

WEB TABLES

U.S. DEPARTMENT OF EDUCATION
AUGUST 2019 NCES 2019-430

Advanced Placement, International Baccalaureate, and Dual-Enrollment Courses: Availability, Participation, and Related Outcomes for 2009 Ninth-Graders: 2013

Advanced Placement (AP), International Baccalaureate (IB), and dual-enrollment courses are generally regarded as academically rigorous courses for high school students. These courses have seen a surge in enrollment between 2003 and 2013 (College Board 2014; International Baccalaureate Organization 2008, 2013; Kleiner and Lewis 2005; Marken, Gray, and Lewis 2013). AP offers college-level courses developed by the College Board and taught by high school teachers at participating secondary schools in the United States. High school students who perform well on an AP subject exam may earn college credits or skip lower level courses at U.S. postsecondary institutions where they later enroll (College Board 2016). Students who take IB courses, developed by the International Baccalaureate Organization, often get these same benefits, but those who complete all courses and components of the IB diploma curriculum are also

granted an internationally recognized diploma (International Baccalaureate Organization 2012).

Whereas AP and IB courses are high school courses that cover college-level material, dual-enrollment courses (also referred to as *dual credit*) are college courses. Upon successful completion of dual-enrollment courses, high school students may earn high school credits as well as college credits that appear on a postsecondary transcript (An and Taylor 2019). Some high schools have formal dual-enrollment programs that provide guidelines for participation and may offer courses on site. Other high schools do not have formal programs but may grant high school credit for college credits earned by students who enroll in college courses on their own.

These Web Tables provide the most recent national statistics on the availability of these academically

rigorous courses and programs, the percentage of graduates who earn high school credits in them, and the postsecondary outcomes of students who earned varying numbers of such credits. They use nationally representative survey and transcript data collected through the High School Longitudinal Study of 2009 (HSL:09), conducted by the U.S. Department of Education's National Center for Education Statistics (NCES).

The total number of credits earned in AP, IB, and dual-enrollment courses can only be determined with confidence for HSL:09 students with complete transcript data; therefore, the estimates in these tables are based on the 79 percent of students who both had received a high school diploma before September 2013, when the high school transcript data collection began, and had complete transcript data. Also, AP and IB courses are combined in these

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estimates because IB courses have relatively small enrollment and many colleges and universities treat entering students who have successfully completed AP and IB courses similarly; that is, they may award college credit to these students, place them in higher level courses, or both.

The first four tables show the availability of AP courses, IB courses, and dual-enrollment *programs* (as opposed to dual-enrollment *courses*) to students with different demographic and social characteristics and in different school settings. Estimates in these tables reflect the offerings of the 9th-graders' base-year schools as reported by their counselors at the time of the first follow-up data collection in the spring term of 2012 when most sample members were 11th-graders. First follow-up data are the most useful HSLs:09 data on AP, IB, and dual-enrollment offerings because most students take these courses after the ninth grade, and the first follow-up counselor survey has more contextual data on offerings than the base-year counselor survey does. These four tables include only students with complete transcripts who received their high school diplomas before September 2013 from the schools they attended in the fall term of 2009 as ninth-grade students (68 percent of 2009 ninth-graders). This is because only counselors at those schools were administered the counselor survey; the first follow-up did not administer counselor surveys in schools to which

students moved after the fall term of ninth grade. Tables 5–14, however, include students who transferred to other schools after the fall term of ninth grade. Table 15 shows the characteristics of the following inference populations: (1) all fall-term 2009 ninth-grade students, (2) fall-term 2009 ninth-grade students who received a diploma before September 2013, (3) fall-term 2009 ninth-grade students who received a diploma before September 2013 and had a complete transcript (tables 5–14), and (4) fall-term 2009 ninth-grade students who received a diploma from their ninth-grade school before September 2013 and had a complete transcript (tables 1–4).

Tables 5–7 present the percentage of high school graduates who earned credits in AP, IB, and dual-enrollment courses, both overall and disaggregated by selected student and parent characteristics, including race/ethnicity and socioeconomic status. Tables 8–11 show standardized assessment scores of students with selected characteristics. Table 8 presents the percentage of AP test takers who scored 3 points or above on a 5-point scale (usually considered a passing score by postsecondary institutions) on selected AP exams. Tables 9–11 present college admissions test scores by the number and type of credits (i.e., AP, IB, or dual-enrollment) students earned and whether they took a dual-enrollment course on a college campus.

Tables 12–14 show the percentage of high school graduates who reported enrolling in an associate's or bachelor's degree program in the fall of 2013, disaggregated by the number and type of credits (i.e., AP, IB, or dual-enrollment) students earned, whether they took a dual-enrollment course on a college campus, and selected student and parent characteristics.

RELATED NCES REPORTS

Dual Enrollment: Participation and Characteristics (NCES 2019-176).
<https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2019176>.

High School Longitudinal Study of 2009 (HSLs:09) 2013 Update and High School Transcript Study: A First Look at Fall 2009 Ninth-Graders in 2013 (NCES 2015-037rev).
<https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2015037rev>.

High School Longitudinal Study of 2009 (HSLs:09) 2013 Update and High School Transcript Data File Documentation (NCES 2015-036).
<https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2015036>.

Dual Enrollment Programs and Courses for High School Students at Postsecondary Institutions: 2010–11 (NCES 2013-002).
<https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2013002>.

Dual Credit and Exam-Based Courses in U.S. Public High Schools: 2010–11 (NCES 2013-001).
<https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2013001>.

Dual Credit and Exam-Based Courses in U.S. Public High Schools: 2002–03 (NCES 2005-009).

<https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2005009>.

Dual Enrollment of High School Students at Postsecondary Institutions: 2002–03 (NCES 2005-008).

<https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2005008>.

DATA

The estimates presented in these Web Tables are based on nationally representative data from HSL:09, a study that is conducted by NCES and follows more than 23,000 students who were ninth-graders in 944 public and private high schools in 2009. HSL:09 is primarily focused on students' trajectories from the beginning of high school into postsecondary education, the workforce, and beyond, including data on the courses, majors, and careers that students pursue. The study pays particular attention to students' experience in science, technology, engineering, and mathematics fields.

Data were collected via surveys of students, their parents, math and science teachers, school administrators, and school counselors in the ninth-grade year (2009) and first follow-up year (2012). In both years, student assessments in algebraic skills, reasoning, and problem solving were administered, providing information on students' math performance.

In 2013, when most sample members had recently graduated from high school, an update survey (referred to as the 2013 Update) was administered to sample members or their parents.

Also in 2013, the HSL:09 High School Transcript Collection collected transcripts from all high schools the students had attended, including schools to which they had transferred since they were sampled in 2009. For an overview of the survey methodology used for the HSL:09 High School Transcript Collection, see the *High School Longitudinal Study of 2009 (HSL:09) 2013 Update and High School Transcripts Data File Documentation* (Ingels et al. 2015).

ANALYSIS

The estimates in all tables were calculated using data contained in the *High School Longitudinal Study of 2009 (HSL:09) 2013 Update and High School Transcripts Restricted-use Data File* (U.S. Department of Education 2015).

The estimates and standard errors in these Web Tables were generated using Stata. Variance estimates were computed using the balanced repeated replication method to account for HSL:09's complex sampling design.

All estimates were generated using the sample weight W3W1W2STUTR and replicate weights W3W1W2STUTR001–W3W1W2STUTR200. The Stata programs that generate the estimates in these tables are available from <https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2019430>.

