National Center for Education Statistics

# condition ofeducation 2003 



## INDICATOR 22

## Postsecondary Attainment of 1988 8th-Graders

The indicator and corresponding tables are taken directly from The Condition of Education 2003. 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 2003, visit the NCES web site
(http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2003067) or contact ED PUBs at 1-877-4ED-PUBS.

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# Postsecondary Persistenceand Progress Postsecondary Attainment of 1988 8th-Graders 

> Postsecondary attainment rates vary with students' socioeconomic status, but rigorous academic preparation and accomplishment can partially compensate for disadvantaged backgrounds.

NOTE:The SES variable has five equally weighted, standardized components: father's education, mother's education, family income, father's occupation, and mother's occupation.
SOURCE: U.S. Department of Education, NCES, National Education Longitudinal Study of 1988 (NELS:88/2000),"Fourth Follow-up, 2000."


FOR MORE INFORMATION:
Supplemental Tables 22-1, 22-2
Adelman 1999

O verall, about threequarters of 1988 8th-graders participated in some postsecondary education by 2000: 47 percent earned some college credits but less than a bachelor's degree, and 30 percent completed a bachelor's or higher degree (see supplemental table 22-1). Postsecondary attainment varied with the student's background characteristics, but high achievement and challenging coursework partially mitigated a disadvantaged background.

Thelikelihood of completing a bachelor'sor higher degree increased with students' socioeconomic status (SES): 7 percent of low-SES students, 24 percent of middle-SES students, and 60 percent of high-SES students completed such a degree by 2000. Among high-achieving students, attaining a college degree still increased along with SES. For example, among students who scored in the highest mathematics test quartile in 8th grade, the likelihood of earning a bachelor's or higher degree increased with SES, from 29 percent among those from low-SES families to 47 percent among those in the middle two quartiles, and to 74 percent among those with the highest SES (see supplemental table 22-2). A similar pat-
tern applied to students who had studied algebra in 8th grade.

Although SES is related to attainment, strong academic preparation and achievement in school increase the likelihood that low-SES students, especially, will finish college. Among low-SES students, high achievers on 8th-grade mathematics tests were about 10 times more likely than low achievers to complete a degree by 2000. In contrast, among high-SES students, high achievers were only 2.4 times more likely than low achievers to complete a degree. Similarly, low-SES students who had studied calculus in high school were about 10 times more likely than those who had not studied calculus to have earned at least a bachelor's degree by 2000. In contrast, middleSES students were only 3 times more likely to complete a degree-and high-SES students 1.7 times more likely-if they had studied calculus in high school. A chieving high test scores and studying calculuswereassociated with higher rates of college completion, and the association was stronger for low-SES students than for others in this cohort.

STUDENT ATTAINMENT: Percentage of 1988 8th-graders in selected categories who had completed at least a bachelor's degree by 2000 , by family socioeconomic status


## Postsecondary Attainment of 1988 8th-Graders

Table 22-1. Percentage distribution of 1988 8th-graders according to their educational attainment, by selected student characteristics: 2000


## Postsecondary Attainment of 1988 8th-Graders

Table 22-1. Percentage distribution of 19888th-graders according to their educational attainment, by selected student characteristics: 2000-Continued

