National Center for Education Statistics

# condition ofeducation 2004 



INDICATOR 18

## Remediation and Degree Completion

The indicator and corresponding tables are taken directly from The Condition of Education 2004. Therefore, the page numbers may not be sequential.

Additional information about the survey data and supplementary notes can be found in the full report. For a copy of The Condition of Education 2004 visit the NCES web site (http:/Inces.ed.gov/pubsearch/pubsinfo.asp?pubid=2004077) or contact ED PUBs at 1-877-4ED-PUBS.

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# Postsecondary Persistence and Progress Remediation and Degree Completion 

## Postsecondary students who take remedial reading are about half as likely as those who

 take no remedial courses to earn a degree or certificate.${ }^{1}$ Includes all Title IV degree-granting 2- and 4year institutions that enrolled freshmen.

NOTE: Data consist of all 12th-graders who subsequently were known participants in postsecondary education. Detail may not sum to totals because of rounding. The estimates in this indicator differ from those in indicator 31 because the populations differ. This indicator examines a cohort (1992 12th-graders who enrolled in postsecondary education) while indicator 31 deals with entering freshmen of all ages in 2000.
SOURCE: Adelman, C. (2004).Principal Indicators of Student Academic Histories in Postsecondary Education, 1972-2000, table 7.3. Available at: http://preview.ed.gov/rschstat/research/pubs/ prinindicat/index.html. Data from U.S. Department of Education, NCES, National Education Longitudinal Study of 1988 (NELS:88/2000), "Fourth Follow-up, 2000."

FOR MORE INFORMATION:
Supplemental Notes 1,3,6,8
Supplemental Tables 18-1, 18-2
NCES 2004-010

Many students enter postsecondary education underprepared for college-level work. In fall 2000, some 76 percent of postsecondary institutions offered at least one remedial reading, writing, or mathematics course (NCES 2004-010). ${ }^{1}$ Postsecondary transcripts of 1992 12th-graders who enrolled in postsecondary education between 1992 and 2000 show that 61 percent of students who first attended a public 2-year and 25 percent who first attended a 4 -year institution completed at least one remedial course at the postsecondary level (see supplemental table 18-1). Students who first attended public 2-year institutions were more likely than their peers at 4 -year institutions to enroll in a remedial reading course ( 18 vs. 5 percent) or one or two remedial mathematics courses ( 16 vs. 7 percent).

Despite assistance offered through remediation, students enrolled in remediation are less likely to earn a degree or certificate. Regardless of the combination of remedial coursework, students who completed any remedial courses were less likely to earn a degree or certificate than students who had no remediation. While 69 percent of 1992 12th-graders who had not enrolled in any postsecondary remedial courses earned a
degree or certificate by 2000, 30 to 57 percent of those who had enrolled in one or more remedial courses had earned a formal award, depending on the types and amount of remediation.

The need for remedial reading appears to be the most serious barrier to degree completion: it is associated with more total remedial coursework and with lower rates of degree attainment than other remedial course-taking patterns. Students who took any postsecondary remedial reading were less likely than their peers who took one or two remedial mathematics courses only or just one remedial course (not mathematics or reading) to complete a bachelor's degree or higher ( 17 vs. 27 and 39 percent, respectively). They were also less likely than their peers who took any other combination of remedial courses to have earned a formal award ( 30 vs. 41 to 57 percent) within 8 years of high school graduation. Enrollment in remedial reading is also associated with higher rates of total remediation. Fifty-one percent of students who took any remedial reading enrolled in four or more remedial courses, compared with 31 percent of students who took any remedial mathematics (see supplemental table 18-2).

EDUCATIONAL ATTAINMENT OF REMEDIAL COURSETAKERS:Among 1992 12th-graders who enrolled in postsecondary education, percentage who earned a specific degree or certificate, by type and intensity of postsecondary remedial coursework:


## Remediation and Degree Completion

Table 18-1. Percentage distribution of 1992 12th-graders who enrolled in postsecondary education by type and intensity of remedial coursework, by selected student and school characteristics: 2000