The analysis sample included all 2009 ninth-graders who had graduated from high school by September 2013 and, to ensure accurate estimates of graduates' coursetaking, had complete transcript data. The variable X3TOUTCOME identified students who had earned high school diplomas by September 2013. Graduates with complete transcript data met two criteria: they had earned at least 16 Carnegie credits (indicated by the variable X3TCREDTOT) and had transcript records for each grade or academic year of high school. For students who received their diplomas between the fall of 2012 and the summer of 2013, the variable X3TCOVERAGE was used to indicate transcript coverage in all four grades or academic years. Graduates who received their diplomas before the 2012–13 academic year did not have four years of high school attendance. Therefore, for these early graduates, transcripts covering each of the first three academic years (X3TSTATYR09, X3TSTATYR10, and X3TSTATYR11) or each of the first three high school grades (X3TSTATGR09, X3TSTATGR10, and X3TSTATGR11) were required to be included in the analysis sample.

For more information, contact NCES.Info@ed.gov

For readers with disabilities, a Section 508-compliant version of these Web Tables is available at <https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2019430>.

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VARIABLES USED

The variables used in these Web Tables are listed below.

Label	Name
Student's sex (2009)	X1SEX
Student's race/ethnicity (2009)	X1RACE
Student's native language (2009)	X1DUALLANG
Parents' socioeconomic status (2009)	X1SESQ5
Parents' highest level of education (2009)	X1PAREDU
Student's educational expectations (2009)	X1STUEDEXPCT
Student's mathematics achievement (2009)	X1TXMQUINT
Student's school sector (2012)	Derived from A2SCHTYPE and X2CONTROL
Student's school region (2012)	X2REGION
Student's school locale (2012)	X2LOCALE
Student's school size (2012)	A2HSSIZE
Student's school percentage of students who received free or reduced-price lunch (2012)	A2FREELUNCH
Student's school percentage of students who were non-Hispanic Black or African American, non-Hispanic American Indian or Alaska Native, and Hispanic or Latino students of any race (2009)	Derived from A1ASIANPISTU, A1BLACKSTU, A1HISPSTU, A1WHITESTU, and A1AMINDIANSTU
Student's school percentage of English language learners (2012)	A2ELL
High school from which student received diploma (2013)	Derived from T3SNCEID, X1NCEID, and T3SSCHTYPE
Student's school offered AP courses (2012)	C2HAAPCRS
Student's school offered IB courses (2012)	C2HAIBPRGM
Student's school offered dual-enrollment program (2012)	C2DUALPROG
Number of AP or higher level IB math courses offered (2012)	Derived from C2NUMAPMATH and C2NUMIBMATH
Number of AP or higher level IB science courses offered (2012)	Derived from C2NUMAPSCI and C2NUMIBSCI
Dual-enrollment program has option to complete certificate program (2012)	C2DUALCERT
Dual-enrollment program has option to complete associate's degree (2012)	C2DUALAA
Students accepted to partner college through dual-enrollment program (2012)	C2DUALCLGACC
Dual-enrollment courses may be taken for credit at community colleges (2012)	C2COMCOL
Dual-enrollment courses may be taken for credit at 4-year colleges and universities (2012)	C24YRCOL

(continued)

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U.S. Department of Education, National Center for Education Statistics. (2015). *High School Longitudinal Study of 2009 (HLS:09) 2013 Update and High School Transcripts Restricted-use Data File* (NCES 2015038). Retrieved May 24, 2019, from <https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2015038>.

VARIABLES—Continued

Label	Name
Student earned any credits in AP or IB courses (2013)	X3TCREDAPIB
Student earned any credits in dual-enrollment courses (2013)	X3TCREDPPSE
Number of credits student earned in AP or IB courses (continuous) (2013)	X3TCREDAPIB
Number of credits student earned in dual-enrollment courses (continuous) (2013)	X3TCREDPPSE
Student's score on AP Calculus AB exam (2013)	X3TXAPCALCAB
Student's score on AP Biology exam (2013)	X3TXAPBIO
Student's score on AP English literature and composition exam (2013)	X3TXAPENGLIT
Student's score on AP U.S. History exam (2013)	X3TXAPUSHIST
Student's college entrance exam score on the SAT scale (2013)	X3TXSATCOMP
Student earned any dual-enrollment credits on college campus or off college campus only (2013)	Derived from T3SLOC and T3SCRDTYP
Student's enrollment in associate's or bachelor's degree program in fall of 2013 (2013)	Derived from X3CLASSES and X3PROGLEVEL

National Center for Education Statistics

Table 1.

Among fall 2009 ninth-graders who received a high school diploma from their ninth-grade school by the fall of 2013, percentage whose school offered Advanced Placement (AP) courses, International Baccalaureate (IB) courses, and/or a dual-enrollment program, by selected student and parent characteristics: 2013

Selected student and parent characteristics	School offered AP courses, IB courses, or a dual-enrollment program ¹	Offered by student's school		
		AP or IB courses	Dual-enrollment program ²	AP or IB courses and dual-enrollment program ³
Total	99.7	91.8	88.8	80.8
Student's sex (2009)				
Female	99.7	91.4	89.2	80.9
Male	99.7	92.1	88.4	80.7
Student's race/ethnicity (2009) ⁴				
Asian	100.0 ⁵	95.8	78.4	74.2
Black/African American	100.0 ⁵	92.3	88.1	80.3
Hispanic/Latino	99.9	94.9	88.1	83.1
Other	99.1	93.4	91.4	85.7
White	99.7	90.0	89.6	79.8
Student's native language (2009)				
English	99.7	90.8	88.7	79.8
English and a non-English language	99.8	95.3	86.0	81.6
Non-English	100.0 ⁵	97.2	90.8	88.1
Parents' socioeconomic status (2009) ⁶				
Lowest fifth	99.6	90.3	91.1	81.8
Middle three-fifths	99.8	91.1	90.6	81.9
Highest fifth	99.8	94.3	83.0	77.4
Parents' highest level of education (2009)				
High school credential or less	99.6	90.6	91.3	82.2
Undergraduate degree	99.8	91.5	88.4	80.0
Graduate degree	99.8	94.8	82.6	77.5
Student's educational expectations (2009)				
High school credential	99.6	90.0	90.5	80.8
Undergraduate degree	99.7	92.3	91.3	83.9
Graduate degree	99.8	92.7	86.7	79.5
Don't know	99.8	90.1	89.7	80.0
Student's mathematics achievement (2009) ⁷				
Lowest fifth	99.4	89.2	92.7	82.5
Middle three-fifths	99.7	91.5	89.8	81.6
Highest fifth	100.0 ⁵	93.8	84.1	77.9

See notes at end of table.

National Center for Education Statistics

Table 1.