| Selected student characteristics | No postsecondary education | Some postsecondary education, but no bachelor's degree | Bachelor's or higher degree |
| :---: | :---: | :---: | :---: |
| School experiences, 8th to 12th grades |  |  |  |
| Mathematics achievement in 8th grade ${ }^{4}$ |  |  |  |
| Lowest quartile | 41.7 | 51.2 | 7.2 |
| Middle two quartiles | 24.0 | 51.2 | 24.8 |
| Highest quartile | 6.5 | 34.8 | 58.7 |
| Studied algebra in 8th grade |  |  |  |
| Yes | 12.3 | 40.3 | 47.4 |
| No | 29.4 | 48.9 | 21.7 |
| Studied precalculus by 12th grade |  |  |  |
| Yes | 1.5 | 25.2 | 73.3 |
| No | 25.2 | 50.8 | 24.0 |
| Studied calculus by 12th grade |  |  |  |
| Yes | 0.8 | 18.7 | 80.5 |
| No | 24.0 | 50.1 | 25.9 |
| School sector in 8th grade |  |  |  |
| Public | 25.9 | 47.6 | 26.4 |
| Private | 6.8 | 40.2 | 53.0 |
| Extracurricular participant, 12th grade |  |  |  |
| Yes | 12.7 | 46.2 | 41.0 |
| No | 40.0 | 47.5 | 12.5 |
| High school completion status by 2000 |  |  |  |
| High school diploma | 15.7 | 48.9 | 35.4 |
| GED certificate | 40.6 | 56.8 | 2.6 |
| No diploma or equivalent | 85.7 | 14.3 | \# |
| \#Rounds to zero. |  |  |  |
| ${ }^{1}$ American Indian includes Alaska Native, Black includes African American, Pacific Islander includes Native Hawaiian, and Hispanic includes Latino. Race categories exclude Hispanic origin unless specified. ${ }^{2}$ The SES variable has five equally weighted, standardized components: father's education, mother's education, family income, father's occupation, and mother's occupation. |  |  |  |
| 3Risk factors, measured in 8th grade, were living in a single-parent household; having a low-income family; having parents who had not graduated from high school; having an older sibling who dropped out of school; spending 3 or more hours alone at home atter school per day; and having limited English proficiency. |  |  |  |
| ${ }^{\text {4 }}$ (Uartile rankings are based on the student's mathematics achievement test score in 8 8th grade. |  |  |  |
| NOTE: 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), "Fouth Follow-up, 2000." |  |  |  |

# Postsecondary Attainment of 1988 8th-Graders 

Table 22-2. Percentage of 19888th-graders with selected characteristics who had completed a bachelor's or higher degree by 2000

| Selected student characteristics in 8th grade | Studied algebra in 8th grade |  | 8th-grade mathematics achievement ${ }^{1}$ |  | Sector of 8th-grade school |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Yes | No | High quartile | Low quartile | Public | Private |
| Total | 47.4 | 21.7 | 58.7 | 7.2 | 26.4 | 53.0 |
| Family socioeconomic status ${ }^{2}$ |  |  |  |  |  |  |
| Lowest quartile | 15.0 | 5.6 | 28.8 | 2.9 | 6.7 | 24.4 |
| Middle two quartiles | 38.8 | 18.4 | 46.6 | 6.7 | 22.4 | 39.1 |
| Highest quartile | 71.3 | 50.9 | 74.1 | 30.3 | 57.6 | 70.4 |
| Mother's attainment preference for student |  |  |  |  |  |  |
| Less than bachelor's degree | 13.4 | 8.4 | 26.1 | 5.4 | 7.2 | 29.7 |
| Bachelor's degree or higher | 54.4 | 29.0 | 63.1 | 9.3 | 34.8 | 56.8 |
| Risk factors for dropping out of school ${ }^{3}$ |  |  |  |  |  |  |
| None | 56.3 | 30.8 | 62.9 | 12.4 | 37.2 | 56.5 |
| One | 35.5 | 16.4 | 51.5 | 6.0 | 19.2 | 45.1 |
| Two or more | 22.8 | 5.5 | 29.7 | 3.4 | 7.9 | 35.1 |
| Selected student characteristics in 8 th grade | Studied precalculus by 12th grade |  | Studied calculus by 12th grade |  | Extracurricular participant in 12th grade |  |
|  | Yes | No | Yes | No | Public | Private |
| Total | 73.3 | 24.0 | 80.5 | 25.9 | 41.0 | 12.5 |
| Family socioeconomic status ${ }^{2}$ |  |  |  |  |  |  |
| Lowest quartile | 46.1 | 6.1 | 65.8 | 6.3 | 13.3 | 2.7 |
| Middle two quartiles | 65.2 | 20.3 | 67.0 | 22.4 | 33.2 | 10.6 |
| Highest quartile | 82.9 | 51.8 | 90.4 | 52.9 | 67.9 | 38.0 |
| Mother's attainment preference for student |  |  |  |  |  |  |
| Less than bachelor's degree | 48.9 | 7.9 | 53.9 | 8.5 | 15.3 | 3.7 |
| Bachelor's degree or higher | 74.7 | 31.6 | 82.4 | 33.4 | 47.7 | 18.1 |
| Risk factors for dropping out of school ${ }^{3}$ |  |  |  |  |  |  |
| None | 78.4 | 33.2 | 84.7 | 35.3 | 50.1 | 19.2 |
| One | 63.2 | 17.1 | 66.9 | 19.4 | 30.7 | 11.1 |
| Two or more | 42.1 | 8.2 | 68.3 | 7.9 | 16.2 | 3.0 |