| Student or school characteristic | Any remedial reading | Two or fewer courses of remedial mathematics only | Two or more other remedial courses, but no remedial reading | One remedial course, not mathematics or reading | No remedial courses |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 10.6 | 10.9 | 13.2 | 6.7 | 58.6 |
| Race/ethnicity ${ }^{1}$ |  |  |  |  |  |
| Asian | 10.0 | 7.7 | 13.4 | 6.8 | 62.0 |
| Black | 24.1 | 10.4 | 20.6 | 6.6 | 38.3 |
| White | 7.2 | 10.7 | 10.9 | 6.9 | 64.4 |
| Hispanic | 20.3 | 13.3 | 23.5 | 6.1 | 36.8 |
| Type of institution first attended |  |  |  |  |  |
| 2-year public | 17.8 | 15.5 | 21.0 | 7.0 | 38.9 |
| 4-year public or private | 5.2 | 7.0 | 6.6 | 6.5 | 74.7 |
| Other subbaccalaureate ${ }^{2}$ | 6.6 | 12.7 | 19.9 | 9.1 | 51.7 |
| Delayed entry |  |  |  |  |  |
| Did not delay entry | 10.6 | 9.8 | 11.4 | 6.8 | 61.4 |
| Delayed entry | 9.8 | 15.7 | 22.1 | 6.4 | 46.0 |
| Urbanicity of high school |  |  |  |  |  |
| Urban | 13.0 | 11.7 | 15.2 | 6.9 | 53.2 |
| Suburban | 10.2 | 9.1 | 11.7 | 6.3 | 62.6 |
| Rural | 9.0 | 11.4 | 13.3 | 7.0 | 58.4 |
| Socioeconomic status quintile |  |  |  |  |  |
| 81st-100th percentile | 5.9 | 6.8 | 6.8 | 5.3 | 75.2 |
| 61st-80th percentile | 10.8 | 10.1 | 12.6 | 7.7 | 58.8 |
| 41st-60th percentile | 9.9 | 15.4 | 14.2 | 6.2 | 54.3 |
| 21st-40th percentile | 10.6 | 12.1 | 18.2 | 10.1 | 49.0 |
| 1st-20th percentile | 22.9 | 12.9 | 22.1 | 5.3 | 36.8 |
| Senior test score quintile ${ }^{3}$ |  |  |  |  |  |
| Highest | 0.4 | 3.1 | 1.8 | 3.6 | 91.1 |
| 2nd | 3.9 | 10.4 | 9.3 | 8.7 | 67.7 |
| 3rd | 10.2 | 17.3 | 17.6 | 8.3 | 46.6 |
| 4th | 19.2 | 15.8 | 24.6 | 7.8 | 32.7 |
| Lowest | 41.1 | 8.6 | 24.0 | 5.5 | 20.7 |

${ }^{1}$ Asian includes Pacific Islander, Black includes African American, and Hispanic includes Latino. Racial categories exclude Hispanic origin.
${ }^{2}$ Includes public less-than-2-year and private less-than-4-year institutions.
${ }^{3}$ Derived variable based on 1992 composite reading and mathematics standardized test scores.
NOTE:Data consist of all 12th-graders who subsequently were known participants in postsecondary education. See supplemental note 1 for urbanicity and supplemental note 3 for information on the National Education Longitudinal Study of 1988 (NELS:88/2000). Detail may not sum to totals because of rounding.
SOURCE:Adelman, C. (2004). Principal Indicators of Student Academic Histories in Postsecondary Education, 1972-2000, tables 7.1 and 7.2.Available at:http:///preview.ed.gov/rschstat/research/pubs/prinindicat/index.html. Data from U.S. Department of Education, NCES, National Education Longitudinal Study of 1988 (NELS:88/2000),"Fourth Follow-up, 2000."

## Remediation and Degree Completion

Table 18-2. Percentage distribution of 1992 12th-graders who took any postsecondary remedial reading or mathematics courses by amount of remedial coursework taken, by type of remedial coursework: 2000

|  |  | Total remedial courses |  | Any remedial <br> Type of remedial coursework | Any remedial <br> reading |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| mathematics |  |  |  |  |  |

NOTE:Data consist of all 12th-graders who subsequently were known participants in postsecondary education. Detail may not sum to totals because of rounding
SOURCE:U.S. Department of Education, NCES, National Education Longitudinal Study of 1988 (NELS:88/2000),"Fourth Follow-up, 2000."

## Remediation and Degree Completion

Table S18. Standard errors for the percentage who earned a specific degree or certificate among 1992 12th-graders who enrolled in postsecondary education, by type and intensity of postsecondary remedial coursework: 2000

|  |  | Highest degree earned |  |  | Percentage of students in remediation category |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Type of remedial coursework | Any | Certificate | Associate's degree | Bachelor's degree or higher |  |
| Any remedial reading | 2.61 | 1.34 | 0.99 | 2.01 | 0.68 |
| Two or fewer courses of remedial mathematics only | 2.91 | 1.19 | 1.43 | 2.81 | 0.60 |
| Two or more other remedial courses, but no remedial reading | 2.67 | 1.52 | 1.91 | 1.98 | 0.69 |
| One remedial course, not mathematics or reading | 2.85 | 1.61 | 1.29 | 2.75 | 0.36 |
| No remedial courses | 1.22 | 0.48 | 0.61 | 1.31 | 1.04 |

SOURCE:Adelman, C. (2004). Principal Indicators of Student Academic Histories in Postsecondary Education, 1972-2000, table 7.3. Available at:http:///preview.ed.gov/rschstat/research/pubs/prinindicat/index.html. Data from U.S. Department of Education, NCES, National Education Longitudinal Study of 1988 (NELS:88/2000),"Fourth Follow-up, 2000."