Among fall 2009 ninth-graders who received a high school diploma from their ninth-grade school by the fall of 2013, percentage whose school offered Advanced Placement (AP) courses, International Baccalaureate (IB) courses, and/or a dual-enrollment program, by selected student and parent characteristics: 2013—Continued

Selected student and parent characteristics	School offered AP courses, IB courses, or a dual-enrollment program ¹	Offered by student's school		
		AP or IB courses	Dual-enrollment program ²	AP or IB courses and dual-enrollment program ³
Student's school sector (2012)				
Public	99.9	92.0	91.7	83.9
Regular	99.9	92.1	91.9	84.2
Charter or special-program school	100.0 ⁵	94.0	86.1	79.7
Career/technical/vocational or alternative school	99.5	81.0 !	99.5	81.0 !
Private	99.1	90.0	54.3	44.8
Student's school region (2012)				
Northeast	100.0 ⁵	94.9	84.9	79.8
Midwest	99.3	84.8	91.1	76.7
South	99.9	92.6	93.7	86.3
West	100.0 ⁵	95.7	81.4	77.1
Student's school locale (2012)				
City	100.0 ⁵	97.4	83.3	80.6
Suburb	99.7	96.8	89.1	86.2
Town	100.0 ⁵	84.9	97.8	82.8
Rural	99.7	84.8	90.3	75.4
Student's school size (2012)				
Fewer than 500 students	98.4	64.9	87.1	53.6
500 to 1,199 students	100.0 ⁵	92.8	88.6	81.3
1,200 or more students	100.0 ⁵	99.0	89.6	88.6
Student's school percentage of students who received free or reduced-price lunch (2012) ⁸				
Lowest fifth (0–18 percent of students)	99.7	93.7	73.1	66.9
Middle three-fifths (19–67 percent of students)	99.9	90.9	94.4	85.3
Highest fifth (68–100 percent of students)	99.1	90.8	89.1	80.8
Student's school percentage of students who were non-Hispanic Black or African American, non-Hispanic American Indian or Alaska Native, and Hispanic or Latino students of any race (2009) ⁹				
Lowest fifth (0–7 percent of students)	99.8	85.1	91.4	76.6
Middle three-fifths (8–64 percent of students)	99.7	93.2	87.7	81.1
Highest fifth (65–100 percent of students)	99.6	96.9	92.6	89.8

See notes at end of table.

National Center for Education Statistics

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Among fall 2009 ninth-graders who received a high school diploma from their ninth-grade school by the fall of 2013, percentage whose school offered Advanced Placement (AP) courses, International Baccalaureate (IB) courses, and/or a dual-enrollment program, by selected student and parent characteristics: 2013—Continued

Selected student and parent characteristics	School offered AP courses, IB courses, or a dual-enrollment program ¹	Offered by student's school		
		AP or IB courses	Dual-enrollment program ²	AP or IB courses and dual-enrollment program ³
Student's school percentage of English language learners (2012)				
0 percent	99.5	77.6	82.7	60.8
1 to 5 percent	99.7	93.5	90.7	84.4
More than 5 percent	100.0 ⁵	96.2	88.7	84.8

! Interpret data with caution. Estimate is unstable because the standard error is between 30 and 50 percent of the estimate.

¹ Dual enrollment refers to taking postsecondary courses while also enrolled in high school. Students may take dual-enrollment courses through a program offered by their high school or independently. A high school dual-enrollment program is an organized system with special guidelines that might have to do with, for example, entrance or eligibility requirements, funding, and limits on coursetaking. Students whose ninth-grade schools offered AP courses, IB courses, or a dual-enrollment program are included in these estimates. Students whose ninth-grade schools did not offer AP courses, IB courses, or a dual-enrollment program are excluded even if they took dual-enrollment courses independently.

² Students whose ninth-grade schools offered a dual-enrollment program are included in these estimates. Students whose schools did not offer a dual-enrollment program are excluded even if they took dual-enrollment courses independently. See footnote 1 for a definition of dual enrollment and dual-enrollment programs.

³ Students whose ninth-grade schools offered AP or IB courses and a dual-enrollment program are included in these estimates. Students whose schools did not offer a dual-enrollment program are excluded even if they took dual-enrollment courses independently. See footnote 1 for a definition of dual enrollment and dual-enrollment programs.

⁴ All race categories exclude Hispanic or Latino origin unless specified. "Other" includes American Indian, Alaska Native, Native Hawaiian, other Pacific Islander, and individuals who indicated Two or more races or Other.

⁵ Rounds to 100.

⁶ Parents' socioeconomic status was calculated using parents' education, occupation, and family income.

⁷ Student's mathematics achievement was measured by a two-stage adaptive assessment in algebraic reasoning developed for HSLs:09.

⁸ To be eligible for free lunch under the National School Lunch Program (NSLP), a federally assisted meal program, a student must be from a household with an income at or below 130 percent of the poverty threshold; to be eligible for reduced-price lunch, a student must be from a household with an income between 130 percent and 185 percent of the poverty threshold. Therefore, the percentage of students receiving free or reduced-price lunch (FRPL) under the NSLP provides a proxy measure for the concentration of low-income students within a school. However, this percentage cannot be used as a strict measure of the percentage of children at or below 185 percent of the poverty threshold because some students are eligible for FRPL based on criteria other than income, and some schools and districts provide FRPL to all students regardless of income.

⁹ Students in these racial/ethnic groups tend to be underrepresented in AP, IB, and dual-enrollment courses. These data were only collected from students' ninth-grade schools in 2009, the base year of the study.

NOTE: Estimates are based on fall 2009 ninth-graders who had received a high school diploma from their ninth-grade school before September 2013, when the high school transcript data collection began. Students in this group whose exact graduation date is unknown are included. Students who had not received a diploma, received a diploma in the fall of 2013 or later, or for whom transcript data were incomplete are excluded. Students' schools' offerings were collected in the first follow-up data collection in 2012, when most students were in the 11th grade. The lowest fifth, middle three-fifths, and highest fifth categories are based on the distribution of fall-term ninth-grade students. Data were weighted using the weight W3W1W2STUTR. This weight accounts for (1) base-year school nonresponse; (2) high school transcript nonresponse; and (3) student nonresponse in the base year, first follow-up, and 2013 Update.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School Longitudinal Study of 2009 (HSLs:09) 2013 Update and High School Transcripts Restricted-use Data File.

National Center for Education Statistics

Table S1.

Standard errors for table 1: Among fall 2009 ninth-graders who received a high school diploma from their ninth-grade school by the fall of 2013, percentage whose school offered Advanced Placement (AP) courses, International Baccalaureate (IB) courses, and/or a dual-enrollment program, by selected student and parent characteristics: 2013

Selected student and parent characteristics	School offered AP courses, IB courses, or a dual-enrollment program	Offered by student's school		
		AP or IB courses	Dual-enrollment program	AP or IB courses and dual-enrollment program
Total	0.13	1.27	1.59	2.04
Student's sex (2009)				
Female	0.12	1.52	1.70	2.27
Male	0.14	1.18	1.72	2.07
Student's race/ethnicity (2009)				
Asian	#	2.11	9.12	8.89
Black/African American	#	3.58	3.20	4.31
Hispanic/Latino	0.08	1.45	2.63	2.95
Other	0.68	1.66	1.96	2.62
White	0.18	1.63	1.60	2.32
Student's native language (2009)				
English	0.15	1.42	1.57	2.10
English and a non-English language	0.21	1.83	3.75	4.11
Non-English	0.02	1.02	2.79	3.05
Parents' socioeconomic status (2009)				
Lowest fifth	0.27	1.72	1.94	2.53
Middle three-fifths	0.12	1.44	1.64	2.19
Highest fifth	0.16	1.20	2.43	2.69
Parents' highest level of education (2009)				
High school credential or less	0.20	1.53	1.58	2.19
Undergraduate degree	0.12	1.58	1.83	2.37
Graduate degree	0.18	1.17	2.51	2.80
Student's educational expectations (2009)				
High school credential	0.19	1.98	2.27	2.93
Undergraduate degree	0.16	1.51	1.43	2.07
Graduate degree	0.11	1.28	1.99	2.32
Don't know	0.13	1.92	1.98	2.72
Student's mathematics achievement (2009)				
Lowest fifth	0.38	1.90	1.62	2.41
Middle three-fifths	0.17	1.36	1.49	2.06
Highest fifth	0.04	1.43	2.69	2.92

See notes at end of table.

National Center for Education Statistics

Table S1.

