995; *The Washington Post*, April 30, 1995).

- The state legislature in Washington considered a bill to prohibit using state money to pay for any remedial work (*New York Times*, June 7, 1995).

This study on remedial education in higher education institutions was designed to provide current national estimates about the extent of remediation on college campuses to inform this ongoing debate. The study examined participation in college-level remedial education, characteristics of remedial courses and programs, and policies or laws that affect remedial education. Results from this study also provide information about changes in remedial education since 1983-84 and 1989, when the National Center for Education Statistics (NCES) conducted two previous surveys on remedial education at higher education institutions.

To retain comparability with these two previous studies, the current study included 2-year and 4-year higher education institutions that enrolled freshman students and asked about freshman enrollments in remedial courses, even though remediation is not entirely a freshman phenomenon. Institutions were asked to supply information about their remedial program if they provided any remedial reading, writing, or mathematics courses in fall 1995. For purposes of this study, remedial education courses were defined as courses in reading, writing, or mathematics for college students lacking those skills necessary to perform college-level work at the level required by the institution. Thus, what constituted remedial courses varied from institution to institution. Throughout the questionnaire, these courses were referred to as “remedial.” However, respondents were asked to include any courses meeting the definition, regardless of name. Institutions may use other names for remedial courses, such as “compensatory,” “developmental,” or “basic skills.”

The following institutional characteristics were used as variables for analyzing the survey data:

- Type of institution: public 2-year, private 2-year, public 4-year, private 4-year. Type was created from a combination of level (2-year, 4-year) and control (public, private). Two-year institutions are defined as institutions at which the highest level of offering is at least 2 but less than 4 years (below the baccalaureate degree); 4-year institutions are those at which

the highest level of offering is 4 or more years (baccalaureate or higher degree).¹ Private comprises private nonprofit and private for-profit institutions; these private institutions are reported together because there are too few private for-profit institutions in the sample for this survey to report them as a separate category.

- **Minority enrollment:** low, high. Institutions with high minority enrollment are defined for this study as those institutions where the total student enrollment, excluding nonresident aliens, is less than 50 percent white, non-Hispanic.

The survey was conducted in fall 1995 by the National Center for Education Statistics using the Postsecondary Education Quick Information System (PEQIS). PEQIS is designed to collect limited amounts of policy-relevant information on a quick turnaround basis from a previously recruited, nationally representative sample of postsecondary institutions. PEQIS surveys are generally limited to two to three pages of questions with a response burden of 30 minutes per respondent.² The survey was mailed to the PEQIS survey coordinators at 849 2-year and 4-year higher education institutions.³ Coordinators were told that the survey was designed to be completed by the person at the institution who was most knowledgeable about the institution's remedial education courses. The unweighted survey response rate is 94 percent (the weighted survey response rate is 96 percent). Data were adjusted for questionnaire nonresponse and weighted to provide national estimates. The section of this report on survey methodology and data reliability provides a more detailed discussion of the sample and survey methodology. The survey questionnaire is reproduced in appendix B.

All specific statements of comparison made in this report have been tested for statistical significance through chi-square tests and t-tests adjusted for multiple comparisons using the Bonferroni adjustment and are significant at the 95 percent confidence level or better. However, not all statistically different comparisons have been presented, since some were not of substantive importance.

¹ Definitions for level are from the data file documentation for the Integrated Postsecondary Education Data System (IPEDS) Institutional Characteristics file, U.S. Department of Education, National Center for Education Statistics.

² Additional information about PEQIS is presented in the methodology section of this report.

³ Higher education institutions are institutions accredited at the college level by an agency recognized by the Secretary, U.S. Department of Education, and are a subset of all postsecondary education institutions.

2. Participation in College-Level Remedial Education

This section provides information about remedial course offerings and enrollments. Institutions were asked whether they offered any remedial reading, writing, or mathematics courses, both overall and by subject. Institutions that offered remedial reading, writing, or mathematics courses were asked about the number of remedial courses offered and freshman enrollment in these courses.

Institutions Offering Remedial Courses

About three-quarters (78 percent) of higher education institutions that enrolled freshmen offered at least one remedial reading, writing, or mathematics course in fall 1995 (table 1). The percentage of institutions offering remedial courses varied greatly by institutional type. All public 2-year institutions and 81 percent of public 4-year institutions offered remedial courses; 63 percent of private 2-year and private 4-year institutions offered such courses.⁴ The percentage of institutions offering remedial courses also varied greatly by the minority enrollment of the institution, with 94 percent of institutions with high minority enrollment compared with 76 percent of institutions with low minority enrollment offering at least one remedial reading, writing, or mathematics course.

Remedial reading courses were offered by 57 percent of higher education institutions enrolling freshmen (table 1). Differences by institutional type and by minority enrollment were particularly striking for remedial reading. While almost all public 2-year institutions offered remedial reading courses, about half of public 4-year institutions and about a third of private 2-year and private 4-year institutions offered such courses. A much greater percentage of institutions with high minority enrollment than of institutions with low minority enrollment offered courses in remedial reading: 87 percent compared with 53 percent.

⁴ In the analyses in this report, the comparisons of private 2-year institutions with other types of institutions are often not significant because of the large standard errors for private 2-year institutions, which are related to the fairly small sample size for this type of institution.

Table 1.--Institutions offering remedial courses in fall 1995, by subject area and institutional characteristics

Institutional characteristic	Number of higher education institutions with freshmen	Percent of higher education institutions enrolling freshmen that offer remedial courses in:			
		Reading, writing, or mathematics	Reading	Writing	Mathematics
All institutions	3,060	78	57	71	72
Type					
Public 2-year	950	100	99	99	99
Private 2-year	350	63	29	61	62
Public 4-year	550	81	52	71	78
Private 4-year	1,200	63	34	52	51
Minority enrollment					
High	340	94	87	85	93
Low	2,720	76	53	70	70

NOTE: Data are for higher education institutions in the 50 states, the District of Columbia, and Puerto Rico that enroll freshmen. The numbers of institutions have been rounded to the nearest 10. Numbers of institutions with freshmen may not sum to total because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Remedial Education in Higher Education Institutions, 1995.

Remedial writing courses were offered by 71 percent and remedial mathematics courses by 72 percent of higher education institutions that enrolled freshmen (table 1). Both subject areas showed a similar pattern of differences by institutional type: almost all public 2-year institutions offered remedial writing and mathematics courses, about three-quarters of public 4-year institutions offered remedial courses in these subjects, about 6 out of 10 private 2-year institutions offered such courses, and about half of private 4-year institutions offered remedial courses in writing and mathematics. A greater percentage of institutions with high minority than low minority enrollment offered remedial writing and mathematics courses.

The greater extent to which remedial courses were offered by public 2-year and high minority enrollment institutions may be related to the characteristics of the institutions and the types of students they serve. For example, about half of public 2-year institutions and about a third of institutions with high minority enrollment have open admissions policies, compared with less than 10 percent of 2-year private and 4-year institutions and 15 percent of institutions with low minority enrollment.⁵

⁵ U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, 1994-95 Institutional Characteristics file, unpublished tabulations, July 1996.

Number of Remedial Courses Offered

Most institutions that offered remedial reading, writing, or mathematics courses offered one or two different courses in a subject area in fall 1995. At institutions that offered remedial reading, 41 percent offered one course and 34 percent offered two courses; at institutions that offered remedial writing, 53 percent offered one course and 26 percent offered two courses; and at institutions that offered remedial mathematics, 40 percent offered one course and 24 percent offered two courses (figure 1). This is also exemplified by the average (mean) number of courses offered: 2.1 for reading, 2.0 for writing, and 2.5 for mathematics (table 2). More remedial courses were offered in mathematics than in other subject areas for all institutions grouped together, and for public 2-year, public 4-year, and low minority enrollment institutions. Within each subject area, differences by institutional type in the average number of courses offered in the various subject areas were particularly striking, with public 2-year institutions offering a much higher average number of courses than other types of institutions.

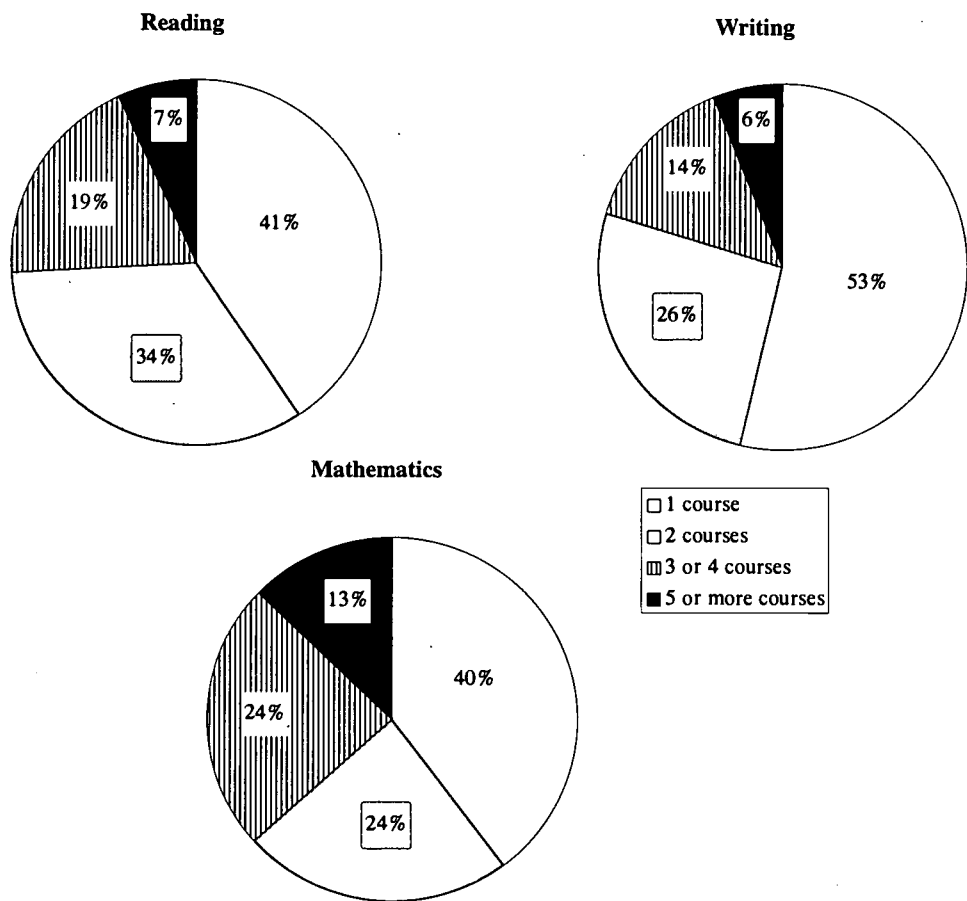
Freshman Enrollment in Remedial Courses

Institutions that offered remedial reading, writing, and mathematics courses were asked about the percentage of entering freshmen that enrolled in any remedial course in one or more of these subject areas, and that enrolled in remedial courses in each subject area. This information about the percentage of entering freshmen enrolled in remedial courses was then combined with information about the total number of first-time freshmen (both full- and part-time) enrolled at all institutions with freshmen to obtain national estimates of the number of entering first-time freshmen enrolled in remedial courses. The total number of first-time freshmen was obtained from the Integrated Postsecondary Education Data System (IPEDS) 1994 Fall Enrollment file (the most recent year for which data were available).⁶ The percentage of first-time freshmen enrolled in remedial courses was then calculated by dividing the sum of first-time freshmen taking remedial courses by the sum of all first-time freshmen enrolled at all institutions with freshmen. Thus, both the numerator and denominator for each percentage calculated were based on the IPEDS numbers.

⁶ The number of first-time freshmen was obtained by summing the numbers from line 01 (full-time first-time freshmen) and line 15 (part-time first-time freshmen) of the IPEDS 1994 Fall Enrollment file. There were an estimated 2.1 million first-time freshmen in fall 1994.

Figure 1.--Numbers of different remedial courses offered in fall 1995, by subject area

(Percent of higher education institutions offering remedial courses in the subject)



NOTE: Data are for higher education institutions in the 50 states, the District of Columbia, and Puerto Rico that enroll freshmen. Percents are based on institutions that offered at least one remedial course in that subject area in fall 1995. Percents may not sum to 100 because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Remedial Education in Higher Education Institutions, 1995.

Table 2.--Mean number of remedial courses offered in fall 1995, by subject area and institutional characteristics

Institutional characteristic	Reading	Writing	Mathematics
All institutions	2.1	2.0	2.5
Type			
Public 2-year	2.7	2.7	3.6
Private 2-year	(#)	1.2	1.3
Public 4-year	1.6	1.5	2.0
Private 4-year	1.5	1.4	1.5
Minority enrollment			
High	2.2	2.4	2.4
Low	2.1	1.9	2.5

(#) Too few cases for a reliable estimate.

NOTE: Data are for higher education institutions in the 50 states, the District of Columbia, and Puerto Rico that enroll freshmen. The means are based on institutions that offer remedial courses in that subject.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Remedial Education in Higher Education Institutions, 1995.