${ }^{1}$ Quartile rankings are based on the student's mathematics achievement test score in 8th grade.
${ }^{2}$ The SES variable has five equally weighted, standardized components: father's education, mother's education, family income, father's occupation, and mother's occupation.
${ }^{3}$ Risk factors, measured in 8th grade, were living in a single-parent household; having a low-income family; having parents who had not graduated from high school; having an older sibling who dropped out of school; spending 3 or more hours alone at home atter school per day; and having limited English proficiency.
SOURCE: U.S. Department of Education, NCES, National Education Longitudinal Study of 1988 (NELS:88/2000), "Fourth Follow-up, 2000."

## Postsecondary Attainment of 1988 8th-Graders

Table S22. Standard errorsfor the percentage of 1988 8th-gradersin selected categories who had completed at least a bachelor's degree by 2000, by family socioeconomicstatus

|  | 8th-grade mathematics <br> achievement quartile |  | Calculus by 12th grade |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Family socioeconomic status | Low | 5.5 | 0.6 | Studied |  |
| Lowest SES quartile | 0.9 | 2.3 | 1.1 | 4.9 |  |
| Middle two SES quartiles | 1.6 | 1.9 | 2.3 | 1.9 |  |
| Highest SES quartile | 6.8 |  |  | 0.9 |  |

SOURCE: U.S. Department of Education, NCES, National Education Longitudinal Study of 1988 (NELS:88/2000), "Fourth Follow-up, 2000."

## Postsecondary Attainment of 1988 8th-Graders

Tables22-1. Standard errors for the percentage distribution of 1988 8th-graders according to their educational attainment, by selected student characteristics: 2000

| Selected student characteristics | No postsecondary education | Some postsecondary education, but no bachelor's degree | Bachelor's or higher degree |
| :---: | :---: | :---: | :---: |
| Total | 1.08 | 1.08 | 0.97 |
| Student characteristics in 8th grade |  |  |  |
| Sex |  |  |  |
| Male | 1.57 | 1.67 | 1.26 |
| Female | 1.43 | 1.34 | 1.22 |
| Race/ethnicity |  |  |  |
| American Indian | 6.00 | 6.18 | 2.87 |
| Asian or Pacific Islander | 1.04 | 5.56 | 5.49 |
| Black | 3.39 | 4.46 | 2.67 |
| White | 1.28 | 1.09 | 1.10 |
| More than one race | 4.75 | 5.48 | 4.36 |
| Hispanic | 3.38 | 3.24 | 1.60 |
| Family socioeconomic status |  |  |  |
| Lowest quartile | 2.26 | 2.18 | 0.79 |
| Middle two quartiles | 1.52 | 1.60 | 1.10 |
| Highest quartile | 0.65 | 1.60 | 1.65 |
| Mother's attainment preference for student |  |  |  |
| High school diploma or less | 5.81 | 5.85 | 0.66 |
| Some college, including vocational/technical | 2.22 | 2.30 | 1.25 |
| Bachelor's degree | 1.32 | 1.28 | 1.23 |
| Graduate school | 1.77 | 2.63 | 2.26 |
| Risk factors for dropping out of school |  |  |  |
| None | 1.32 | 1.25 | 1.27 |
| One | 2.14 | 2.51 | 1.61 |
| Two | 3.01 | 2.90 | 1.38 |
| Three or more | 4.93 | 5.12 | 0.96 |

See notes at end of table.

## Postsecondary Attainment of 1988 8th-Graders

TableS22-1. Standard errors for the percentage distribution of 1988 8th-graders according to their educational attainment, by their selected student characteristics: 2000-Continued