Standard errors for table 1: Among fall 2009 ninth-graders who received a high school diploma from their ninth-grade school by the fall of 2013, percentage whose school offered Advanced Placement (AP) courses, International Baccalaureate (IB) courses, and/or a dual-enrollment program, by selected student and parent characteristics: 2013—Continued

Selected student and parent characteristics	School offered AP courses, IB courses, or a dual-enrollment program	Offered by student's school		
		AP or IB courses	Dual- enrollment program	AP or IB courses and dual-enrollment program
Student's school sector (2012)				
Public	0.12	1.35	1.67	2.15
Regular	0.13	1.41	1.72	2.23
Charter or special-program school	†	4.91	9.80	12.23
Career/technical/vocational or alternative school	15.82	31.02	12.30	31.02
Private	0.92	3.86	6.40	6.14
Student's school region (2012)				
Northeast	#	2.73	4.27	4.93
Midwest	0.53	3.20	2.20	3.67
South	0.09	1.95	1.39	2.38
West	#	2.39	5.67	6.06
Student's school locale (2012)				
City	#	1.52	3.98	4.10
Suburb	0.35	1.49	2.44	2.76
Town	#	5.46	2.18	6.01
Rural	0.25	3.46	3.10	4.18
Student's school size (2012)				
Fewer than 500 students	0.83	6.15	3.23	6.11
500 to 1,199 students	#	2.29	2.49	3.54
1,200 or more students	#	0.66	2.42	2.51
Student's school percentage of students who received free or reduced-price lunch (2012)				
Lowest fifth (0–18 percent of students)	0.32	2.54	4.62	4.67
Middle three-fifths (19–67 percent of students)	0.06	1.81	1.76	2.51
Highest fifth (68–100 percent of students)	0.67	3.28	3.50	4.52
Student's school percentage of students who were non-Hispanic Black or African American, non-Hispanic American Indian or Alaska Native, and Hispanic or Latino students of any race (2009)				
Lowest fifth (0–7 percent of students)	0.15	3.58	2.49	4.15
Middle three-fifths (8–64 percent of students)	0.22	1.63	2.54	2.94
Highest fifth (65–100 percent of students)	0.37	2.38	2.71	3.52

See notes at end of table.

National Center for Education Statistics

Table S1.

Standard errors for table 1: Among fall 2009 ninth-graders who received a high school diploma from their ninth-grade school by the fall of 2013, percentage whose school offered Advanced Placement (AP) courses, International Baccalaureate (IB) courses, and/or a dual-enrollment program, by selected student and parent characteristics: 2013—Continued

Selected student and parent characteristics	School offered AP courses, IB courses, or a dual-enrollment program	Offered by student's school		
		AP or IB courses	Dual- enrollment program	AP or IB courses and dual-enrollment program
Student's school percentage of English language learners (2012)				
0 percent	0.40	4.81	3.24	5.11
1 to 5 percent	0.24	2.00	2.02	2.92
More than 5 percent	#	1.41	3.80	4.01

† Not applicable.

Rounds to zero.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School Longitudinal Study of 2009 (HSL:09) 2013 Update and High School Transcripts Restricted-use Data File.

National Center for Education Statistics

Table 2.

Among fall 2009 ninth-graders who received a high school diploma from their ninth-grade school by the fall of 2013 and whose school offered Advanced Placement (AP) and/or International Baccalaureate (IB) courses, average number of AP and higher level IB courses offered in all subjects, in math, and in science at their schools, by selected student and parent characteristics: 2013

Selected student and parent characteristics	Average number of AP and higher level IB ¹ courses offered at student's school		
	All subjects	Math	Science
Total	12.1	1.9	2.6
Student's sex (2009)			
Female	12.1	1.9	2.5
Male	12.0	1.9	2.6
Student's race/ethnicity (2009) ²			
Asian	15.6	2.5	3.2
Black/African American	11.8	1.8	2.4
Hispanic/Latino	13.7	2.2	2.9
Other	11.8	1.9	2.4
White	11.3	1.8	2.4
Student's native language (2009)			
English	11.7	1.9	2.5
English and a non-English language	14.4	2.3	3.0
Non-English	13.6	2.2	2.9
Parents' socioeconomic status (2009) ³			
Lowest fifth	10.8	1.8	2.3
Middle three-fifths	11.7	1.9	2.5
Highest fifth	13.9	2.2	2.9
Parents' highest level of education (2009)			
High school credential or less	11.0	1.8	2.4
Undergraduate degree	12.6	2.0	2.6
Graduate degree	14.0	2.1	2.9
Student's educational expectations (2009)			
High school credential	10.4	1.7	2.3
Undergraduate degree	12.3	2.0	2.6
Graduate degree	12.5	2.0	2.6
Don't know	11.7	1.9	2.5
Student's mathematics achievement (2009) ⁴			
Lowest fifth	10.1	1.6	2.1
Middle three-fifths	11.7	1.9	2.5
Highest fifth	14.1	2.2	2.9

See notes at end of table.

National Center for Education Statistics

Table 2.

Among fall 2009 ninth-graders who received a high school diploma from their ninth-grade school by the fall of 2013 and whose school offered Advanced Placement (AP) and/or International Baccalaureate (IB) courses, average number of AP and higher level IB courses offered in all subjects, in math, and in science at their schools, by selected student and parent characteristics: 2013—Continued

Selected student and parent characteristics	Average number of AP and higher level IB ¹ courses offered at student's school		
	All subjects	Math	Science
Student's school sector (2012)			
Public	12.1	1.9	2.6
Regular	12.0	2.0	2.6
Charter or special-program school	16.5	2.2	3.0
Career/technical/vocational or alternative school	‡	‡	‡
Private	11.4	1.8	2.5
Student's school region (2012)			
Northeast	10.1	1.7	2.4
Midwest	10.8	1.7	2.2
South	14.1	2.1	2.9
West	11.6	2.2	2.5
Student's school locale (2012)			
City	13.4	2.1	2.7
Suburb	14.7	2.3	3.2
Town	7.2	1.4	1.7
Rural	9.8	1.6	2.1
Student's school size (2012)			
Fewer than 500 students	5.8	1.1	1.3
500 to 1,199 students	8.6	1.4	1.8
1,200 or more students	15.3	2.4	3.2
Student's school percentage of students who received free or reduced-price lunch (2012) ⁵			
Lowest fifth (0–18 percent of students)	14.7	2.3	3.1
Middle three-fifths (19–67 percent of students)	11.8	1.9	2.5
Highest fifth (68–100 percent of students)	9.8	1.7	2.2
Student's school percentage of students who were non-Hispanic Black or African American, non-Hispanic American Indian or Alaska Native, and Hispanic or Latino students of any race (2009) ⁶			
Lowest fifth (0–7 percent of students)	8.4	1.5	1.8
Middle three-fifths (8–64 percent of students)	13.2	2.1	2.8
Highest fifth (65–100 percent of students)	12.6	1.9	2.6

See notes at end of table.

National Center for Education Statistics

Table 2.

Among fall 2009 ninth-graders who received a high school diploma from their ninth-grade school by the fall of 2013 and whose school offered Advanced Placement (AP) and/or International Baccalaureate (IB) courses, average number of AP and higher level IB courses offered in all subjects, in math, and in science at their schools, by selected student and parent characteristics: 2013—Continued

Selected student and parent characteristics	Average number of AP and higher level IB ¹ courses offered at student's school		
	All subjects	Math	Science
Student's school percentage of English language learners (2012)			
0 percent	10.6	1.6	2.3
1 to 5 percent	11.9	1.9	2.5
More than 5 percent	13.3	2.2	2.9
Student's school offered dual-enrollment program (2012) ⁷			
School did not offer dual-enrollment program	13.2	2.1	3.0
School offered dual-enrollment program	11.9	1.9	2.5

‡ Reporting standards not met either because the standard error is greater than 50 percent of the estimate or because there were too few cases for a reliable estimate.