Twenty-nine percent of first-time freshmen enrolled in at least one remedial reading, writing, or mathematics course in fall 1995 (table 3). Freshman remedial enrollments differed by institutional type and minority enrollment of the institution. At public 2-year institutions, 41 percent of first-time freshmen enrolled in one or more remedial courses, at private 2-year and public 4-year institutions about a quarter of first-time freshmen were enrolled in a remedial course, and at private 4-year institutions, 13 percent of first-time freshmen were enrolled in at least one remedial course. At institutions with high minority enrollment, 43 percent of first-time freshmen were enrolled in remedial reading, writing, or mathematics, compared with 26 percent at institutions with low minority enrollment.

First-time freshmen took more remedial courses in mathematics (24 percent) than in writing (17 percent) and reading (13 percent). A similar general pattern of higher remedial enrollments at public 2-year and high minority enrollment institutions emerged for the individual subject areas as for the overall remedial enrollment.

Table 3.--Freshman remedial enrollment in fall 1995, by subject area and institutional characteristics

Institutional characteristic	Number of first-time freshmen (in thousands)	Percent of all entering first-time freshmen that enrolled in remedial courses in:			
		Reading, writing, or mathematics	Reading	Writing	Mathematics
All institutions	2,128	29	13	17	24
Type					
Public 2-year	943	41	20	25	34
Private 2-year	56	26	11	18	23
Public 4-year	726	22	8	12	18
Private 4-year	403	13	7	8	9
Minority enrollment					
High	338	43	25	29	35
Low	1,790	26	11	15	21

NOTE: Data are for higher education institutions in the 50 states, the District of Columbia, and Puerto Rico that enroll freshmen. Institutions that offered remedial reading, writing, and mathematics courses were asked about the percent of entering freshmen that enrolled in any remedial course in one or more of these subject areas, and that enrolled in remedial courses in each subject area. This information about the percent of entering freshmen enrolled in remedial courses was then combined with information about the total number of first-time freshmen (both full and part time) enrolled at all institutions with freshmen to obtain national estimates of the number of entering first-time freshmen enrolled in remedial courses. The total number of first-time freshmen was obtained from the Integrated Postsecondary Education Data System (IPEDS) 1994 Fall Enrollment file (the most recent year for which data were available). The percent of first-time freshmen enrolled in remedial courses was then calculated by dividing the sum of first-time freshmen taking remedial courses by the sum of all first-time freshmen enrolled at all institutions with freshmen.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Remedial Education in Higher Education Institutions, 1995.

Institutional Reporting of Change in Remedial Enrollments

Institutions were asked whether the number of students enrolled in remedial courses at their institution had increased, stayed about the same, or decreased in the last 5 years. About half (47 percent) of the institutions indicated that remedial enrollments stayed about the same, 39 percent said enrollments had increased, and 14 percent said they had decreased (table 4). A greater percentage of public 2-year than of other types of institutions indicated that remedial enrollments had increased; public and private 4-year institutions reported decreases in remedial enrollments more often than did public 2-year institutions.

Table 4.--Perceptions of change in the number of students enrolled in remedial courses at the institution in the last 5 years, by institutional characteristics: 1995

(Percent of higher education institutions offering remedial courses)

Institutional characteristic	Increased	Stayed about the same	Decreased
All institutions	39	47	14
Type			
Public 2-year	55	40	5
Private 2-year	32	57	10
Public 4-year	28	49	23
Private 4-year	27	52	20
Minority enrollment			
High	33	57	11
Low	40	46	14

NOTE: Data are for higher education institutions in the 50 states, the District of Columbia, and Puerto Rico that enroll freshmen. Percents are based on institutions that offered at least one remedial reading, writing, or mathematics course in fall 1995. Percents are computed across each row, but may not sum to 100 because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Remedial Education in Higher Education Institutions, 1995.

Average Length of Time in Remedial Courses

Institutions were asked to indicate about how long, on average, a student takes remedial courses: less than 1 year, 1 year, or more than 1 year. Two-thirds of the institutions indicated that the average time a student takes remedial courses was less than 1 year, 28 percent indicated that the average time was 1 year, and 5 percent indicated that the average time was more than 1 year (table 5). Students were more likely to take remedial courses for a longer time at certain types of institutions than at others. While 46 percent of public 2-year institutions reported that students take remedial courses for less than 1 year, 69 percent of public 4-year, 84 percent of private 4-year, and 95 percent of private 2-year institutions reported the average time in remedial courses as less than 1 year. Institutions with low minority enrollment reported the average time as less than 1 year more often than did institutions with high minority enrollment.

Table 5.--Approximate average length of time a student takes remedial courses at the institution, by institutional characteristics: 1995

(Percent of higher education institutions offering remedial courses)

Institutional characteristic	Less than 1 year	1 year	More than 1 year
All institutions	67	28	5
Type			
Public 2-year	46	44	10
Private 2-year	95	5	0
Public 4-year	69	27	3
Private 4-year	84	14	2
Minority enrollment			
High	53	34	13
Low.....	69	27	4

NOTE: Data are for higher education institutions in the 50 states, the District of Columbia, and Puerto Rico that enroll freshmen. Percents are based on institutions that offered at least one remedial reading, writing, or mathematics course in fall 1995. Percents are computed across each row, but may not sum to 100 because of rounding. Zeros indicate that no institution in the sample gave the indicated response.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Remedial Education in Higher Education Institutions, 1995.

Students Passing Remedial Courses

In general, about three-quarters of the students enrolled in remedial reading, writing, or mathematics courses pass or successfully complete those courses (table 6). The percentage of students passing remedial reading and writing courses was lower in public 2-year than in other types of institutions, and for remedial mathematics it was lower in public 2-year and 4-year than in private 2-year and 4-year institutions. The percentage of students passing remedial courses in all three subjects was lower at institutions with high minority enrollment than at institutions with low minority enrollment.

Table 6.--Mean percent of students generally passing or successfully completing remedial courses, by subject area and institutional characteristics: 1995

Institutional characteristic	Reading	Writing	Mathematics
All institutions	77	79	74
Type			
Public 2-year	72	71	66
Private 2-year	(#)	81	80
Public 4-year	82	81	71
Private 4-year	84	88	84
Minority enrollment			
High	70	71	69
Low	78	80	74

(#) Too few cases for a reliable estimate.

NOTE: Data are for higher education institutions in the 50 states, the District of Columbia, and Puerto Rico that enroll freshmen. Percents are for institutions that offered at least one remedial course in that subject in fall 1995.

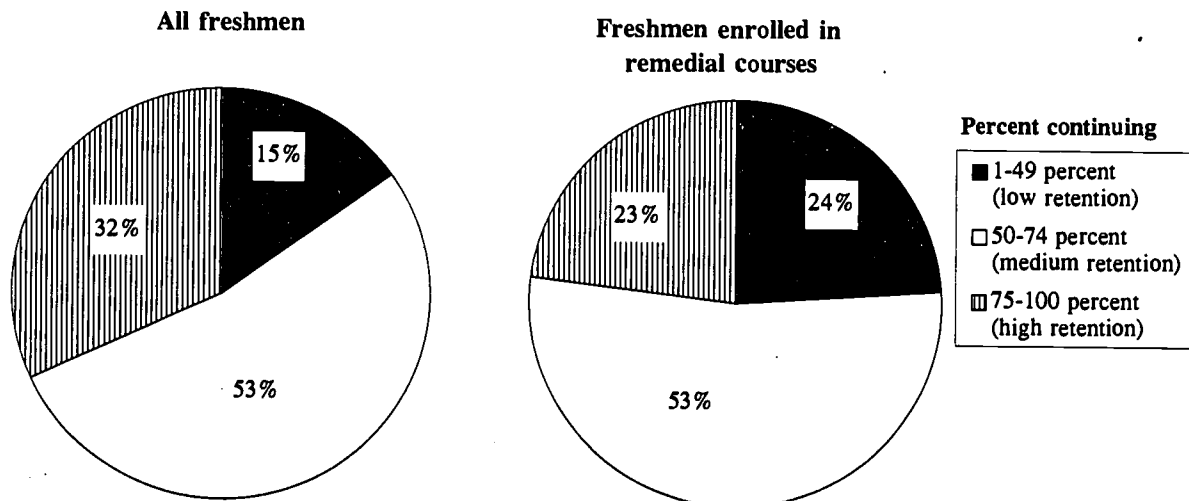
SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Remedial Education in Higher Education Institutions, 1995.

Freshman Retention

Full-time entering freshmen who enrolled in remedial courses continued at their institution to the start of their second year at a somewhat lower rate than all full-time entering freshmen at institutions offering remedial courses. High retention (i.e., 75-100 percent continuing) of all freshmen was reported by 32 percent of institutions offering remedial courses; high retention of freshmen enrolled in remedial courses was reported by 23 percent of the institutions (figure 2). Conversely, low retention (i.e., 1-49 percent continuing) of all freshmen was reported by 15 percent of institutions offering remedial courses; low retention of freshmen enrolled in remedial courses was reported by 24 percent of the institutions.

Figure 2.--Percent of 1994-95 full-time entering freshmen continuing at the institution to the start of their second year

(Percent of freshmen at institutions offering remedial courses in fall 1995)



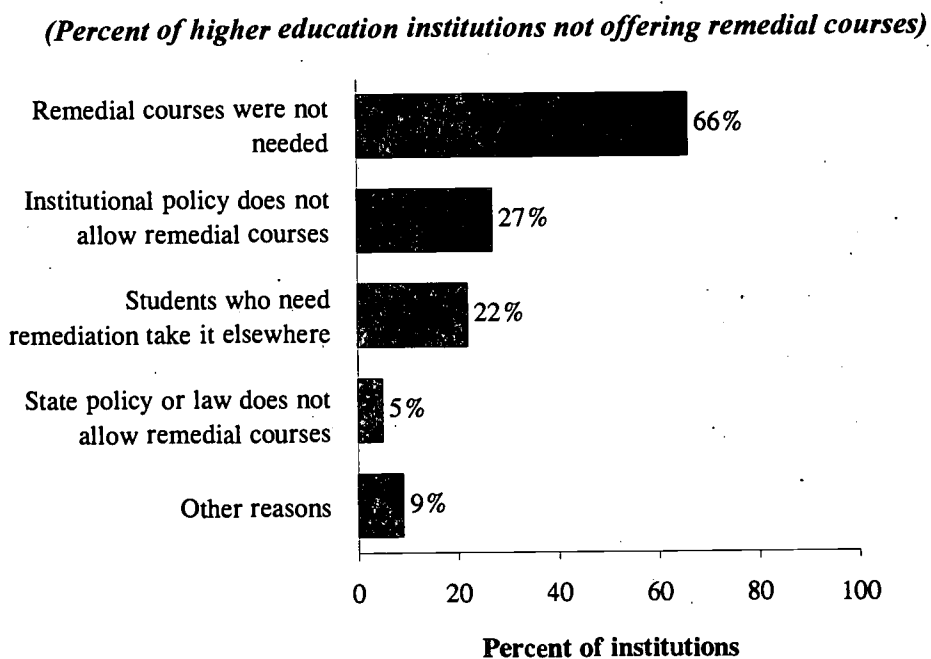
NOTE: Data are for higher education institutions in the 50 states, the District of Columbia, and Puerto Rico that enroll freshmen. Percents are based on institutions that offered at least one remedial reading, writing, or mathematics course in fall 1995.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Remedial Education in Higher Education Institutions, 1995.

Reasons Institutions Do Not Offer Remedial Courses

The 22 percent of institutions that did not offer remedial reading, writing, or mathematics courses in fall 1995 (see table 1) were asked to indicate why remedial courses were not offered. The most frequent reason, indicated by 66 percent of institutions, was that remedial courses were not needed by students at the institution (figure 3). About a quarter of institutions indicated that students at the institution who need remediation take remedial courses offered by another institution (22 percent), and/or that institutional policy does not allow the institution to offer remedial courses (27 percent). Eighteen percent of the institutions that did not offer remedial courses in fall 1995 had offered remedial courses at some time during the previous 5 years (not shown in tables).

Figure 3.--Reasons institutions did not offer remedial courses in fall 1995



NOTE: Data are for higher education institutions in the 50 states, the District of Columbia, and Puerto Rico that enroll freshmen. Percents are based on those institutions that did not offer any remedial reading, writing, or mathematics courses in fall 1995.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Remedial Education in Higher Education Institutions, 1995.

3. Characteristics of Remedial Courses and Programs

This section provides general descriptive information about remedial courses, such as the type of credit earned, whether remedial courses were recommended or required, how students were selected for remedial courses, who provided remedial education, and when and how remedial courses were provided.

Type of Credit

The survey collected information about the most frequent type of credit given for remedial reading, writing, and mathematics courses: degree credit that counts toward subject requirements, degree credit that counts toward elective requirements, institutional credit (e.g., counts toward financial aid, campus housing, or full-time student status, but does not count toward degree completion), or no credit. Institutional credit was the most frequent type of credit given for remedial courses in fall 1995. For example, among institutions that offered remedial mathematics, 71 percent gave institutional credit, 13 percent gave no credit, 11 percent gave elective degree credit, and 5 percent gave subject degree credit (table 7). Patterns of credit given were similar for remedial reading and writing courses. There was some variation by institutional type; for example, about 80 percent of public 2-year institutions offered institutional credit compared with about half of private 4-year institutions.