| Selected student characteristics | No postsecondary education | Some postsecondary education, but no bachelor's degree | Bachelor's or higher degree |
| :---: | :---: | :---: | :---: |
| School experiences, 8th to 12th grades |  |  |  |
| Mathematics achievement in 8th grade |  |  |  |
| Lowest quartile | 2.90 | 3.04 | 1.14 |
| Middle two quartiles | 1.56 | 1.41 | 1.08 |
| Highest quartile | 0.91 | 1.58 | 1.61 |
| Studied algebra in 8th grade |  |  |  |
| Yes | 1.46 | 1.49 | 1.60 |
| No | 1.49 | 1.36 | 1.04 |
| Studied precalculus by 12th grade |  |  |  |
| Yes | 0.97 | 1.80 | 1.91 |
| No | 1.17 | 1.22 | 0.99 |
| Studied calculus by 12th grade |  |  |  |
| Yes | 0.42 | 2.26 | 2.34 |
| No | 1.12 | 1.17 | 0.95 |
| School sector in 8th grade |  |  |  |
| Public | 1.20 | 1.18 | 1.01 |
| Private | 1.22 | 2.42 | 2.51 |
| Extracurricular participant, 12th grade |  |  |  |
| Yes | 0.72 | 1.21 | 1.16 |
| No | 2.13 | 2.02 | 1.34 |
| High school completion status by 2000 |  |  |  |
| High school diploma | 0.95 | 1.13 | 1.09 |
| GED certificate | 3.89 | 3.96 | 1.70 |
| No diploma or equivalent | 4.97 | 4.97 | \# |

\#Rounds to zero.
SOURCE: U.S. Department of Education, NCES, National Education Longitudinal Study of 1988 (NELS:88/2000), "Fourth Follow-up, 2000."

## Postsecondary Attainment of 1988 8th-Graders

Table S22-2. Standard errors forthe percentage of 1988 8th-graders with selected characteristics who had completed a bachelor's or higher degree by 2000

| Selected student characteristics in 8th grade | Studied algebra in 8th grade |  | 8th-grade mathematics achievement ${ }^{1}$ |  | Sector of 8th-grade school |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Yes | No | High quartile | Low quartile | Public | Private |
| Total | 1.60 | 1.04 | 1.61 | 1.14 | 1.01 | 2.51 |
| Family socioeconomic status |  |  |  |  |  |  |
| Lowest quartile | 2.89 | 0.74 | 5.51 | 0.86 | 0.79 | 4.54 |
| Middle two quartiles | 1.95 | 1.15 | 2.28 | 1.58 | 1.16 | 2.92 |
| Highest quartile | 2.03 | 2.74 | 1.95 | 6.75 | 1.87 | 3.22 |
| Mother's attainment preference for student |  |  |  |  |  |  |
| Less than bachelor's degree | 2.02 | 1.29 | 3.94 | 2.01 | 0.82 | 6.48 |
| Bachelor's degree or higher | 1.73 | 1.33 | 1.60 | 1.80 | 1.27 | 2.71 |
| Risk factors for dropping out of school |  |  |  |  |  |  |
| None | 1.75 | 1.61 | 1.86 | 2.48 | 1.39 | 2.75 |
| One | 3.46 | 1.41 | 3.76 | 1.75 | 1.62 | 4.71 |
| Two or more | 3.54 | 1.04 | 4.21 | 1.39 | 1.01 | 6.39 |
| Selected student characteristics in 8th grade | Studied precalculus by 12 th grade |  | Studied calculus by 12th grade |  | Extracurricular participant in 12th grade |  |
|  | Yes | No | Yes | No | Public | Private |
| Total | 1.91 | 0.99 | 2.34 | 0.95 | 1.16 | 1.34 |
| Family socioeconomic status |  |  |  |  |  |  |
| Lowest quartile | 4.75 | 0.61 | 6.94 | 0.60 | 1.28 | 0.96 |
| Middle two quartiles | 3.37 | 1.06 | 4.85 | 1.06 | 1.44 | 1.76 |
| Highest quartile | 1.88 | 2.52 | 1.86 | 2.34 | 1.48 | 4.35 |
| Mother's attainment preference for student |  |  |  |  |  |  |
| Less than bachelor's degree | 8.56 | 0.83 | 10.35 | 0.86 | 1.28 | 1.32 |
| Bachelor's degree or higher | 2.01 | 1.32 | 2.43 | 1.25 | 1.46 | 1.95 |
| Risk factors for dropping out of school |  |  |  |  |  |  |
| None | 1.65 | 1.41 | 1.85 | 1.31 | 1.18 | 2.19 |
| One | 5.71 | 1.46 | 8.57 | 1.46 | 2.50 | 2.35 |
| Two or more | 5.74 | 1.01 | 7.87 | 0.95 | 1.49 | 1.37 |

SOURCE: US. Department of Education, NCES, National Education Longitudinal Study of 1988 (NELS:88/2000),"Fourth Follow-up, 2000."