¹ Most IB courses may be taken at the standard level or higher level. Higher level courses include additional elements and require more instructional hours than standard-level courses. This table presents the number of higher level IB courses offered. Data on the number of standard-level IB courses are not available.

² All race categories exclude Hispanic or Latino origin unless specified. "Other" includes American Indian, Alaska Native, Native Hawaiian, other Pacific Islander, and individuals who indicated Two or more races or Other.

³ Parents' socioeconomic status was calculated using parents' education, occupation, and family income.

⁴ Student's mathematics achievement was measured by a two-stage adaptive assessment in algebraic reasoning developed for HSLs:09.

⁵ To be eligible for free lunch under the National School Lunch Program (NSLP), a federally assisted meal program, a student must be from a household with an income at or below 130 percent of the poverty threshold. To be eligible for reduced-price lunch, a student must be from a household with an income between 130 percent and 185 percent of the poverty threshold. Therefore, the percentage of students receiving free or reduced-price lunch (FRPL) under the NSLP provides a proxy measure for the concentration of low-income students within a school. However, this percentage cannot be used as a strict measure of the percentage of children at or below 185 percent of the poverty threshold because some students are eligible for FRPL based on criteria other than income, and some schools and districts provide FRPL to all students regardless of income.

⁶ Students in these racial/ethnic groups tend to be underrepresented in AP, IB, and dual-enrollment courses. These data were only collected from students' ninth-grade schools in 2009, the base year of the study.

⁷ Dual enrollment refers to taking postsecondary courses while also enrolled in high school. Students may take dual-enrollment courses through a program offered by their high school or independently. A high school dual-enrollment program is an organized system with special guidelines that might have to do with, for example, entrance or eligibility requirements, funding, and limits on coursetaking. NOTE: Estimates are based on fall 2009 ninth-graders who had received a high school diploma from their ninth-grade school before September 2013, when the high school transcript data collection began. Students in this group whose exact graduation date is unknown are included. Students who had not received a diploma, received a diploma in the fall of 2013 or later, or for whom transcript data were incomplete are excluded. Students' schools' offerings were collected in the first follow-up data collection in 2012, when most students were in the 11th grade. The lowest fifth, middle three-fifths, and highest fifth categories are based on the distribution of fall-term ninth-grade students. Data were weighted using the weight W3W1W2STUTR. This weight accounts for (1) base-year school nonresponse; (2) high school transcript nonresponse; and (3) student nonresponse in the base year, first follow-up, and 2013 Update.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School Longitudinal Study of 2009 (HSLs:09) 2013 Update and High School Transcripts Restricted-use Data File.

National Center for Education Statistics

Table S2.

Standard errors for table 2: Among fall 2009 ninth-graders who received a high school diploma from their ninth-grade school by the fall of 2013 and whose school offered Advanced Placement (AP) and/or International Baccalaureate (IB) courses, average number of AP and higher level IB courses offered in all subjects, in math, and in science at their schools, by selected student and parent characteristics: 2013

Selected student and parent characteristics	Average number of AP and higher level IB courses offered by student's school		
	All subjects	Math	Science
Total	0.37	0.06	0.09
Student's sex (2009)			
Female	0.41	0.06	0.10
Male	0.38	0.06	0.10
Student's race/ethnicity (2009)			
Asian	0.66	0.10	0.17
Black/African American	0.89	0.13	0.22
Hispanic/Latino	0.59	0.09	0.18
Other	0.65	0.10	0.15
White	0.40	0.06	0.09
Student's native language (2009)			
English	0.37	0.06	0.09
English and a non-English language	0.76	0.13	0.17
Non-English	0.65	0.10	0.26
Parents' socioeconomic status (2009)			
Lowest fifth	0.48	0.08	0.15
Middle three-fifths	0.40	0.07	0.10
Highest fifth	0.46	0.06	0.09
Parents' highest level of education (2009)			
High school credential or less	0.39	0.06	0.11
Undergraduate degree	0.41	0.07	0.09
Graduate degree	0.52	0.07	0.11
Student's educational expectations (2009)			
High school credential	0.56	0.10	0.15
Undergraduate degree	0.45	0.06	0.11
Graduate degree	0.37	0.06	0.09
Don't know	0.50	0.08	0.13
Student's mathematics achievement (2009)			
Lowest fifth	0.77	0.15	0.20
Middle three-fifths	0.37	0.06	0.09
Highest fifth	0.44	0.07	0.09

See notes at end of table.

National Center for Education Statistics

Table S2.

Standard errors for table 2: Among fall 2009 ninth-graders who received a high school diploma from their ninth-grade school by the fall of 2013 and whose school offered Advanced Placement (AP) and/or International Baccalaureate (IB) courses, average number of AP and higher level IB courses offered in all subjects, in math, and in science at their schools, by selected student and parent characteristics: 2013—Continued

Selected student and parent characteristics	Average number of AP and higher level IB courses offered by student's school		
	All subjects	Math	Science
Student's school sector (2012)			
Public	0.40	0.06	0.10
Regular	0.43	0.06	0.10
Charter or special-program school	2.28	0.28	0.53
Career/technical/vocational or alternative school	†	†	†
Private	1.07	0.14	0.21
Student's school region (2012)			
Northeast	0.85	0.19	0.25
Midwest	0.70	0.09	0.15
South	0.59	0.08	0.13
West	0.88	0.11	0.23
Student's school locale (2012)			
City	0.65	0.12	0.19
Suburb	0.72	0.11	0.17
Town	0.74	0.14	0.22
Rural	0.59	0.09	0.15
Student's school size (2012)			
Fewer than 500 students	0.68	0.10	0.17
500 to 1,199 students	0.47	0.08	0.12
1,200 or more students	0.51	0.07	0.12
Student's school percentage of students who received free or reduced-price lunch (2012)			
Lowest fifth (0–18 percent of students)	0.63	0.09	0.13
Middle three-fifths (19–67 percent of students)	0.50	0.07	0.12
Highest fifth (68–100 percent of students)	0.86	0.15	0.30
Student's school percentage of students who were non-Hispanic Black or African American, non-Hispanic American Indian or Alaska Native, and Hispanic or Latino students of any race (2009)			
Lowest fifth (0–7 percent of students)	0.66	0.12	0.16
Middle three-fifths (8–64 percent of students)	0.47	0.07	0.11
Highest fifth (65–100 percent of students)	1.27	0.21	0.37

See notes at end of table.

National Center for Education Statistics

Table S2.

Standard errors for table 2: Among fall 2009 ninth-graders who received a high school diploma from their ninth-grade school by the fall of 2013 and whose school offered Advanced Placement (AP) and/or International Baccalaureate (IB) courses, average number of AP and higher level IB courses offered in all subjects, in math, and in science at their schools, by selected student and parent characteristics: 2013—Continued

Selected student and parent characteristics	Average number of AP and higher level IB courses offered by student's school		
	All subjects	Math	Science
Student's school percentage of English language learners (2012)			
0 percent	0.85	0.14	0.18
1 to 5 percent	0.45	0.08	0.11
More than 5 percent	0.75	0.09	0.19
Student's school offers dual-enrollment program (2012)			
School does not offer dual-enrollment program	0.93	0.18	0.22
School offers dual-enrollment program	0.41	0.06	0.10

† Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School Longitudinal Study of 2009 (HSL:09) 2013 Update and High School Transcripts Restricted-use Data File.