Table 7.--Most frequent form of credit given for remedial courses in fall 1995, by subject area and institutional characteristics

(Percent of higher education institutions offering remedial courses in the subject)

Institutional characteristic	Reading				Writing				Mathematics			
	Degree credit, subject	Degree credit, elective	Institutional credit	No credit	Degree credit, subject	Degree credit, elective	Institutional credit	No credit	Degree credit, subject	Degree credit, elective	Institutional credit	No credit
All institutions.	3	15	72	10	4	17	68	11	5	11	71	13
Type												
Public 2-year	1	8	82	9	2	8	81	9	2	7	81	11
Private 2-year	(#)	(#)	(#)	(#)	11	4	66	19	11	4	66	19
Public 4-year	2	15	74	9	6	11	71	12	4	9	74	13
Private 4-year	3	34	52	11	5	39	46	10	10	22	55	13
Minority enrollment												
High	4	4	72	21	4	4	70	22	4	3	71	22
Low	3	17	72	8	4	19	67	9	6	12	71	11

(#) Too few cases for a reliable estimate.

NOTE: Data are for higher education institutions in the 50 states, the District of Columbia, and Puerto Rico that enroll freshmen. Percents are based on institutions that offered at least one remedial course in that subject in fall 1995. Percents are computed across each row for each subject area, but may not sum to 100 because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Remedial Education in Higher Education Institutions, 1995.

Course Requirement Status

Institutions were asked whether remedial courses for students needing remediation were required or recommended but not required. About three-quarters of the institutions indicated that remedial courses were required for students needing remediation (table 8). Public 2-year institutions required students to enroll in remedial courses less often than did public or private 4-year institutions.

Table 8.--Most frequent requirement status for remedial courses in fall 1995, by subject area and institutional characteristics

(Percent of higher education institutions offering remedial courses in the subject)

Institutional characteristic	Reading		Writing		Mathematics	
	Required	Recommended but not required	Required	Recommended but not required	Required	Recommended but not required
All institutions	71	29	79	21	75	25
Type						
Public 2-year	62	38	70	30	68	32
Private 2-year	(#)	(#)	84	16	82	18
Public 4-year	74	26	86	14	82	18
Private 4-year	85	15	86	14	80	20
Minority enrollment						
High.....	76	24	79	21	78	22
Low.....	70	30	79	21	75	25

(#) Too few cases for a reliable estimate.

NOTE: Data are for higher education institutions in the 50 states, the District of Columbia, and Puerto Rico that enroll freshmen. Percents are based on institutions that offered at least one remedial course in that subject in fall 1995.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Remedial Education in Higher Education Institutions, 1995.

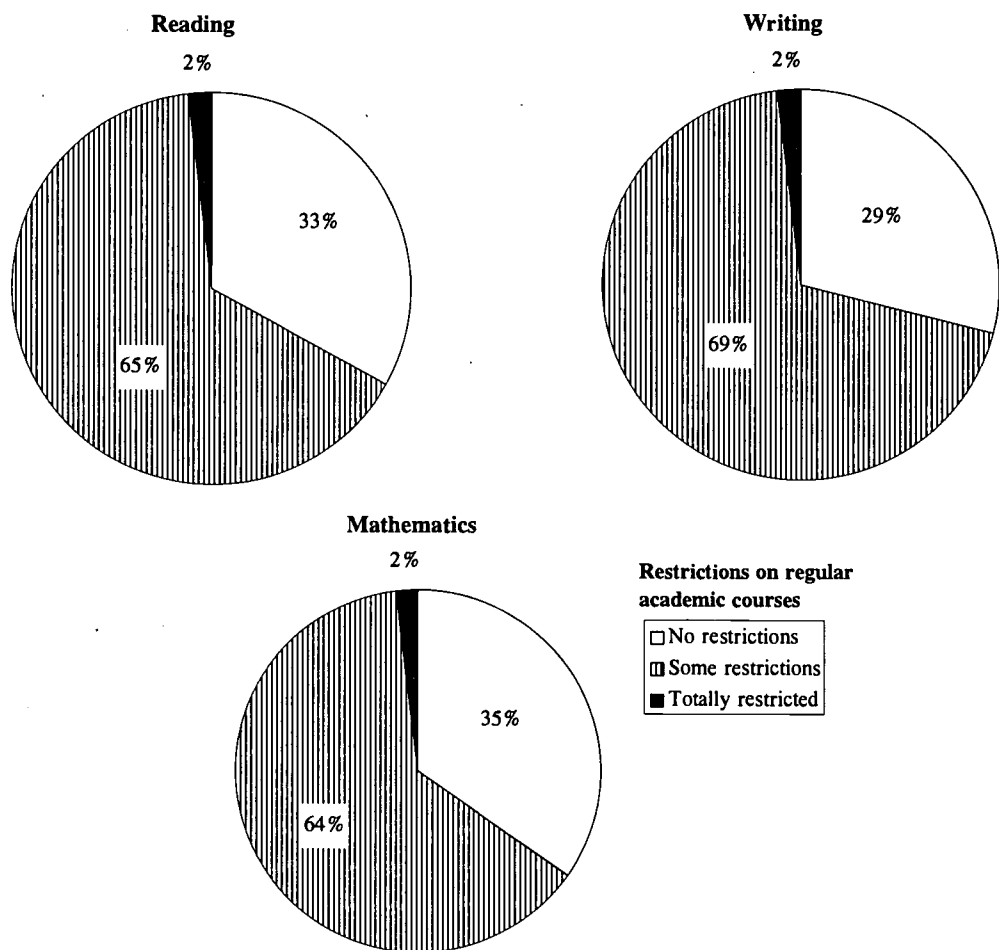
Restrictions on Regular Academic Courses

Institutions vary in their policies toward students taking regular academic courses while they are taking remedial courses. Some institutions do not place any restrictions on the regular academic courses students can take while they are enrolled in remedial courses, while others do not allow students to take any regular academic courses while they are taking remedial courses. Other institutions allow students enrolled in remedial courses to take some regular academic courses (e.g., a student taking remedial mathematics could take regular English courses but could not take regular mathematics courses until remediation in mathematics was complete).

About two-thirds of institutions placed some restrictions on the regular academic courses that students could take while they were enrolled in remedial courses; about one-third of institutions did not place any restrictions on regular academic courses (figure 4). Only 2 percent of institutions did not allow students to take any regular academic courses while they were taking remedial courses.

Figure 4.--Type of restrictions on regular academic courses that students can take while taking remedial courses in fall 1995, by subject area

(Percent of higher education institutions offering remedial courses in the subject)



NOTE: Data are for higher education institutions in the 50 states, the District of Columbia, and Puerto Rico that enroll freshmen. Percents are based on institutions that offered at least one remedial course in that subject area in fall 1995. Percents may not sum to 100 because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Remedial Education in Higher Education Institutions, 1995.

Selection Approach

Institutions have a number of options for selecting those students that need remedial coursework: they may give all entering students placement tests to determine need for remediation, they may give entering students who meet various criteria (e.g., low SAT/ACT scores or low grade point averages) placement tests to determine need, they may require or encourage entering students who meet various criteria to enroll in remedial courses, or they may use some other selection approach (e.g., faculty/staff may refer students for enrollment, or students may refer themselves for enrollment).

The most frequently used selection approach was to give all entering students placement tests to determine the need for remedial coursework; about 60 percent of institutions used this approach in each subject area (table 9). Entering students who met various criteria (i.e., who do not have SAT/ACT scores, who score below a certain level on the SAT/ACT, or who have a grade point average below a certain level) were given placement tests to determine the need for remediation in about a quarter of institutions, and they were required or encouraged to enroll in remedial courses in about 10 percent of institutions. Other selection approaches were used by the remaining 7 to 9 percent of the institutions. Public 2-year institutions gave placement tests in reading and writing to all entering students more frequently than did public and private 4-year institutions, and in mathematics more often than did public 4-year institutions. Public and private 4-year institutions required or encouraged students who met various criteria to enroll in remedial courses more often than did public 2-year institutions in all subject areas.

Providers of Remedial Education

A traditional academic department was the most frequent provider of remedial reading in 55 percent of institutions; 30 percent most frequently provided remedial reading in a separate remedial division (table 10). Remedial writing and mathematics courses were most frequently provided by traditional academic departments at about 70 percent of institutions, and by a separate remedial division at about 20 percent of institutions. Learning centers were less frequently used, with 7 to 12 percent of institutions most frequently providing remedial courses in the various subject areas in this way. A larger percentage of public 2-year than private 2-year institutions offered remedial writing and mathematics courses in a separate remedial division; institutions with high minority enrollment provided remedial reading, writing, and mathematics courses through a separate remedial division more often than institutions with low minority enrollment did.

Table 9.--Usual selection approach for remedial courses in fall 1995, by subject area and institutional characteristics

(Percent of higher education institutions offering remedial courses in the subject)

Institutional characteristic	Reading				Writing				Mathematics			
	All entering students given placement tests to determine need	Entering students who meet various criteria given placement tests to determine need	Entering students who meet various criteria are required or encouraged to enroll	Other selection approach	All entering students given placement tests to determine need	Entering students who meet various criteria given placement tests to determine need	Entering students who meet various criteria are required or encouraged to enroll	Other selection approach	All entering students given placement tests to determine need	Entering students who meet various criteria given placement tests to determine need	Entering students who meet various criteria are required or encouraged to enroll	Other selection approach
All institutions	58	23	10	9	60	25	9	7	63	22	8	7
Type												
Public 2-year	69	20	3	8	69	22	2	7	70	21	1	8
Private 2-year	(#)	(#)	(#)	(#)	74	20	0	6	79	16	0	5
Public 4-year	37	34	17	12	48	27	18	7	52	28	14	6
Private 4-year	46	24	21	10	47	28	17	7	56	22	16	7
Minority enrollment												
High	67	26	2	4	68	25	2	4	68	26	4	2
Low	56	23	12	10	58	24	10	7	62	22	8	8

(#) Too few cases for a reliable estimate.

NOTE: : Data are for higher education institutions in the 50 states, the District of Columbia, and Puerto Rico that enroll freshmen. Percents are based on institutions that offered at least one remedial course in that subject in fall 1995. Percents are computed across each row for each subject area, but may not sum to 100 because of rounding. Zeros indicate that no institution in the sample gave the indicated response.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Remedial Education in Higher Education Institutions, 1995.

Table 10.--Location within the institution of the most frequent providers of remedial education in fall 1995, by subject area and institutional characteristics

(Percent of higher education institutions offering remedial courses in the subject)

Institutional characteristic	Reading			Writing			Mathematics					
	Separate remedial division	Traditional academic department	Learning center	Other	Separate remedial division	Traditional academic department	Learning center	Other	Separate remedial division	Traditional academic department	Learning center	Other
All institutions	30	55	12	3	22	67	8	2	21	70	7	2
Type												
Public 2-year	34	54	10	3	30	59	8	3	27	62	8	3
Private 2-year	(#)	(#)	(#)	(#)	7	87	4	2	7	87	4	2
Public 4-year	32	59	6	3	20	71	6	3	19	72	6	3
Private 4-year	25	50	24	1	17	69	11	2	16	73	9	2
Minority enrollment												
High	41	47	11	1	35	53	11	1	34	53	10	2
Low	28	57	13	3	20	69	8	3	18	72	7	2

(#) Too few cases for a reliable estimate.

NOTE: Data are for higher education institutions in the 50 states, the District of Columbia, and Puerto Rico that enroll freshmen. Percents are based on institutions that offered at least one remedial course in that subject in fall 1995. Percents are computed across each row for each subject area, but may not sum to 100 because of rounding.

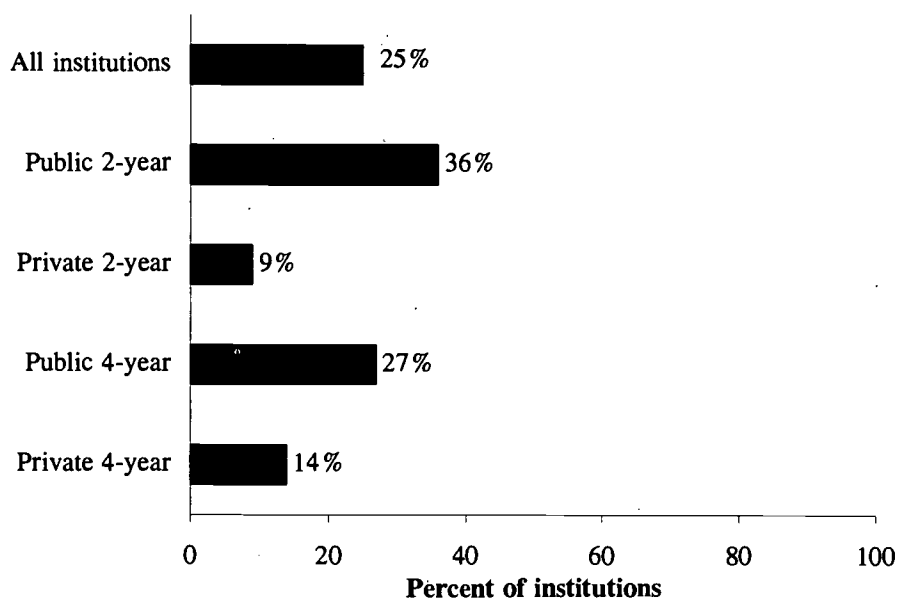
SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Remedial Education in Higher Education Institutions, 1995.

