

condition of education 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 Persistence and 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.

Overall, about three-quarters 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.

The likelihood of completing a bachelor's or 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 pattern 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, middle-SES 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. Achieving high test scores and studying calculus were associated with higher rates of college completion, and the association was stronger for low-SES students than for others in this cohort.

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."

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FOR MORE INFORMATION: Supplemental Tables 22-1, 22-2 Adelman 1999 Percent 100 90 80 66 67 60 53 47 40 30 29 22 20 7 6 3 0

Middle two SES quartiles

Did not study

High

8th-grade mathematics

achievement quartile

Low

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

Studied

Highest SES quartile

Calculus by 12th grade

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

	No postsecondary	Some postsecondary education, but	Bachelor's or higher
Selected student characteristics	education	no bachelor's degree	degree
Total	23.6	46.7	29.6
Student characteristics in 8th grade			
Sex			
Male	26.3	46.8	26.9
Female	21.0	46.7	32.3
Race/ethnicity ¹			
American Indian	34.5	55.2	10.3
Asian or Pacific Islander	4.6	43.7	51.7
Black	23.1	59.7	17.1
White	22.9	42.5	34.6
More than one race	23.6	58.1	18.3
Hispanic	29.9	54.9	15.2
Family socioeconomic status ²			
Lowest quartile	47.5	45.1	7.3
Middle two quartiles	22.6	53.2	24.2
Highest quartile	3.7	35.9	60.4
Mother's attainment preference for student			
High school diploma or less	60.6	36.5	2.9
Some college, including vocational/technical	34.2	54.5	11.2
Bachelor's degree	16.7	45.7	37.6
Graduate school	15.2	46.0	38.8
Risk factors for dropping out of school ³			
None	16.3	43.5	40.2
One	26.0	52.0	22.0
Тwo	40.1	49.5	10.4
Three or more	46.8	48.8	4.5
See notes at end of table.			

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

	No postsecondary	Some postsecondary education, but	Bachelor's or higher
Selected student characteristics	education	no bachelor's degree	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.

¹American Indian includes Alaska Native, Black includes African American, Pacific Islander includes Native Hawaiian, and Hispanic includes Latino. Race categories exclude Hispanic origin unless specified. ²The 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 after school per day; and having limited English proficiency.

⁴Quartile rankings are based on the student's mathematics achievement test score in 8th grade.

NOTE: Detail may not sum to totals because of rounding.

Table 22-2. Percentage of 1988 8th-graders with selected characteristics who had completed a bachelor's or higher degree by 2000

	Studied algebra 8th-grade			Sector of			
Selected student	in 8th grade		mathematics achievement ¹		8th-g	8th-grade school	
characteristics in 8th grade	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	

	Studied	precalculus	Studied	calculus	Extrac	urricular
Selected student	by 12	2th grade	by 12tl	n grade	participant i	n 12th grade
characteristics in 8th 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

¹Quartile rankings are based on the student's mathematics achievement test score in 8th grade.

²The 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 after school per day; and having limited English proficiency.

Table S22. Standard errors for the percentage of 1988 8th-graders in selected categories who had completed at least a bachelor's degree by 2000, by family socioeconomic status

	8th-grade achievem	mathematics ent quartile	Calculus by 12	th grade
Family socioeconomic status	Low	High	Did not study	Studied
Lowest SES quartile	0.9	5.5	0.6	6.9
Middle two SES quartiles	1.6	2.3	1.1	4.9
Highest SES quartile	6.8	1.9	2.3	1.9

Table S22-1. Standard errors for the percentage distribution of 1988 8th-graders according to their educational attainment, by selected student characteristics: 2000

		Some postsecondary	Bachelor's
	No postsecondary	education, but	or higher
Selected student characteristics	education	no bachelor's degree	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
Тwo	3.01	2.90	1.38
Three or more	4.93	5.12	0.96

See notes at end of table.

Table S22-1. Standard errors for the percentage distribution of 1988 8th-graders according to their educational attainment, by their selected student characteristics: 2000—Continued

	No postsecondary	Some postsecondary	Bachelor's
Selected student characteristics	education	no bachelor's degree	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.

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

	Studi	ed algebra	8th-grade			Sector of	
Selected student	in 8	8th grade	mathematics	achievement ¹	8th-g	8th-grade school	
characteristics in 8th grade	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	

	Studied	precalculus	Studied	calculus	Extrac	urricular
Selected student	by 12	th grade	by 12th	n grade	participant i	n 12th grade
characteristics in 8th 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