National Center for Education Statistics

Table 3.

Among fall 2009 ninth-graders who received a high school diploma from their ninth-grade school by the fall of 2013 and whose school offered a dual-enrollment program, percentage whose school's dual-enrollment program had various characteristics, by selected student and parent characteristics: 2013

Selected student and parent characteristics	Dual-enrollment program ¹ characteristics		
	Option to complete certificate program	Option to complete associate's degree	Automatic acceptance to partner college
Total	53.9	21.4	17.4
Student's sex (2009)			
Female	55.7	21.8	17.0
Male	52.0	21.0	17.8
Student's race/ethnicity (2009) ²			
Asian	49.2	10.6	14.3
Black/African American	59.1	27.1	27.3
Hispanic/Latino	54.3	25.2	19.2
Other	58.6	24.9	21.6
White	52.3	19.1	14.4
Student's native language (2009)			
English	54.2	21.1	17.7
English and a non-English language	54.4	26.0	14.3
Non-English	50.0	21.5	15.2
Parents' socioeconomic status (2009) ³			
Lowest fifth	56.7	25.9	16.4
Middle three-fifths	54.3	21.8	19.5
Highest fifth	50.6	17.2	12.3
Parents' highest level of education (2009)			
High school credential or less	55.7	24.3	18.0
Undergraduate degree	52.0	20.2	17.7
Graduate degree	51.9	17.9	11.5
Student's educational expectations (2009)			
High school credential	57.6	24.0	20.7
Undergraduate degree	53.4	22.4	16.3
Graduate degree	53.9	20.4	17.4
Don't know	52.5	21.0	17.3
Student's mathematics achievement (2009) ⁴			
Lowest fifth	56.4	23.0	26.1
Middle three-fifths	53.4	21.9	16.4
Highest fifth	53.5	19.1	14.6

See notes at end of table.

National Center for Education Statistics

Table 3.

Among fall 2009 ninth-graders who received a high school diploma from their ninth-grade school by the fall of 2013 and whose school offered a dual-enrollment program, percentage whose school's dual-enrollment program had various characteristics, by selected student and parent characteristics: 2013—Continued

Selected student and parent characteristics	Dual-enrollment program ¹ characteristics		
	Option to complete certificate program	Option to complete associate's degree	Automatic acceptance to partner college
Student's school sector (2012)			
Public	55.4	22.1	18.1
Regular	55.2	21.9	17.0
Charter or special-program school	65.2	30.7 !	‡
Career/technical/vocational or alternative school	‡	‡	91.2 !
Private	16.4 !	‡	‡
Student's school region (2012)			
Northeast	37.5	‡	‡
Midwest	50.4	14.7	14.9
South	64.1	28.8	21.9
West	52.8	29.7	14.7
Student's school locale (2012)			
City	52.3	14.8	14.2 !
Suburb	51.2	25.4	15.0
Town	54.0	26.8	13.5 !
Rural	57.7	20.7	24.7
Student's school size (2012)			
Fewer than 500 students	42.2	19.7	20.0 !
500 to 1,199 students	56.3	19.7	14.9
1,200 or more students	55.6	22.8	18.4
Student's school percentage of students who received free or reduced-price lunch (2012) ⁵			
Lowest fifth (0–18 percent of students)	38.4	7.4 !	7.9 !
Middle three-fifths (19–67 percent of students)	57.1	22.6	16.7
Highest fifth (68–100 percent of students)	61.3	35.3	25.3
Student's school percentage of students who were non-Hispanic Black or African American, non-Hispanic American Indian or Alaska Native, and Hispanic or Latino students of any race (2009) ⁶			
Lowest fifth (0–7 percent of students)	48.5	14.6	14.2
Middle three-fifths (8–64 percent of students)	54.8	22.5	16.2
Highest fifth (65–100 percent of students)	62.4	25.0	27.8 !

See notes at end of table.

National Center for Education Statistics

Table 3.

Among fall 2009 ninth-graders who received a high school diploma from their ninth-grade school by the fall of 2013 and whose school offered a dual-enrollment program, percentage whose school's dual-enrollment program had various characteristics, by selected student and parent characteristics: 2013—Continued

Selected student and parent characteristics	Dual-enrollment program ¹ characteristics		
	Option to complete certificate program	Option to complete associate's degree	Automatic acceptance to partner college
Student's school percentage of English language learners (2012)			
0 percent	46.1	10.8 †	20.0
1 to 5 percent	56.9	22.1	16.3
More than 5 percent	55.6	27.7	15.2

! Interpret data with caution. Estimate is unstable because the standard error is between 30 and 50 percent of the estimate.

‡ Reporting standards not met either because the standard error is greater than 50 percent of the estimate or because there were too few cases for a reliable estimate.

¹ Dual enrollment refers to taking postsecondary courses while also enrolled in high school. Students may take dual-enrollment courses through a program offered by their high school or independently. A high school dual-enrollment program is an organized system with special guidelines that might have to do with, for example, entrance or eligibility requirements, funding, and limits on coursetaking. Students who received their high school diploma from ninth-grade schools that offered a dual-enrollment program are included in these estimates. Students whose schools did not offer a dual-enrollment program are excluded even if they took dual-enrollment courses independently.

² All race categories exclude Hispanic or Latino origin unless specified. "Other" includes American Indian, Alaska Native, Native Hawaiian, other Pacific Islander, and individuals who indicated Two or more races or Other.

³ Parents' socioeconomic status was calculated using parents' education, occupation, and family income.

⁴ Student's mathematics achievement was measured by a two-stage adaptive assessment in algebraic reasoning developed for HSL:09.

⁵ To be eligible for free lunch under the National School Lunch Program (NSLP), a federally assisted meal program, a student must be from a household with an income at or below 130 percent of the poverty threshold. To be eligible for reduced-price lunch, a student must be from a household with an income between 130 percent and 185 percent of the poverty threshold. Therefore, the percentage of students receiving free or reduced-price lunch (FRPL) under the NSLP provides a proxy measure for the concentration of low-income students within a school. However, this percentage cannot be used as a strict measure of the percentage of children at or below 185 percent of the poverty threshold because some students are eligible for FRPL based on criteria other than income, and some schools and districts provide FRPL to all students regardless of income.

⁶ Students in these racial/ethnic groups tend to be underrepresented in AP, IB, and dual-enrollment courses. These data were only collected from students' ninth-grade schools in 2009, the base year of the study.

NOTE: Estimates are based on fall 2009 ninth-graders who had received a high school diploma from their ninth-grade school before September 2013, when the high school transcript data collection began. Students in this group whose exact graduation date is unknown are included. Students who had not received a diploma, received a diploma in the fall of 2013 or later, or for whom transcript data were incomplete are excluded. Students' schools' offerings were collected in the first follow-up data collection in 2012, when most students were in the 11th grade. The lowest fifth, middle three-fifths, and highest fifth categories are based on the distribution of fall-term ninth-grade students. Data were weighted using the weight W3W1W2STUTR. This weight accounts for (1) base-year school nonresponse; (2) high school transcript nonresponse; and (3) student nonresponse in the base year, first follow-up, and 2013 Update.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School Longitudinal Study of 2009 (HSL:09) 2013 Update and High School Transcripts Restricted-use Data File.

National Center for Education Statistics

Table S3.