Remedial Courses in Other Academic Subjects

Twenty-five percent of institutions that offered remedial reading, writing, or mathematics courses in fall 1995 offered remedial courses in other academic subjects (figure 5). Public institutions (both 2-year and 4-year) offered such courses more often than did private 2-year or 4-year institutions. The most frequently mentioned subject areas were science (general science, biology, chemistry, and physics), English as a second language, and study skills.

Figure 5.--Remedial course offerings in academic subjects other than reading, writing, or mathematics, by institutional type: 1995

(Percent of higher education institutions offering remedial courses)



NOTE: Data are for higher education institutions in the 50 states, the District of Columbia, and Puerto Rico that enroll freshmen. Percents are based on those institutions that offered at least one remedial reading, writing, or mathematics course in fall 1995.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Remedial Education in Higher Education Institutions, 1995.

English as a Second Language

About half (47 percent) of institutions that enrolled freshmen offered English as a second language (ESL) courses (remedial and nonremedial) for college students (table 11). Public institutions, both 2-year and 4-year, offered ESL more often than did private institutions. All ESL courses were considered remedial at 38 percent of institutions, and an additional 38 percent of institutions considered none of their ESL courses to be remedial. The remaining 24 percent of institutions considered some of their ESL courses to be remedial. Public 2-year institutions classified all their ESL courses as remedial more often than did 4-year public and private institutions; 4-year institutions, both public and private, considered none of their ESL courses to be remedial more often than did public 2-year institutions. Institutions with low minority enrollment more often than institutions with high minority enrollment considered none of their ESL courses to be remedial.

Table 11.--Institutions offering any English as a second language (ESL) courses for college students, and whether the ESL courses are considered to be remedial courses, by institutional characteristics: 1995

(Percent of higher education institutions enrolling freshmen)

Institutional characteristic	Offer English as a second language for college students	Whether ESL courses are considered remedial*		
		All ESL courses are remedial	Some ESL courses are remedial	No ESL courses are remedial
All institutions	47	38	24	38
Type				
Public 2-year	55	55	31	15
Private 2-year	24	(#)	(#)	(#)
Public 4-year	58	35	17	48
Private 4-year	42	16	25	58
Minority enrollment				
High	55	42	39	19
Low	46	37	22	41

*Percents are based on those institutions enrolling freshmen that offer English as a second language (ESL) courses for college students. Percents are computed across each row, but may not sum to 100 because of rounding.

(#) Too few cases for a reliable estimate.

NOTE: Data are for higher education institutions in the 50 states, the District of Columbia, and Puerto Rico that enroll freshmen.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Remedial Education in Higher Education Institutions, 1995.

Offering Times for Remedial Courses

Almost all institutions that offered remedial courses in fall 1995 offered remedial courses during the daytime (table 12), about two-thirds offered remedial courses in the evenings and/or during the summer session, 18 percent offered such courses on weekends, and 4 percent offered them at some other time (primarily during a winter "mini-mester"). Public 2-year institutions offered remedial courses during evenings and weekends more frequently than did public and private 4-year institutions, and offered remedial courses during summer session more often than did private 2-year and private 4-year institutions.

Table 12.--Times when remedial courses are offered, by institutional characteristics: 1995

(Percent of higher education institutions offering remedial courses)

Institutional characteristic	Daytime	Evenings	Weekends	Summer session	Other
All institutions	99	63	18	65	4
Type					
Public 2-year	100	88	31	86	4
Private 2-year	96	70	9	47	5
Public 4-year	97	61	7	77	7
Private 4-year	99	30	10	38	2
Minority enrollment					
High	99	69	32	65	7
Low	99	62	16	66	3

NOTE: Data are for higher education institutions in the 50 states, the District of Columbia, and Puerto Rico that enroll freshmen. Percents are based on institutions that offered at least one remedial reading, writing, or mathematics course in fall 1995.

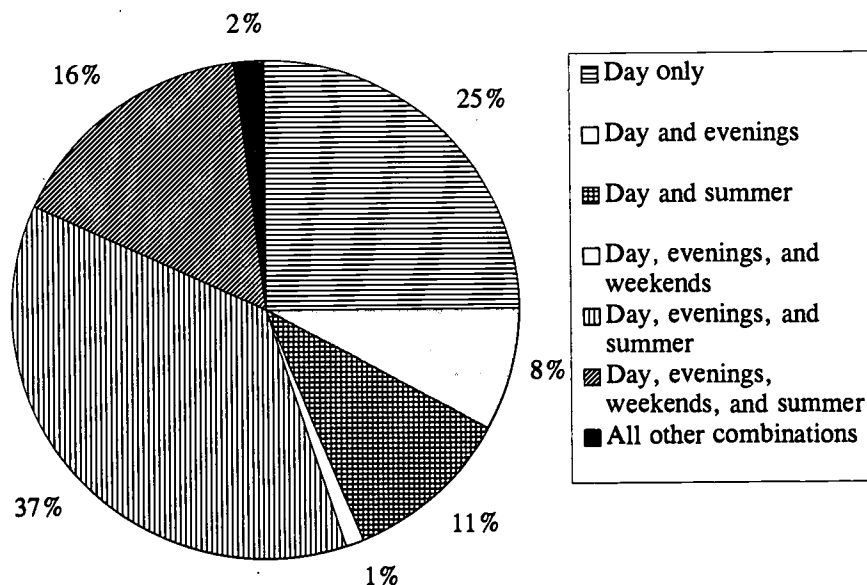
SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Remedial Education in Higher Education Institutions, 1995.

Figure 6 shows the percentage of institutions that offered remedial courses in various combinations of time periods. A quarter of the institutions offered remedial courses only during the day; 37 percent offered remedial courses during the day, evenings, and summer; and 16 percent offered remedial courses during the day, evenings, weekends, and summer. Various other patterns were present for the remaining institutions.

In addition to the time periods for course offerings, 3 percent of the institutions offered remedial courses through distance learning (not shown in tables). Distance learning includes instruction using such modes as television broadcast or cable.

Figure 6.--Combinations of time periods for remedial course offerings: 1995

(Percent of higher education institutions offering remedial courses)



NOTE: Data are for higher education institutions in the 50 states, the District of Columbia, and Puerto Rico that enroll freshmen. Percents are based on institutions that offered at least one remedial reading, writing, or mathematics course in fall 1995.

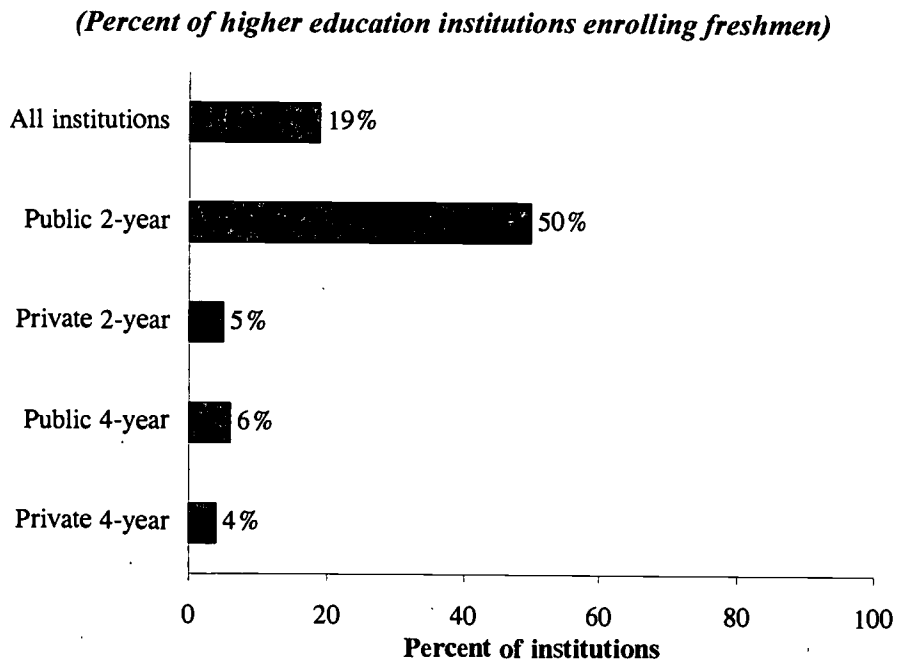
SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Remedial Education in Higher Education Institutions, 1995.

Remedial Offerings to Other Institutions and to Local Business and Industry

Three percent of institutions that offered remedial courses indicated that they have formal arrangements to offer remedial courses to students from other postsecondary institutions (not shown in tables). While 7 percent of public 2-year and 3 percent of public 4-year institutions have such arrangements, no private institutions (as estimated by this sample) have arrangements to offer remedial courses to students from other institutions.

Remedial education services/courses were provided to local business and industry by 19 percent of institutions that enroll freshmen (figure 7). However, among these higher education institutions, public 2-year institutions were the primary providers of remedial services/courses to local business and industry. While half of public 2-year institutions provided these remedial services, only about 5 percent of other types of institutions did so. Most institutions that provided remedial education services to business and industry provided remedial reading (87 percent), writing (93 percent), and mathematics (94 percent); 18 percent provided remediation in some other subject area (mostly English as a second language and basic computer skills; not shown in tables). Most of the institutions provided remedial services to business and industry at business and industry sites (89 percent) and on the campus of the institution (74 percent); only 5 percent of the institutions offered such remedial services through distance learning and 3 percent offered them at some other location (not shown in tables).

Figure 7.--Provision of remedial education services/courses to local business and industry, by institutional type: 1995



NOTE: Data are for higher education institutions in the 50 states, the District of Columbia, and Puerto Rico that enroll freshmen.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Remedial Education in Higher Education Institutions, 1995.

4. Policies or Laws Affecting Remedial Education

This section provides information about policies or laws affecting remedial education offerings. Institutions that offered remedial education courses were asked whether there were any state policies or laws that affected their remedial education offerings and how these policies or laws affected the offerings. Institutions were also asked whether there was a limit on the length of time a student may take remedial courses at their institution and how the time limit on remediation was set.

State Policies or Laws and Remedial Offerings

A third of institutions offering remedial courses reported that there were state policies or laws that affected the remedial education offerings of their institution, with many more public than private institutions reporting that they were affected (table 13). Thus, while 57 percent of public 2-year and 40 percent of public 4-year institutions that offered remedial courses reported that state policies or laws affected their remedial offerings, only 3 percent of private 2-year and 7 percent of private 4-year institutions that offered remedial courses reported that their remedial offerings were affected by state policies or laws.

The major way in which state policies or laws affected the remedial offerings of institutions that offered remedial courses was to require or encourage institutions to offer remedial education. Thus, 59 percent of institutions with state policies or laws affecting their remedial offerings reported that they were required to offer remedial education, and 19 percent reported that they were encouraged to do so (table 13). Public 2-year and public 4-year institutions were affected somewhat differently by state policies or laws. About twice as many public 2-year as public 4-year institutions were required to offer remedial courses, while more public 4-year than public 2-year institutions were discouraged from offering remedial education or their remedial offerings were restricted.

Table 13.--Whether state policies or laws affect higher education institutions' remedial education offerings, and how those policies or laws affect remedial offerings, by institutional characteristics: 1995

Institutional characteristic	State policies or laws affect remedial offerings at institutions offering remedial courses	How state policies or laws affect remedial offerings*				
		Required to offer	Encouraged to offer	Discouraged from offering	Offerings are restricted	Other
All institutions	33	59	19	4	7	10
Type						
Public 2-year	57	71	19	1	4	6
Private 2-year	3	(#)	(#)	(#)	(#)	(#)
Public 4-year	40	35	24	15	14	13
Private 4-year	7	(#)	(#)	(#)	(#)	(#)
Minority enrollment						
High.....	43	55	19	6	10	10
Low.....	31	60	20	4	6	10

*Percents are based on those institutions offering remedial courses with state policies or laws that affect remedial offerings. Percents are computed across each row, but may not sum to 100 because of rounding.

(#) Too few cases for a reliable estimate.

NOTE: Data are for higher education institutions in the 50 states, the District of Columbia, and Puerto Rico that enroll freshmen. Percents in the first column are based on institutions that offered at least one remedial reading, writing, or mathematics course in fall 1995.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Remedial Education in Higher Education Institutions, 1995.

Limitations on Length of Time in Remedial Courses

About a quarter of institutions reported that there was a limit on the length of time a student may take remedial courses at their institution (table 14). Time limits on remediation were present about equally often at all types of institutions. Time limits on remediation were set by institutional policy at 75 percent of the institutions with time limits, and by state policy or law at 21 percent of the institutions. Time limits were set by institutional policy at almost all public and private 4-year institutions with such limits, while at public 2-year institutions, state policy or law was also an important factor in setting time limits, with 53 percent of public 2-year institutions indicating that time limits were set by state policy or law.

Table 14.--Limitation on the length of time a student may take remedial courses at the higher education institution, and how the time limit on remediation is set, by institutional characteristics: 1995

Institutional characteristic	Length of remediation is limited at institutions offering remedial courses	How time limit on remediation is set*		
		State policy or law	Institutional policy	Other
All institutions	26	21	75	3
Type				
Public 2-year	23	53	41	7
Private 2-year	26	(#)	(#)	(#)
Public 4-year	24	6	94	0
Private 4-year	29	1	98	1
Minority enrollment				
High	34	17	77	5
Low	24	22	75	3

*Percents are based on those institutions offering remedial courses with a limit on the length of time a student may take remedial courses at their institution. Percents are computed across each row, but may not sum to 100 because of rounding. Zeros indicate that no institution in the sample gave the indicated response.