## Remediation and Degree Completion

Table S18-1. Standard errors for the percentage distribution of 1992 12th-graders who enrolled in postsecondary education by type and intensity of remedial coursework, by selected student and school characteristics: 2000

| Student or school characteristic | Any remedial reading | Two or fewer courses of remedial mathematics only | Two or more other remedial courses, but no remedial reading | One remedial course, not mathematics or reading | No remedial courses |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 0.68 | 0.60 | 0.69 | 0.36 | 1.04 |
| Race/ethnicity |  |  |  |  |  |
| Asian | 2.58 | 2.31 | 3.03 | 1.01 | 6.50 |
| Black | 3.24 | 2.42 | 2.87 | 1.54 | 3.41 |
| White | 0.63 | 0.65 | 0.68 | 0.41 | 1.06 |
| Hispanic | 2.53 | 1.78 | 2.78 | 1.09 | 2.92 |
| Type of institution first attended |  |  |  |  |  |
| 2-year public | 1.38 | 1.22 | 1.36 | 0.63 | 1.66 |
| 4-year public or private | 0.55 | 0.62 | 0.55 | 0.47 | 1.04 |
| Other subbaccalaureate | 1.34 | 2.85 | 3.71 | 1.95 | 3.85 |
| Delayed entry |  |  |  |  |  |
| Did not delay entry | 0.76 | 0.62 | 0.67 | 0.39 | 1.13 |
| Delayed entry | 1.29 | 1.78 | 2.19 | 1.01 | 2.53 |
| Urbanicity of high school |  |  |  |  |  |
| Urban | 1.50 | 1.26 | 1.47 | 0.70 | 2.06 |
| Suburban | 1.07 | 0.82 | 0.91 | 0.55 | 1.53 |
| Rural | 0.91 | 1.23 | 1.14 | 0.60 | 1.58 |
| Socioeconomic status quintile |  |  |  |  |  |
| 81st-100th percentile | 1.21 | 0.73 | 0.75 | 0.73 | 1.47 |
| 61st-80th percentile | 1.45 | 1.10 | 1.35 | 0.81 | 1.99 |
| 41st-60th percentile | 1.09 | 1.84 | 1.42 | 0.73 | 2.07 |
| 21st-40th percentile | 1.12 | 1.10 | 1.91 | 1.31 | 2.16 |
| 1st-20th percentile | 2.73 | 2.04 | 2.70 | 0.79 | 3.20 |
| Senior test score quintile |  |  |  |  |  |
| Highest | 0.13 | 0.79 | 0.35 | 0.47 | 0.95 |
| 2nd | 0.58 | 0.88 | 1.50 | 0.90 | 1.73 |
| 3rd | 1.35 | 1.82 | 1.51 | 0.79 | 2.15 |
| 4th | 1.87 | 2.11 | 2.10 | 0.91 | 2.67 |
| Lowest | 3.83 | 1.32 | 3.20 | 1.25 | 2.58 |

SOURCE:Adelman, C. (2004). Principal Indicators of Student Academic Histories in Postsecondary Education, 1972-2000, tables 7.1 and 7.2.Available at:http://preview.ed.gov/rschstat/research/pubs/prinindicat/index.htmI. Data from U.S. Department of Education,NCES, National Education Longitudinal Study of 1988 (NELS:88/2000),"Fourth Follow-up, 2000."

## Remediation and Degree Completion

Table S18-2. Standard errors for the percentage distribution of 1992 12th-graders who took any postsecondary remedial reading or mathematics courses by amount of remedial coursework taken, by type of remedial coursework: 2000

| Type of remedial coursework | Total remedial courses |  |  |  | Any remedial mathematics | Any remedial reading |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | One | Two | Three | Four or more |  |  |
| Remedial reading courses | 1.63 | 2.56 | 2.93 | 3.60 | 3.25 | $\dagger$ |
| Remedial mathematics courses | 1.56 | 1.52 | 1.27 | 1.83 | $\dagger$ | 2.06 |
| $\dagger$ Not applicable. SOURCE:U.S. Department of Education, NCES, | Stu | 000), "F | 2000." |  |  |  |