Standard errors for table 3: Among fall 2009 ninth-graders who received a high school diploma from their ninth-grade school by the fall of 2013 and whose school offered a dual-enrollment program, percentage whose school's dual-enrollment program had various characteristics, by selected student and parent characteristics: 2013

Selected student and parent characteristics	Dual-enrollment program characteristics		
	Option to complete certificate program	Option to complete associate's degree	Automatic acceptance to partner college
Total	2.87	1.88	2.39
Student's sex (2009)			
Female	3.13	1.99	2.32
Male	2.86	1.98	2.63
Student's race/ethnicity (2009)			
Asian	5.78	2.34	4.04
Black/African American	5.21	4.16	5.65
Hispanic/Latino	5.55	4.25	4.40
Other	4.73	4.05	3.98
White	2.82	2.01	2.06
Student's native language (2009)			
English	2.71	1.86	2.33
English and a non-English language	5.74	5.35	4.33
Non-English	6.76	4.49	3.97
Parents' socioeconomic status (2009)			
Lowest fifth	4.26	3.18	2.91
Middle three-fifths	3.03	1.97	2.76
Highest fifth	3.02	2.15	2.00
Parents' highest level of education (2009)			
High school credential or less	3.31	2.50	2.65
Undergraduate degree	3.05	1.96	2.89
Graduate degree	3.22	2.52	2.02
Student's educational expectations (2009)			
High school credential	4.18	3.03	4.02
Undergraduate degree	3.06	2.14	2.01
Graduate degree	2.94	1.98	2.53
Don't know	3.52	2.42	3.03
Student's mathematics achievement (2009)			
Lowest fifth	5.03	3.09	6.51
Middle three-fifths	2.94	2.09	2.28
Highest fifth	3.33	2.35	1.97

See notes at end of table.

National Center for Education Statistics

Table S3.

Standard errors for table 3: Among fall 2009 ninth-graders who received a high school diploma from their ninth-grade school by the fall of 2013 and whose school offered a dual-enrollment program, percentage whose school's dual-enrollment program had various characteristics, by selected student and parent characteristics: 2013—Continued

Selected student and parent characteristics	Dual-enrollment program characteristics		
	Option to complete certificate program	Option to complete associate's degree	Automatic acceptance to partner college
Student's school sector (2012)			
Public	3.00	1.99	2.50
Regular	2.92	2.06	2.14
Charter or special-program school	18.22	15.31	†
Career/technical/vocational or alternative school	†	†	27.69
Private	6.91	†	†
Student's school region (2012)			
Northeast	7.83	†	†
Midwest	5.16	3.32	2.90
South	3.66	3.05	3.35
West	7.78	5.44	5.18
Student's school locale (2012)			
City	6.06	3.59	5.01
Suburb	4.45	3.49	2.75
Town	7.94	5.50	4.69
Rural	4.97	3.80	4.99
Student's school size (2012)			
Fewer than 500 students	6.66	4.53	6.17
500 to 1,199 students	5.05	3.38	3.17
1,200 or more students	3.81	2.59	3.57
Student's school percentage of students who received free or reduced-price lunch (2012)			
Lowest fifth (0–18 percent of students)	5.63	3.00	3.00
Middle three-fifths (19–67 percent of students)	3.63	2.58	2.82
Highest fifth (68–100 percent of students)	7.46	6.19	5.47
Student's school percentage of students who were non-Hispanic Black or African American, non-Hispanic American Indian or Alaska Native, and Hispanic or Latino students of any race (2009)			
Lowest fifth (0–7 percent of students)	5.75	3.90	3.96
Middle three-fifths (8–64 percent of students)	3.84	2.74	2.61
Highest fifth (65–100 percent of students)	9.60	6.82	8.96
Student's school percentage of English language learners (2012)			
0 percent	6.37	4.20	5.77
1 to 5 percent	3.54	2.90	2.83
More than 5 percent	6.34	3.98	3.89

† Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School Longitudinal Study of 2009 (HLS:09) 2013 Update and High School Transcripts Restricted-use Data File.

National Center for Education Statistics

Table 4.

Among fall 2009 ninth-graders who received a high school diploma from their ninth-grade school by the fall of 2013, percentage who had the option to take courses for high school credit at community colleges and 4-year colleges and universities, by dual-enrollment program offering and selected student and parent characteristics: 2013

Selected student and parent characteristics	Student's school offered dual-enrollment program ¹		Student's school did not offer dual-enrollment program ²	
	Courses may be taken for credit at community colleges	Courses may be taken for credit at 4-year colleges and universities	Courses may be taken for credit at community colleges	Courses may be taken for credit at 4-year colleges and universities
Total	92.3	63.6	81.0	55.7
Student's sex (2009)				
Female	92.8	63.3	81.0	51.5
Male	91.8	64.0	81.1	59.7
Student's race/ethnicity (2009) ³				
Asian	96.3	64.0	93.9	‡
Black/African American	91.2	67.9	55.9 !	‡
Hispanic/Latino	95.3	54.9	96.4	47.2 !
Other	93.6	61.2	65.3	41.6 !
White	91.1	66.2	80.2	75.3
Student's native language (2009)				
English	91.5	64.6	77.7	59.8
English and a non-English language	95.9	61.2	94.3	‡
Non-English	96.4	57.8	95.1	37.4 !
Parents' socioeconomic status (2009) ⁴				
Lowest fifth	92.2	57.0	86.2	48.6 !
Middle three-fifths	91.7	62.9	81.9	53.5
Highest fifth	94.0	69.9	77.1	62.9
Parents' highest level of education (2009)				
High school credential or less	91.3	58.1	83.5	51.0
Undergraduate degree	92.4	65.4	81.2	59.6
Graduate degree	93.1	71.1	73.5	61.6
Student's educational expectations (2009)				
High school credential	91.6	61.7	80.9	41.2 !
Undergraduate degree	92.4	62.0	85.1	57.8
Graduate degree	92.6	65.4	77.9	58.9
Don't know	92.2	63.0	84.4	51.7
Student's mathematics achievement (2009) ⁵				
Lowest fifth	91.4	61.2	90.7	55.6
Middle three-fifths	91.5	62.8	79.4	54.4
Highest fifth	95.1	67.3	80.6	57.2

See notes at end of table.

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Table 4.

Among fall 2009 ninth-graders who received a high school diploma from their ninth-grade school by the fall of 2013, percentage who had the option to take courses for high school credit at community colleges and 4-year colleges and universities, by dual-enrollment program offering and selected student and parent characteristics: 2013—Continued

Selected student and parent characteristics	Student's school offered dual-enrollment program ¹		Student's school did not offer dual-enrollment program ²	
	Courses may be taken for credit at community colleges	Courses may be taken for credit at 4-year colleges and universities	Courses may be taken for credit at community colleges	Courses may be taken for credit at 4-year colleges and universities
Student's school sector (2012)				
Public	92.9	63.7	87.9	56.9
Regular	92.3	62.0	88.6	59.1
Charter or special-program school	100.0 ⁶	85.1	83.4 [!]	‡
Career/technical/vocational or alternative school	92.4 [!]	‡	‡	‡
Private	79.2	66.6	63.1	58.2
Student's school region (2012)				
Northeast	91.3	79.8	97.4	76.8
Midwest	88.6	76.1	71.8	68.0
South	92.5	58.9	‡	‡
West	97.6	43.8	96.1	45.3 [!]
Student's school locale (2012)				
City	93.3	66.8	81.3	36.7 [!]
Suburb	98.1	74.5	88.7	71.7
Town	84.9	58.3	‡	‡
Rural	89.0	53.1	76.0	75.6
Student's school size (2012)				
Fewer than 500 students	84.8	38.3	51.5 [!]	50.1 [!]
500 to 1,199 students	89.7	70.1	67.3	48.7 [!]
1,200 or more students	95.8	67.4	95.6	61.7
Student's school percentage of students who received free or reduced-price lunch (2012) ⁷				
Lowest fifth (0–18 percent of students)	90.9	71.2	79.7	58.5
Middle three-fifths (19–67 percent of students)	92.8	65.2	94.6	77.8
Highest fifth (68–100 percent of students)	92.6	46.7	73.2	‡
Student's school percentage of students who were non-Hispanic Black or African American, non-Hispanic American Indian or Alaska Native, and Hispanic or Latino students of any race (2009) ⁸				
Lowest fifth (0–7 percent of students)	88.7	63.8	77.8	79.8
Middle three-fifths (8–64 percent of students)	92.6	66.1	88.5	58.9
Highest fifth (65–100 percent of students)	95.5	51.1	77.1	‡

See notes at end of table.