(#) Too few cases for a reliable estimate.

NOTE: Data are for higher education institutions in the 50 states, the District of Columbia, and Puerto Rico that enroll freshmen. Percents in the first column are based on institutions that offered at least one remedial reading, writing, or mathematics course in fall 1995.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Remedial Education in Higher Education Institutions, 1995.

5. Changes in Remedial Education Since 1983-84 and 1989

Some of the items on this survey were also included in two previous surveys on remedial education in higher education institutions conducted through the Fast Response Survey System in 1983-84 and 1989. Selected items that were asked in the same or similar manner on the three surveys were compared to examine what changes may have occurred in the intervening 12 years. The 1983-84 survey asked for the “Number of separate courses (Do not count courses repeated in more than one semester or multiple sections of the same course more than once)” for academic year 1983-84, including summer courses. The 1989 survey asked “What was the number of remedial/developmental courses with different catalog numbers in fall 1989? (Do not count multiple sections of the same course.)” The 1995 survey was worded very similarly to the 1989 survey: “What was the number of remedial courses with different catalog numbers in fall 1995? (Do not count multiple sections of the same course.)”

The percentage of institutions offering any remedial reading, writing, or mathematics courses varied over the years from 82 percent in academic year 1983-84 to 74 percent in fall 1989, to 78 percent in fall 1995 (table 15).⁷ Only the difference between 1983-84 and 1989 was statistically significant. The percentage of institutions offering remedial writing and mathematics courses

⁷ For 1983-84 and 1989, standard errors were available only on selected items. To determine the standard errors for the remaining items, the ratios of the known standard errors from the 1989 survey to the corresponding standard errors from the 1995 survey were computed. Then the average of the ratios based on standard errors for all institutions was calculated to obtain a conversion factor. The standard errors for 1989 were obtained by multiplying the corresponding 1995 standard error by this conversion factor. For the 1983-84 survey, the conversion factor was obtained by multiplying the 1989 conversion factor by the square root of the ratio of the 1989 to 1983-84 sample sizes. This approach was used for 1983-84 because there were almost no standard errors from which to develop the appropriate conversion factor.

showed a similar pattern, with only the difference between 1983-84 and fall 1989 for writing courses statistically significant. Thus, for any remedial courses, remedial writing courses, and remedial mathematics courses, there were no significant changes between 1983-84 and fall 1995 in the percentage of institutions offering such courses. The percentage of institutions offering remedial reading courses showed a significant decrease from 1983-84 to both fall 1989 and fall 1995.

Table 15.--Percent of higher education institutions offering remedial courses, mean number of different remedial courses offered, percent of freshmen enrolled in remedial courses, and percent of institutions giving elective degree or institutional credit for remedial courses in academic year 1983-84, fall 1989, and fall 1995

Item	Academic year 1983-84	Fall 1989	Fall 1995
Percent of institutions offering remedial reading, writing, or mathematics courses.....	82	74	78
Percent of institutions offering remedial reading courses.....	66	58	57
Percent of institutions offering remedial writing courses.....	73	65	71
Percent of institutions offering remedial mathematics courses.....	71	68	72
Mean number of different remedial reading courses.....	1.9	1.9	2.1
Mean number of different remedial writing courses.....	1.8	1.9	2.0
Mean number of different remedial mathematics courses.....	2.0	2.3	2.5
Percent of first-time freshmen who enrolled in a remedial reading, writing, or mathematics course ...	*	30	29
Percent of first-time freshmen who enrolled in a remedial reading course.....	*	13	13
Percent of first-time freshmen who enrolled in a remedial writing course.....	*	16	17
Percent of first-time freshmen who enrolled in a remedial mathematics course.....	*	21	24
Percent of institutions giving elective degree credit in remedial reading.....	25	19	15
Percent of institutions giving institutional credit in remedial reading.....	54	66	72
Percent of institutions giving elective degree credit in remedial writing.....	25	18	17
Percent of institutions giving institutional credit in remedial writing.....	53	67	68
Percent of institutions giving elective degree credit in remedial mathematics.....	23	15	11
Percent of institutions giving institutional credit in remedial mathematics.....	52	69	71

*Statistics not estimated for that year.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Remedial Education in Higher Education Institutions, 1995; U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, Survey on College-Level Remedial Education in the Fall of 1989 (NCES 91-191, May 1991); and U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, Survey on College-Level Remediation (CS, 86-218, October 1986).

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The mean number of remedial reading and writing courses did not vary significantly across the 3 years. The mean number of remedial mathematics courses did increase significantly from 1983-84 to fall 1995 (table 15).

In 1983-84, the percentage of freshmen enrolled in remedial courses was computed in a different way than it was in 1989 and 1995.

Therefore, the freshman estimates for 1983-84 cannot be compared to the freshman estimates for 1989 and 1995. However, the estimates for 1989 can be compared to the estimates for 1995. The percentage of first-time freshmen who enrolled in a remedial reading, writing, or mathematics course showed no significant change from 1989 (30 percent) to 1995 (29 percent; table 15). The percentage of first-time freshmen who enrolled in remedial reading and the percentage who enrolled in remedial writing also showed no significant change between the 2 years. The percentage of first-time freshmen enrolled in remedial mathematics did increase significantly from 1989 to 1995.

Based on the results of these three surveys, there appears to be a slight upward trend in the mean number of remedial mathematics courses offered and in first-time freshman enrollments in remedial mathematics, and a downward trend in the percentage of institutions offering remedial reading. However, aside from these isolated findings, there does not appear to be substantial, consistent upward or downward change in remedial education offerings or enrollments.

The three surveys also asked about the most frequent type of credit given for remedial reading, writing, and mathematics courses. Findings for all three subject areas showed a similar pattern, with an increasing percentage of institutions awarding institutional credit and a decreasing percentage awarding elective degree credit across the years (table 15). For reading, the differences were statistically significant between 1983-84 and fall 1995. For writing and mathematics, the differences were statistically significant between 1983-84 and both fall 1989 and fall 1995.

6. Summary

About three-quarters (78 percent) of higher education institutions that enrolled freshmen offered at least one remedial reading, writing, or mathematics course in fall 1995. Public 2-year and high minority enrollment institutions were particularly important providers of remedial education: all public 2-year and 94 percent of high minority enrollment institutions offered remedial reading, writing, or mathematics. Public 4-year institutions also were important providers of remediation, with 81 percent offering at least one remedial reading, writing, or mathematics course. Remedial reading courses were offered by 57 percent and remedial writing and mathematics courses by about three-quarters of higher education institutions that enrolled freshmen. Almost all (99 percent) public 2-year institutions offered remedial courses in each subject area. Among institutions that did not offer remedial courses, the most frequent reason given was that remedial courses were not needed by students at the institution.

Most institutions that offered remedial reading, writing, or mathematics courses offered one or two different courses in a subject area in fall 1995. The average (mean) number of courses offered was 2.1 for reading, 2.0 for writing, and 2.5 for mathematics. Public 2-year institutions offered a much higher average number of courses than other types of institutions.

Twenty-nine percent of first-time freshmen enrolled in one or more remedial reading, writing, or mathematics courses in fall 1995. Remedial courses in mathematics were taken by more freshmen than were remedial reading and writing courses. There was a general pattern of higher remedial enrollments and lower remedial pass rates at public 2-year and high minority enrollment institutions. In general, about three-quarters of the students enrolled in remedial courses pass or successfully complete those courses.

At most institutions, students do not take remedial courses for long periods of time: two-thirds of institutions indicated that the average time a student takes remedial courses was less than 1 year, 28 percent indicated that the average time was 1 year, and 5 percent indicated that the average time was more than 1 year. Students were more likely to take remedial courses for a longer time at certain types of institutions than at others, with fewer public 2-year and

high minority enrollment institutions reporting that students take remedial courses for less than 1 year, on average.

Remedial education services/courses were provided to local business and industry by 19 percent of institutions that enroll freshmen. However, among these higher education institutions, public 2-year institutions were the primary providers of remedial services/courses to local business and industry: half of public 2-year institutions provided these services, compared with only about 5 percent of other types of institutions. Most institutions that provided remedial education services to business and industry provided remedial reading, writing, and mathematics, and most provided services at business and industry sites and on the campus of the institution.

A third of institutions offering remedial courses reported that there were state policies or laws that affected the remedial education offerings of their institution, with many more public than private institutions reporting that they were affected. Thus, while 57 percent of public 2-year and 40 percent of public 4-year institutions that offered remedial courses reported that state policies or laws affected their remedial offerings, less than 10 percent of private institutions that offered remedial courses reported being affected. The major way in which state policies or laws affected the remedial offerings was to require or encourage institutions to offer remedial education. Public 2-year and public 4-year institutions were affected somewhat differently by state policies or laws. About twice as many public 2-year as public 4-year institutions were required to offer remedial courses, while more public 4-year than public 2-year institutions were discouraged from offering remedial education or their remedial offerings were restricted.

About a quarter of institutions reported that there was a limit on the length of time a student may take remedial courses at their institution. Time limits on remediation were present about equally often at all types of institutions. Time limits on remediation were set by institutional policy at 75 percent of the institutions with time limits, and by state policy or law at 21 percent of the institutions. Time limits were set by institutional policy at almost all public and private 4-year institutions with such limits, while at public 2-year institutions, state policy or law was also an important factor, with about half of the public 2-year institutions indicating that time limits were set by state policy or law.

7. Survey Methodology and Data Reliability

Postsecondary Education Quick Information System

The Postsecondary Education Quick Information System (PEQIS) was established in 1991 by the National Center for Education Statistics, U.S. Department of Education. PEQIS is designed to conduct brief surveys of postsecondary institutions or state higher education agencies on postsecondary education topics of national importance. Surveys are generally limited to two or three pages of questions, with a response burden of about 30 minutes per respondent. Most PEQIS institutional surveys use a previously recruited, nationally representative panel of institutions. The sampling frame for the PEQIS panel recruited in 1992 was constructed from the 1990-91 Integrated Postsecondary Education Data System (IPEDS) Institutional Characteristics file. Institutions eligible for the PEQIS frame for the panel recruited in 1992 included 2-year and 4-year (including graduate-level) institutions (both institutions of higher education and other postsecondary institutions), and less-than-2-year institutions of higher education located in the 50 states, the District of Columbia, and Puerto Rico: a total of 5,317 institutions.

The PEQIS sampling frame for the panel recruited in 1992 was stratified by instructional level (4-year, 2-year, less-than-2-year), control (public, private nonprofit, private for-profit), highest level of offering (doctor's/first professional, master's, bachelor's, less than bachelor's), total enrollment, and status as either an institution of higher education or other postsecondary institution. Within each of the strata, institutions were sorted by region (Northeast, Southeast, Central, West), whether the institution had a relatively high minority enrollment, and whether the institution had research expenditures exceeding \$1 million. The sample of 1,665 institutions was allocated to the strata in proportion to the aggregate square root of full-time-equivalent enrollment. Institutions within a stratum were sampled with equal probabilities of selection. During panel recruitment, 50 institutions were found to be ineligible for PEQIS, primarily because they had closed or offered just correspondence courses. The final unweighted response rate at the end of PEQIS panel recruitment in spring 1992 was 98 percent (1,576 of the 1,615 eligible institutions). The weighted response rate for panel recruitment was 96 percent.

Each institution in the PEQIS panel was asked to identify a campus representative to serve as survey coordinator. The campus representative facilitates data collection by identifying the appropriate respondent for each survey and forwarding the questionnaire to that person.

Sample and Response Rates

The sample for this survey consisted of two-thirds of the 2-year and 4-year (including graduate-level) higher education institutions in the PEQIS panel, for a sample of 849 institutions. In late September 1995, questionnaires (see appendix B) were mailed to the PEQIS coordinators at the institutions. Coordinators were told that the survey was designed to be completed by the person at the institution most knowledgeable about the institution's remedial education courses.

Two institutions were found to be out of the scope of the survey because they were closed, leaving 847 eligible institutions. These 847 institutions represent the universe of approximately 3,450 2-year and 4-year (including graduate-level) higher education institutions in the 50 states, the District of Columbia, and Puerto Rico, including institutions that do not enroll freshmen. Telephone followup of nonrespondents was initiated in late October 1995; data collection and clarification was completed in late January 1996. For the eligible institutions that received surveys, an unweighted response rate of 94 percent (797 responding institutions divided by the 847 eligible institutions in the sample) was obtained. The weighted response rate for this survey was 96 percent. The unweighted overall response rate was 92 percent (97.6 percent panel recruitment participation rate multiplied by the 94.1 percent survey response rate). The weighted overall response rate was 92 percent (96.1 percent weighted panel recruitment participation rate multiplied by the 95.7 percent weighted survey response rate).

Weighted item nonresponse rates ranged from 0 percent to 4.9 percent, except for retention of freshmen enrolled in remedial courses, which had a nonresponse rate of 8.5 percent. Item nonresponse rates for most items were less than 1 percent. Because the item nonresponse rates were so low, imputation for item nonresponse was not implemented.

Sampling and Nonsampling Errors

The response data were weighted to produce national estimates (see table 16). Since all analyses of the data included only those institutions that enroll freshmen, the number of respondents and the national estimates presented in table 16 represent higher education institutions that enroll freshmen, rather than all higher education institutions. The weights were designed to adjust for the variable probabilities of selection and differential nonresponse. The findings in this report are estimates based on the sample selected and, consequently, are subject to sampling variability.

Table 16.--Number and percent of higher education institutions in the study that enroll freshmen, and the estimated number and percent in the nation, by institutional characteristics: 1995

Institutional characteristic	Respondents		National estimate*	
	Number	Percent	Number	Percent
All institutions	750	100	3,060	100
Type				
Public 2-year	248	33	950	31
Private 2-year	49	7	350	11
Public 4-year	222	30	550	18
Private 4-year	231	31	1,200	39
Minority enrollment				
High	98	13	340	11
Low	652	87	2,720	89

*Data presented in all tables are weighted to produce national estimates. The sample was selected with probabilities proportionate to the square root of full-time-equivalent enrollment. Institutions with larger full-time-equivalent enrollments have higher probabilities of inclusion and lower weights. The weighted numbers of institutions have been rounded to the nearest 10.

NOTE: Data are for higher education institutions in the 50 states, the District of Columbia, and Puerto Rico that enroll freshmen. Percents may not sum to 100 and numbers may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Remedial Education in Higher Education Institutions, 1995.

The survey estimates are also subject to nonsampling errors that can arise because of nonobservation (nonresponse or noncoverage) errors, errors of reporting, and errors made in data collection. These errors can sometimes bias the data. Nonsampling errors may include such problems as misrecording of responses; incorrect editing, coding, and data entry; differences related to the particular time the survey was conducted; or errors in data preparation. While general sampling theory can be used in part to determine how to estimate the sampling variability of a statistic, nonsampling errors are not easy to measure and, for measurement purposes, usually require that an

experiment be conducted as part of the data collection procedures or that data external to the study be used.

To minimize the potential for nonsampling errors, the questionnaire was pretested with respondents at institutions like those that completed the survey. During the design of the survey and the survey pretest, an effort was made to check for consistency of interpretation of questions and to eliminate ambiguous items. The questionnaire and instructions were extensively reviewed by the National Center for Education Statistics and the Office of the Under Secretary, U.S. Department of Education. Manual and machine editing of the questionnaire responses were conducted to check the data for accuracy and consistency. Cases with missing or inconsistent items were recontacted by telephone. Data were keyed with 100 percent verification.

Variations

The standard error is a measure of the variability of estimates due to sampling. It indicates the variability of a sample estimate that would be obtained from all possible samples of a given design and size. Standard errors are 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 institutions reporting that the institution offered at least one remedial reading, writing, or mathematics course is 77.6 percent, and the estimated standard error is 1.7 percent. The 95 percent confidence interval for the statistic extends from $[77.6 - (1.7 \text{ times } 1.96)]$ to $[77.6 + (1.7 \text{ times } 1.96)]$, or from 74.3 to 80.9 percent. Tables of standard errors for each table and figure in the report are provided in appendix A.

Estimates of standard errors were computed using a technique known as jackknife replication. As with any replication method, jackknife replication involves constructing a number of subsamples (replicates) from the full sample and computing the statistic of interest for each replicate. The mean square error of the replicate estimates around the full sample estimate provides an estimate of the variances of the statistics.⁸ To construct the replications, 51 stratified subsamples of the full sample were created and then

⁸ K. Wolter. *Introduction to Variance Estimation*, Springer-Verlag, 1985.

dropped one at a time to define 51 jackknife replicates.⁹ A computer program (WesVarPC), distributed free of charge by Westat, Inc., through the Internet, was used to calculate the estimates of standard errors. WesVarPC is a stand-alone Windows application that computes sampling errors for a wide variety of statistics (totals, percents, ratios, log-odds ratios, general functions of estimates in tables, linear regression parameters, and logistic regression parameters).

The test statistics used in the analysis were calculated using the jackknife variances and thus appropriately reflected the complex nature of the sample design. In particular, an adjusted chi-square test using Satterthwaite's approximation to the design effect was used in the analysis of the two-way tables.¹⁰ Finally, Bonferroni adjustments were made to control for multiple comparisons where appropriate. For example, for an "experiment-wise" comparison involving g pairwise comparisons, each difference was tested at the $0.05/g$ significance level to control for the fact that g differences were simultaneously tested.

Comparison With Other Estimates of Remedial Education

The percentage of institutions offering remedial education as estimated by this PEQIS survey is about the same as the percentage of institutions offering remedial instructional services as estimated from the Integrated Postsecondary Education Data System (IPEDS) Institutional Characteristics Survey. This PEQIS survey estimated that 78 percent of higher education institutions enrolling freshmen offered at least one remedial reading, writing, or mathematics course in fall 1995. IPEDS estimated that 79 percent of higher education institutions offered remedial instructional services in academic year 1993-94.¹¹

Estimates of the percentage of students in remedial education vary depending upon whether data are reported by institutions or are student self-reports. This PEQIS survey, which uses data reported by institutions, estimated that 29 percent of first-time freshmen were enrolled in remedial reading, writing, or mathematics, with estimates of 13 percent enrolled in reading, 17 percent in writing, and 24

⁹ Ibid, 183.

¹⁰ For example, see D. Rao and A. Scott. "On Chi-square Tests for Multi-way Contingency Tables with Cell Proportions Estimated from Survey Data," *Annals of Statistics* 12 (1984): 46-60.

¹¹ U.S. Department of Education, National Center for Education Statistics. *Characteristics of the Nation's Postsecondary Institutions: Academic Year 1993-94*. NCES 94-388. 1994. Washington, DC.

percent in mathematics. Data from other institutional surveys are fairly similar to the PEQIS estimates. A recent study by the American Council on Education (ACE) found that an average of 33 percent of first-year undergraduates needed remedial work in mathematics and 27 percent needed remedial work in English in fall 1994.¹² An earlier study conducted by the Southern Regional Education Board (SREB) in member states estimated that an average of 36 percent of first-time freshmen needed remedial instruction in 1986.¹³ It should be noted that the ACE and SREB studies asked about the percentage of freshmen needing remediation and not about the percentage of freshmen actually enrolled in remedial courses.

Estimates of remedial enrollments from student self-reports are quite different. The 1993 National Postsecondary Student Aid Study estimated that 17 percent of first-year undergraduates at higher education institutions reported taking remedial courses during academic year 1992-93, with estimates of 7 percent for reading, 6 percent for writing, and 10 percent for mathematics.¹⁴

Postsecondary transcripts provide another way to examine remedial enrollments. A recent publication from the U.S. Department of Education (*The New College Course Map*¹⁵) examined course taking by postsecondary students based on the transcripts collected during two national longitudinal studies. The National Longitudinal Study of the High School Class of 1972 provided information about student course taking at postsecondary institutions from 1972 to 1984. The High School and Beyond/Sophomores study provided information about postsecondary experiences from 1981 to 1993. According to *The New College Course Map*, the percentage of students earning postsecondary credits in all remedial courses (English, precollegiate mathematics, and basic study skills) has stayed constant across both studies at 46 percent of students who earned more than 10 postsecondary credits. This report also notes that community colleges provide the bulk of remedial courses.

¹² Elaine El-Khawas. *Campus Trends 1995*. American Council on Education. 1995. Washington, DC.

¹³ Ansley Abraham. *Remedial Education in College: How Widespread Is It?* No. 24. Southern Regional Education Board. 1988. Atlanta, Georgia.

¹⁴ U.S. Department of Education, National Center for Education Statistics. 1993 National Postsecondary Student Aid Study, unpublished tabulations, June 1996.

¹⁵ Clifford Adelman. *The New College Course Map and Transcript Files*. U.S. Department of Education. 1995. Washington, D.C.

Background Information

There are many differences in methodologies and populations of interest in these various studies. In particular, the NPSAS estimates were student self-reports, while the other data were obtained from institutional respondents and records. Since the PEQIS study was designed to obtain estimates from institutional respondents about remedial enrollments and was not designed as a comparative study, the reasons for differences in the estimates from these various sources cannot be answered with the available data.

The survey was performed under contract with Westat, Inc., using the Postsecondary Education Quick Information System (PEQIS). This is the sixth PEQIS survey to be conducted. Westat's Project Director was Elizabeth Farris, and the Survey Manager was Laurie Lewis. Bernie Greene was the NCES Project Officer. The data were requested by the Planning and Evaluation Service, Office of the Under Secretary, U.S. Department of Education.

This report was reviewed by the following individuals:

Outside NCES

- Elizabeth Eisner, Planning and Evaluation Service, Office of the Under Secretary, U.S. Department of Education
- Kent Phillippe, American Association of Community Colleges
- Meredith Ludwig, American Association of State Colleges and Universities
- Clifford Adelman, National Institute on Postsecondary Education, Libraries, and Lifelong Learning, U.S. Department of Education

Inside NCES

- Michael Cohen, Statistical Standards and Services Group
- Mary Frase, Data Development and Longitudinal Studies Group
- James Houser, Data Development and Longitudinal Studies Group
- Paula Knepper, Data Development and Longitudinal Studies Group
- Edith McArthur, Data Development and Longitudinal Studies Group
- Peter Stowe, Surveys and Cooperative Systems Group

For more information about the Postsecondary Education Quick Information System or the Survey on Remedial Education in Higher Education Institutions, contact Bernie Greene, Data Development and Longitudinal Studies Group, National Center for Education Statistics, Office of Educational Research and Improvement, 555 New Jersey Avenue, NW, Washington, DC 20208-5651, telephone (202) 219-1366.

Appendix A

Tables of Standard Errors

Table 1a.--Standard errors: Institutions offering remedial courses in fall 1995, by subject area and institutional characteristics

Institutional characteristic	Number of higher education institutions with freshmen	Percent of higher education institutions enrolling freshmen that offer remedial courses in:			
		Reading, writing, or mathematics	Reading	Writing	Mathematics
All institutions	48.2	1.7	1.6	1.6	1.6
Type					
Public 2-year	20.2	--	0.7	0.5	0.5
Private 2-year	31.1	6.8	5.5	6.8	7.0
Public 4-year	14.9	2.6	3.1	2.7	2.7
Private 4-year	43.2	3.9	2.7	4.2	3.5
Minority enrollment					
High	35.8	2.0	3.1	3.4	2.1
Low	64.8	1.9	1.7	1.8	1.7

--Estimate of standard error is not derived because it is based on a statistic estimated at 100 percent.

NOTE: Standard errors are computed on unrounded numbers.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Remedial Education in Higher Education Institutions, 1995.

Table 2a.—Standard errors: Mean number of remedial courses offered in fall 1995, by subject area and institutional characteristics

Institutional characteristic	Reading	Writing	Mathematics
All institutions	0.07	0.06	0.07
Type			
Public 2-year	0.09	0.09	0.13
Private 2-year	(#)	0.10	0.08
Public 4-year	0.06	0.06	0.08
Private 4-year	0.07	0.09	0.08
Minority enrollment			
High	0.14	0.16	0.14
Low	0.07	0.06	0.08

(#) Too few cases for a reliable estimate.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Remedial Education in Higher Education Institutions, 1995.

Table 3a.--Standard errors: Freshman remedial enrollment in fall 1995, by subject area and institutional characteristics

Institutional characteristic	Number of first-time freshmen (in thousands)	Percent of all entering first-time freshmen that enrolled in remedial courses in:			
		Reading, writing, or mathematics	Reading	Writing	Mathematics
All institutions	31.4	0.8	0.5	0.6	0.8
Type					
Public 2-year	24.6	1.4	1.0	1.0	1.3
Private 2-year	6.4	5.4	2.5	5.3	4.8
Public 4-year	15.7	1.2	0.8	0.9	1.1
Private 4-year	14.8	1.6	1.2	1.3	1.4
Minority enrollment					
High	33.1	2.0	1.7	1.7	2.0
Low	35.2	0.8	0.6	0.6	0.8

NOTE: Standard errors are computed on unrounded numbers.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Remedial Education in Higher Education Institutions, 1995.

Table 4a.--Standard errors: Perceptions of change in the number of students enrolled in remedial courses at the institution in the last 5 years, by institutional characteristics: 1995

(Percent of higher education institutions offering remedial courses)

Institutional characteristic	Increased	Stayed about the same	Decreased
All institutions	2.5	2.6	1.5
Type			
Public 2-year	3.6	3.5	1.7
Private 2-year	8.2	9.0	5.6
Public 4-year	3.3	3.3	2.4
Private 4-year	4.1	5.0	4.1
Minority enrollment			
High.....	5.2	5.4	3.7
Low.....	2.9	2.8	1.6

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Remedial Education in Higher Education Institutions, 1995.

Table 5a.--Standard errors: Approximate average length of time a student takes remedial courses at the institution, by institutional characteristics: 1995

(Percent of higher education institutions offering remedial courses)

Institutional characteristic	Less than 1 year	1 year	More than 1 year
All institutions	1.5	1.5	0.9
Type			
Public 2-year	3.5	3.3	2.0
Private 2-year	2.4	2.4	--
Public 4-year	3.6	3.3	1.7
Private 4-year	3.5	3.1	1.0
Minority enrollment			
High	6.3	6.6	3.2
Low	1.7	1.4	1.1

--Estimate of standard error is not derived because it is based on a statistic estimated at 0 percent.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Remedial Education in Higher Education Institutions, 1995.

Table 6a.--Standard errors: Mean percent of students generally passing or successfully completing remedial courses, by subject area and institutional characteristics: 1995

Institutional characteristic	Reading	Writing	Mathematics
All institutions	1.0	0.7	0.8
Type			
Public 2-year	1.2	0.9	0.9
Private 2-year	(#)	3.3	3.3
Public 4-year	1.4	0.9	1.4
Private 4-year	2.6	1.3	1.7
Minority enrollment			
High	2.8	2.5	2.2
Low.....	0.9	0.6	0.8

(#) Too few cases for a reliable estimate.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Remedial Education in Higher Education Institutions, 1995.

Table 7a.--Standard errors: Most frequent form of credit given for remedial courses in fall 1995, by subject area and institutional characteristics

(Percent of higher education institutions offering remedial courses in the subject)

Institutional characteristic	Reading				Writing				Mathematics			
	Degree credit, subject	Degree credit, elective	Institutional credit	No credit	Degree credit, subject	Degree credit, elective	Institutional credit	No credit	Degree credit, subject	Degree credit, elective	Institutional credit	No credit
All institutions.	1.1	1.6	2.7	1.7	1.0	1.4	2.4	1.8	1.1	1.4	2.4	2.0
Type												
Public 2-year.....	0.6	1.8	2.6	2.2	0.6	1.8	2.6	2.2	0.6	1.7	2.5	2.4
Private 2-year.....	(#)	(#)	(#)	(#)	7.8	2.2	10.4	8.6	7.6	2.2	10.4	8.5
Public 4-year.....	1.6	3.4	4.5	2.8	2.8	2.7	3.8	2.6	2.5	2.4	3.6	2.4
Private 4-year.....	2.2	4.0	5.5	4.4	1.7	2.6	4.0	3.6	2.6	3.8	5.1	4.8
Minority enrollment												
High.....	2.1	1.2	6.0	6.0	2.1	1.2	6.3	6.3	2.0	1.1	5.8	5.7
Low.....	1.3	1.9	2.8	1.5	1.1	1.6	2.4	1.6	1.3	1.7	2.5	1.7

(#) Too few cases for a reliable estimate.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Remedial Education in Higher Education Institutions, 1995.

**Table 8a.--Standard errors: Most frequent requirement status for remedial courses in fall 1995,
by subject area and institutional characteristics**

(Percent of higher education institutions offering remedial courses in the subject)

Institutional characteristic	Reading		Writing		Mathematics	
	Required	Recommended but not required	Required	Recommended but not required	Required	Recommended but not required
All institutions	2.6	2.6	2.0	2.0	2.2	2.2
Type						
Public 2-year	3.6	3.6	3.1	3.1	3.3	3.3
Private 2-year	(#)	(#)	10.6	10.6	10.7	10.7
Public 4-year	4.4	4.4	2.6	2.6	2.5	2.5
Private 4-year	4.0	4.0	3.2	3.2	2.6	2.6
Minority enrollment						
High	5.2	5.2	5.4	5.4	4.8	4.8
Low	2.8	2.8	2.0	2.0	2.2	2.2

(#) Too few cases for a reliable estimate.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Remedial Education in Higher Education Institutions, 1995.

Table 9a.--Standard errors: Usual selection approach for remedial courses in fall 1995, by subject area and institutional characteristics

(Percent of higher education institutions offering remedial courses in the subject)

Institutional characteristic	Reading					Writing					Mathematics			
	All entering students given placement tests to determine need	Entering students who meet various criteria given placement tests to determine need	Entering students who meet various criteria are required or encouraged to enroll	Other selection approach	All entering students given placement tests to determine need	Entering students who meet various criteria given placement tests to determine need	Entering students who meet various criteria are required or encouraged to enroll	Other selection approach	All entering students given placement tests to determine need	Entering students who meet various criteria given placement tests to determine need	Entering students who meet various criteria are required or encouraged to enroll	Other selection approach	Mathematics	
													Entering students who meet various criteria are required or encouraged to enroll	Other selection approach
All institutions..	2.6	2.4	1.6	1.4	2.6	2.3	1.2	1.5	2.6	2.3	1.1	1.2	1.1	1.2
Type														
Public 2-year	3.3	3.2	1.3	1.8	3.8	3.1	0.8	1.8	3.8	3.1	0.8	1.8	0.8	1.8
Private 2-year	(#)	(#)	(#)	(#)	8.2	7.6	--	4.3	7.2	6.4	--	4.0	--	4.0
Public 4-year	4.7	5.0	3.1	2.5	4.2	3.4	2.3	2.0	3.8	3.5	1.8	1.2	1.8	1.2
Private 4-year	6.8	5.3	4.9	3.8	5.3	5.1	4.0	2.4	4.8	4.0	3.6	2.2	3.6	2.2
Minority enrollment														
High	7.1	7.2	1.1	1.6	7.6	7.6	1.1	1.5	6.6	6.6	1.7	1.1	1.7	1.1
Low	2.8	2.6	1.8	1.7	2.9	2.6	1.4	1.7	2.8	2.4	1.2	1.4	1.2	1.4

(#) Too few cases for a reliable estimate.

--Estimate of standard error is not derived because it is based on a statistic estimated at 0 percent.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Remedial Education in Higher Education Institutions, 1995.

Table 10a.--Standard errors: Location within the institution of the most frequent providers of remedial education in fall 1995, by subject area and institutional characteristics

(Percent of higher education institutions offering remedial courses in the subject)

Institutional characteristic	Reading				Writing				Mathematics			
	Separate remedial division	Traditional academic department	Learning center	Other	Separate remedial division	Traditional academic department	Learning center	Other	Separate remedial division	Traditional academic department	Learning center	Other
All institutions	2.8	2.8	1.9	0.7	2.0	2.2	1.3	0.7	2.1	2.5	1.5	0.7
Type												
Public 2-year	3.2	3.4	2.1	1.0	2.9	3.2	2.1	1.0	3.0	3.3	2.0	1.0
Private 2-year	(#)	(#)	(#)	(#)	3.3	4.9	4.0	1.8	3.3	4.9	3.9	1.8
Public 4-year	4.3	4.3	1.7	1.1	3.1	3.7	1.8	0.9	3.0	3.4	1.6	0.9
Private 4-year	6.5	4.8	6.0	0.4	4.4	4.4	3.0	0.9	4.3	4.3	2.9	0.9
Minority enrollment												
High.....	6.8	7.3	6.0	0.4	7.0	7.2	6.3	0.4	6.6	7.4	5.6	1.0
Low	2.6	2.6	1.6	0.8	1.8	2.2	1.3	0.8	1.7	2.4	1.5	0.8

(#) Too few cases for a reliable estimate.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Remedial Education in Higher Education Institutions, 1995.

Table 11a.--Standard errors: Institutions offering any English as a second language (ESL) for college students, and whether the ESL courses are considered to be remedial courses, by institutional characteristics: 1995

(Percent of higher education institutions enrolling freshmen)

Institutional characteristic	Offer English as a second language for college students	Whether ESL courses are considered remedial		
		All ESL courses are remedial	Some ESL courses are remedial	No ESL courses are remedial
All institutions	2.0	2.4	2.2	2.6
Type				
Public 2-year	2.4	4.1	3.5	2.9
Private 2-year	5.1	(#)	(#)	(#)
Public 4-year	3.5	3.8	3.0	3.6
Private 4-year	4.0	4.5	4.4	5.2
Minority enrollment				
High	6.8	7.2	6.7	5.3
Low	2.0	2.3	2.4	2.8

(#) Too few cases for a reliable estimate.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Remedial Education in Higher Education Institutions, 1995.

Table 12a.--Standard errors: Times when remedial courses are offered, by institutional characteristics: 1995

(Percent of higher education institutions offering remedial courses)

Institutional characteristic	Daytime	Evenings	Weekends	Summer session	Other
All institutions	0.4	2.4	1.2	2.4	0.7
Type					
Public 2-year	--	2.7	2.3	2.6	1.0
Private 2-year	3.9	9.2	5.0	11.4	4.0
Public 4-year	0.9	4.2	1.8	3.6	1.8
Private 4-year	0.8	4.1	2.9	3.7	1.0
Minority enrollment					
High	0.8	5.8	6.6	7.1	2.3
Low	0.5	2.6	1.1	2.6	0.7

--Estimate of standard error is not derived because it is based on a statistic estimated at 100 percent.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Remedial Education in Higher Education Institutions, 1995.

Table 13a.--Standard errors: Whether state policies or laws affect higher education institutions' remedial education offerings, and how those policies or laws affect remedial offerings, by institutional characteristics: 1995

Institutional characteristic	State policies or laws affect remedial offerings at institutions offering remedial courses	How state policies or laws affect remedial offerings				
		Required to offer	Encouraged to offer	Discouraged from offering	Offerings are restricted	Other
All institutions	1.9	3.8	2.3	1.0	2.0	2.0
Type						
Public 2-year	3.2	3.6	3.1	0.6	1.7	2.3
Private 2-year	2.0	(#)	(#)	(#)	(#)	(#)
Public 4-year	3.6	4.9	4.9	3.6	3.9	3.7
Private 4-year	2.4	(#)	(#)	(#)	(#)	(#)
Minority enrollment						
High	5.3	6.5	6.8	2.7	4.8	3.2
Low	2.0	4.2	2.6	0.8	1.7	2.4

(#) Too few cases for a reliable estimate.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Remedial Education in Higher Education Institutions, 1995.

Table 14a.--Standard errors: Limitation on the length of time a student may take remedial courses at the higher education institution, and how the time limit on remediation is set, by institutional characteristics: 1995

Institutional characteristic	Length of remediation is limited at institutions offering remedial courses	How time limit on remediation is set		
		State policy or law	Institutional policy	Other
All institutions	2.1	3.2	3.4	1.4
Type				
Public 2-year	3.2	7.5	7.2	3.4
Private 2-year	10.4	(#)	(#)	(#)
Public 4-year	3.6	2.5	2.5	--
Private 4-year	3.9	1.2	1.4	0.6
Minority enrollment				
High	6.6	6.5	7.5	4.9
Low	2.0	3.6	3.8	1.4

(#) Too few cases for a reliable estimate.

--Estimate of standard error is not derived because it is based on a statistic estimated at 0 percent.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Remedial Education in Higher Education Institutions, 1995.

Table 15a.--Standard errors: Percent of higher education institutions offering remedial courses, mean number of different remedial courses offered, percent of freshmen enrolled in remedial courses, and percent of institutions giving elective degree or institutional credit for remedial courses in academic year 1983-84, fall 1989, and fall 1995

Item	Academic year 1983-84	Fall 1989	Fall 1995
Percent of institutions offering remedial reading, writing, or mathematics courses.....	2.4	2.1	1.7
Percent of institutions offering remedial reading courses.....	2.2	2.3	1.6
Percent of institutions offering remedial writing courses.....	1.7	2.2	1.6
Percent of institutions offering remedial mathematics courses.....	2.2	2.2	1.6
Mean number of different remedial reading courses.....	0.09	0.12	0.07
Mean number of different remedial writing courses.....	0.08	0.08	0.06
Mean number of different remedial mathematics courses.....	0.09	0.11	0.07
Percent of first-time freshmen who enrolled in a remedial reading, writing, or mathematics course.....	*	1.4	0.8
Percent of first-time freshmen who enrolled in a remedial reading course.....	*	0.7	0.5
Percent of first-time freshmen who enrolled in a remedial writing course.....	*	0.8	0.6
Percent of first-time freshmen who enrolled in a remedial mathematics course.....	*	1.0	0.8
Percent of institutions giving elective degree credit in remedial reading.....	2.2	2.2	1.6
Percent of institutions giving institutional credit in remedial reading.....	3.8	3.8	2.7
Percent of institutions giving elective degree credit in remedial writing.....	2.0	2.0	1.4
Percent of institutions giving institutional credit in remedial writing.....	2.2	2.9	2.4
Percent of institutions giving elective degree credit in remedial mathematics.....	2.0	2.0	1.4
Percent of institutions giving institutional credit in remedial mathematics.....	3.4	2.7	2.4

*Statistics not estimated for that year.

NOTE: For 1983-84 and 1989, standard errors were available only on selected items. To determine the standard errors for the remaining items, the ratios of the known standard errors from the 1989 survey to the corresponding standard errors from the 1995 survey were computed. Then the average of the ratios based on standard errors for all institutions was calculated to obtain a conversion factor. The standard errors for 1989 were obtained by multiplying the corresponding 1995 standard error by this conversion factor. For the 1983-84 survey, the conversion factor was obtained by multiplying the 1989 conversion factor by the square root of the ratio of the 1989 to 1983-84 sample sizes. This approach was used for 1983-84 because there were almost no standard errors from which to develop the appropriate conversion factor.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Remedial Education in Higher Education Institutions, 1995; U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, Survey on College-Level Remedial Education in the Fall of 1989 (NCES 91-191, May 1991); and U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, Survey on College-Level Remediation (CS 86-218, October 1986).

Table 17.--Standard errors for the figures and for data not shown in tables: 1995

Item	Estimate	Standard error
Figure 1: Percent of institutions offering various number of different remedial courses		
Reading: 1 course.....	41	2.2
Reading: 2 courses.....	34	2.8
Reading: 3 or 4 courses.....	19	2.2
Reading: 5 or more courses.....	7	0.9
Writing: 1 course.....	53	1.8
Writing: 2 courses.....	26	1.6
Writing: 3 or 4 courses.....	14	1.4
Writing: 5 or more courses.....	6	0.8
Mathematics : 1 course.....	40	2.4
Mathematics : 2 courses.....	24	2.1
Mathematics : 3 or 4 courses.....	24	1.6
Mathematics : 5 or more courses.....	13	1.2
Figure 2: Percent of all freshmen and freshmen enrolled in remedial courses retained to their second year		
All freshmen: 1-49 percent retained.....	15	1.9
All freshmen: 50-74 percent retained.....	53	2.8
All freshmen: 75-100 percent retained.....	32	2.7
Remedial freshmen: 1-49 percent retained.....	24	2.7
Remedial freshmen: 50-74 percent retained.....	53	2.6
Remedial freshmen: 75-100 percent retained.....	23	2.2
Figure 3: Percent of institutions with various reasons remedial courses were not offered		
Remedial courses were not needed.....	66	4.8
Institutional policy does not allow remedial courses.....	27	4.1
Students who need remediation take it elsewhere.....	22	5.5
State policy or law does not allow remedial courses.....	5	1.4
Other reasons.....	9	2.6
Figure 4: Percent of institutions with restrictions on regular academic courses		
Reading: no restrictions.....	33	2.7
Reading: some restrictions.....	65	2.6
Reading: totally restricted.....	2	0.8
Writing: no restrictions.....	29	1.9
Writing: some restrictions.....	69	1.8
Writing: totally restricted.....	2	0.6
Mathematics : no restrictions.....	35	2.1
Mathematics : some restrictions.....	64	2.0
Mathematics : totally restricted.....	2	0.7

Table 17.--Standard errors for the figures and for data not shown in tables: 1995--Continued

Item	Estimate	Standard error
Figure 5: Percent of institutions offering remedial courses in other academic subjects		
All institutions.....	25	1.9
Public 2-year.....	36	3.4
Private 2-year.....	9	4.5
Public 4-year.....	27	3.3
Private 4-year.....	14	3.1
Figure 6: Percent of institutions offering remedial courses during various combinations of time periods		
Day only.....	25	2.4
Day and evenings.....	8	1.4
Day and summer.....	11	1.4
Day, evenings, and weekends.....	1	0.5
Day, evenings, and summer.....	37	2.4
Day, evenings, weekends, and summer.....	16	1.2
All other combinations.....	2	0.6
Figure 7: Percent of institutions providing remedial services to local business and industry		
All institutions.....	19	1.4
Public 2-year.....	50	2.8
Private 2-year.....	5	3.4
Public 4-year.....	6	1.5
Private 4-year.....	4	1.5
Chapter 2, section on reasons institutions do not offer remedial courses		
Percent of institutions that did not offer remedial courses in fall 1995 that had offered remedial courses during the previous 5 years.....	18	3.8
Chapter 3, section on offering times for remedial courses		
Percent of institutions offering remedial courses through distance learning.....	3	0.5

Table 17.--Standard errors for the figures and for data not shown in tables: 1995--Continued

Item	Estimate	Standard error
Chapter 3, section on remedial offerings to other institutions and to local business and industry		
Percent of institutions offering remedial courses to other postsecondary institutions		
All institutions	3	0.6
Public 2-year	7	1.5
Public 4-year	3	1.0
Percent of institutions providing remedial reading to local business/industry	87	3.0
Percent of institutions providing remedial writing to local business/industry	93	2.3
Percent of institutions providing remedial mathematics to local business/industry	94	1.7
Percent of institutions providing other remedial subject to local business/industry	18	3.3
Percent of institutions providing remedial services at business and industry sites.....	89	2.4
Percent of institutions providing remedial services on the campus	74	3.7
Percent of institutions providing remedial services through distance learning	5	1.4
Percent of institutions providing remedial services at other location	3	1.0

SOURCE: U.S. Department of Education, National Center for Education Statistics, Postsecondary Education Quick Information System, Survey on Remedial Education in Higher Education Institutions, 1995.

Appendix B

Survey Questionnaire

★ U.S. GOVERNMENT PRINTING OFFICE: 1996 - 421 - 103 / 60409

U.S. DEPARTMENT OF EDUCATION
NATIONAL CENTER FOR EDUCATION STATISTICS
WASHINGTON, D.C. 20208-5651

FORM APPROVED
O.M.B. No.: 1850-0721
EXPIRATION DATE: 12/96

**REMEDIAL EDUCATION IN
HIGHER EDUCATION INSTITUTIONS**
POSTSECONDARY EDUCATION QUICK INFORMATION SYSTEM

This survey is authorized by law (20 U.S.C. 1221e-1). While participation in this survey is voluntary, your cooperation is critical to make the results of this survey comprehensive, accurate, and timely.

Definition of Remedial Education Courses for Purposes of This Study:

Courses in reading, writing, or math for college students lacking those skills necessary to perform college-level work at the level required by your institution. Throughout this questionnaire, these courses are referred to as "remedial"; however, your institution may use other names such as "compensatory," "developmental," or "basic skills," or some other term. Please answer the survey for any courses meeting the definition above, regardless of name; however, do not include English as a second language (ESL) when taught primarily to foreign students. Do not include remedial courses offered by another institution, even if students at your institution take these courses.

Please answer for your regular undergraduate programs (except for question 17, which asks about services/courses to business and industry). Use data from your institutional records whenever possible. If exact data are not available, then give your best estimate.

AFFIX LABEL HERE

IF ABOVE INSTITUTION INFORMATION IS INCORRECT, PLEASE UPDATE DIRECTLY ON LABEL.

Name of Person Completing This Form: _____ Telephone Number: _____

Title/Position: _____

THANK YOU. PLEASE KEEP A COPY OF THIS SURVEY FOR YOUR RECORDS.

RETURN COMPLETED FORM TO:

WESTAT, INC.
1650 Research Boulevard
Rockville, Maryland 20850
ATTN: Lewis, 923812

IF YOU HAVE ANY QUESTIONS, CALL:

Laurie Lewis at Westat
1-800-937-8281, Ext. 8284 or 1-301-251-8284
8:00 a.m. - 4:00 p.m., Eastern time zone
Fax#: 1-301-294-3992

The time required to complete this information collection is estimated to average 30 minutes per response, including the time to review instructions, search existing data resources, gather and maintain the data needed, and complete and review the information collection. If you have any comments concerning the accuracy of the time estimate or suggestions for improving this form, please write to: U.S. Department of Education, Washington, DC 20202-4651. If you have any comments regarding the status of your individual submission of this form, write directly to: National Center for Education Statistics, U.S. Department of Education, New Jersey Avenue, NW, Washington, DC 20202-5574.

1. Does your institution enroll any freshman students?
 Yes 1 (Continue with question 2.) No 2 (Stop. Complete respondent section on front and return questionnaire.)
2. Does your institution offer any remedial reading, writing, or math courses (as defined on the front of this questionnaire)?
 Yes 1 (Skip to question 5.) No 2 (Continue with question 3.)
3. Which of the following are reasons that your institution does not offer any remedial courses? (Circle one on each line.)
- | | Yes | No |
|--|-----|----|
| a. Remedial courses are not needed by students at this institution | 1 | 2 |
| b. Students at this institution who need remediation take remedial courses offered by another institution..... | 1 | 2 |
| c. State policy or law does not allow this institution to offer remedial courses..... | 1 | 2 |
| d. Institutional policy does not allow this institution to offer remedial courses | 1 | 2 |
| e. Other reason (specify) _____..... | 1 | 2 |
4. Has your institution offered any remedial courses during the last 5 years? (Circle one and then skip to question 16.)
 Yes 1 (Date last offered: _____) No 2
5. Enter information requested in Parts a-h for remedial courses in each subject area in fall 1995. For those subjects (reading, writing, or math) in which you have no remedial courses, enter "no" in Part a and skip Parts b-i.

Remedial course information	Reading	Writing	Math
a. Did your institution offer remedial courses in this subject in fall 1995? (Enter yes or no.)			
b. What was the number of remedial courses with different catalog numbers in fall 1995? (Do not count multiple sections of the same course.)			
c. What is the most frequent type of credit earned from remedial courses? (Enter one.) 1 = Degree credit, meets subject requirements 2 = Degree credit, elective only 3 = Institutional credit (e.g., counts toward financial aid, campus housing, or full-time student status) 4 = No credit			
d. What is the most frequent type of course requirement status for students needing remedial courses? (Enter one.) 1 = Required; 2 = Recommended but not required			
e. How are students usually selected for remedial courses? (Enter one.) 1 = All entering students are given placement tests to determine need for remediation 2 = Entering students who do not have SAT/ACT scores or who score below a certain level on the SAT/ACT or have a GPA below a certain level are given placement tests to determine need for remediation 3 = Entering students who score below a certain level on the SAT/ACT or have a GPA below a certain level are required or encouraged to enroll in remedial/developmental courses 4 = Faculty or staff refer students for enrollment in remedial/developmental courses 5 = Students refer themselves for enrollment in remedial/developmental courses 6 = Other (specify) _____			

5. (continued)

Remedial course information	Reading	Writing	Math
f. While students are taking remedial courses, are there any restrictions on the regular academic courses they can take? <i>(Enter one.)</i> 1 = No restrictions on regular academic courses 2 = Some restrictions on regular academic courses 3 = Totally restricted from taking regular academic courses			
g. Who most often provides remedial education? <i>(Enter one.)</i> 1 = Separate remedial division/department 2 = Traditional academic department(s) 3 = Learning center 4 = Other <i>(specify)</i> _____			
h. In fall 1995, about what percent of entering freshmen enrolled in any remedial courses in reading? writing? math? <i>(Answer separately for each subject.)</i>			
i. In general, about what percent of students enrolled in remedial courses pass or successfully complete the remedial courses? <i>(Enter for each subject.)</i>			

6. Give your best estimate of the total, **unduplicated** percent of entering freshmen who enrolled in **any** remedial reading or remedial writing or remedial math courses in fall 1995. _____%

7. Has the number of students enrolled in remedial courses at your institution increased, stayed about the same, or decreased in the last 5 years? *(Circle one number.)*

Increased1 Stayed about the same2 Decreased3

8a. About what percent of **all 1994-95** full-time entering freshmen continued at your institution to the start of their second year (1995-96)? _____%

8b. About what percent of **1994-95** full-time entering freshmen **who enrolled in any remedial courses** continued at your institution to the start of their second year (1995-96)? _____%

9. Does your institution offer remedial courses in academic subjects other than reading, writing, or math?

Yes 1 *(specify subject(s)* _____ *)* No 2

10. When does your institution offer remedial courses? *(Circle one on each line.)*

	Yes	No
a. Day time	1	2
b. Evenings	1	2
c. Weekends	1	2
d. Summer session	1	2
e. Other <i>(specify)</i> _____	1	2

11. Does your institution offer any remedial courses through distance learning (e.g., TV broadcast or cable)?

Yes 1 No 2

12a. Are there any state policies or laws that affect your institution's remedial education offerings?

Yes 1 No 2 *(Skip to question 13.)*

12b. How do these state policies or laws affect offerings? *(Circle the one answer that best applies.)*

- This institution is required to offer remedial education 1
- This institution is encouraged (but not required) to offer remedial education 2
- This institution is discouraged from offering remedial education 3
- The remedial offerings of the institution are restricted **79** 4
- Other *(specify)* _____ 5

13. On average, about how long does a student take remedial courses? (Circle one number.)

- Less than 1 year (e.g., 1 semester or 2 quarters) 1
- 1 year 2
- More than 1 year 3

14a. Is there a limit on the length of time a student may take remedial courses at your institution?

- Yes 1 (Length of time: _____) No 2 (Skip to question 15a.)

14b. How is the time limit on remediation set? (Circle one number.)

- State policy or law 1
- Institutional policy 2
- Other (specify) _____ 3

15a. Does your institution have any formal arrangements to offer remedial courses to students from other postsecondary institutions?

- Yes 1 No 2 (Skip to question 16a.)

15b. With what types of institutions do you have such arrangements? (Circle one on each line.)

Yes No

- a. Public 4-year college or university 1 2
- b. Private 4-year college or university 1 2
- c. Public 2-year college 1 2
- d. Private 2-year college 1 2
- e. Other (specify) _____ 1 2

16a. Does your institution offer any English as a second language (ESL) courses for college students?

- Yes 1 No 2 (Skip to question 17a.)

16b. Does your institution consider these ESL courses to be remedial courses? (Circle one number.)

- All ESL courses are considered remedial 1
- Some ESL courses are considered remedial 2
- No ESL courses are considered remedial 3

17a. Does your institution provide remedial education services/courses to local business and industry?

- Yes 1 No 2 (Skip questions 17b and 17c.)

17b. What subject areas are covered in these services/courses? (Circle one on each line.)

Yes No

- a. Reading 1 2
- b. Writing 1 2
- c. Math 1 2
- d. Other (specify) _____ 1 2

17c. What is the location of these services/courses? (Circle one on each line.)

Yes No

- a. On the campus of this institution 1 2
- b. At business/industry sites 1 2
- c. Offered through distance learning 1 2
- d. Other (specify) _____ 1 2

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