National Center for Education Statistics

Table 4.

Among fall 2009 ninth-graders who received a high school diploma from their ninth-grade school by the fall of 2013, percentage who had the option to take courses for high school credit at community colleges and 4-year colleges and universities, by dual-enrollment program offering and selected student and parent characteristics: 2013—Continued

Selected student and parent characteristics	Student's school offered dual-enrollment program ¹		Student's school did not offer dual-enrollment program ²	
	Courses may be taken for credit at community colleges	Courses may be taken for credit at 4-year colleges and universities	Courses may be taken for credit at community colleges	Courses may be taken for credit at 4-year colleges and universities
Student's school percentage of English language learners (2012)				
0 percent	81.1	58.9	67.0	59.6
1 to 5 percent	94.6	68.6	77.4	68.6
More than 5 percent	94.0	55.7	96.1	‡

! Interpret data with caution. Estimate is unstable because the standard error is between 30 and 50 percent of the estimate.

‡ Reporting standards not met either because the standard error is greater than 50 percent of the estimate or because there were too few cases for a reliable estimate.

¹ Dual enrollment refers to taking postsecondary courses while also enrolled in high school. Students may take dual-enrollment courses through a program offered by their high school or independently. A high school dual-enrollment program is an organized system with special guidelines that might have to do with, for example, entrance or eligibility requirements, funding, and limits on coursetaking. Students who received their high school diploma from ninth-grade schools that offered a dual-enrollment program are included in these estimates. Students whose schools did not offer a dual-enrollment program are excluded even if they took dual-enrollment courses independently.

² Students whose ninth-grade schools did not offer a dual-enrollment program are included in these estimates even if they took dual-enrollment courses independently. See footnote 1 for a definition of dual enrollment and dual-enrollment programs.

³ All race categories exclude Hispanic or Latino origin unless specified. "Other" includes American Indian, Alaska Native, Native Hawaiian, other Pacific Islander, and individuals who indicated Two or more races or Other.

⁴ Parents' socioeconomic status was calculated using parents' education, occupation, and family income.

⁵ Student's mathematics achievement was measured by a two-stage adaptive assessment in algebraic reasoning developed for HSLs:09.

⁶ Rounds to 100.

⁷ To be eligible for free lunch under the National School Lunch Program (NSLP), a federally assisted meal program, a student must be from a household with an income at or below 130 percent of the poverty threshold. To be eligible for reduced-price lunch, a student must be from a household with an income between 130 percent and 185 percent of the poverty threshold. Therefore, the percentage of students receiving free or reduced-price lunch (FRPL) under the NSLP provides a proxy measure for the concentration of low-income students within a school. However, this percentage cannot be used as a strict measure of the percentage of children at or below 185 percent of the poverty threshold because some students are eligible for FRPL based on criteria other than income, and some schools and districts provide FRPL to all students regardless of income.

⁸ Students in these racial/ethnic groups tend to be underrepresented in AP, IB, and dual-enrollment courses. These data were only collected from students' ninth-grade schools in 2009, the base year of the study.

NOTE: Estimates are based on fall 2009 ninth-graders who had received a high school diploma from their ninth-grade school before September 2013, when the high school transcript data collection began. Students in this group whose exact graduation date is unknown are included. Students who had not received a diploma, received a diploma in the fall of 2013 or later, or for whom transcript data were incomplete are excluded. Students' schools' offerings were collected in the first follow-up data collection in 2012, when most students were in the 11th grade. The lowest fifth, middle three-fifths, and highest fifth categories are based on the distribution of fall-term ninth-grade students. Data were weighted using the weight W3W1W2STUTR. This weight accounts for (1) base-year school nonresponse; (2) high school transcript nonresponse; and (3) student nonresponse in the base year, first follow-up, and 2013 Update.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School Longitudinal Study of 2009 (HSLs:09) 2013 Update and High School Transcripts Restricted-use Data File.

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Table S4.

Standard errors for table 4: Among fall 2009 ninth-graders who received a high school diploma from their ninth-grade school by the fall of 2013, percentage who had the option to take courses for high school credit at community colleges and 4-year colleges and universities, by dual-enrollment program offering and selected student and parent characteristics: 2013

Selected student and parent characteristics	Student's school offered dual-enrollment program		Student's school did not offer dual-enrollment program	
	Courses may be taken for credit at community colleges	Courses may be taken for credit at 4-year colleges and universities	Courses may be taken for credit at community colleges	Courses may be taken for credit at 4-year colleges and universities
Total	1.38	3.11	5.96	10.69
Student's sex (2009)				
Female	1.35	3.26	6.66	11.56
Male	1.58	3.19	6.38	10.70
Student's race/ethnicity (2009)				
Asian	1.17	6.41	8.94	†
Black/African American	4.04	5.66	18.70	†
Hispanic/Latino	1.53	6.31	3.00	16.63
Other	2.25	4.98	11.49	14.34
White	1.66	3.14	6.88	7.51
Student's native language (2009)				
English	1.51	3.00	6.71	10.04
English and a non-English language	1.42	5.82	5.83	†
Non-English	1.35	7.20	4.03	18.60
Parents' socioeconomic status (2009)				
Lowest fifth	2.44	4.46	7.84	14.92
Middle three-fifths	1.56	3.29	6.52	12.10
Highest fifth	1.27	3.31	8.29	11.69
Parents' highest level of education (2009)				
High school credential or less	1.78	3.68	6.68	12.69
Undergraduate degree	1.53	3.31	6.02	11.32
Graduate degree	1.65	3.49	10.02	11.86
Student's educational expectations (2009)				
High school credential	2.43	4.65	11.14	15.78
Undergraduate degree	1.50	3.43	5.87	11.02
Graduate degree	1.45	3.24	7.37	11.29
Don't know	1.75	3.75	5.92	13.41
Student's mathematics achievement (2009)				
Lowest fifth	2.83	5.60	6.01	15.88
Middle three-fifths	1.53	3.30	6.63	10.44
Highest fifth	1.07	3.31	7.36	13.85

See notes at end of table.

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Table S4.

Standard errors for table 4: Among fall 2009 ninth-graders who received a high school diploma from their ninth-grade school by the fall of 2013, percentage who had the option to take courses for high school credit at community colleges and 4-year colleges and universities, by dual-enrollment program offering and selected student and parent characteristics: 2013—Continued

Selected student and parent characteristics	Student's school offered dual-enrollment program		Student's school did not offer dual-enrollment program	
	Courses may be taken for credit at community colleges	Courses may be taken for credit at 4-year colleges and universities	Courses may be taken for credit at community colleges	Courses may be taken for credit at 4-year colleges and universities
Student's school sector (2012)				
Public	1.45	3.27	5.93	13.05
Regular	1.56	3.42	6.53	14.22
Charter or special-program school	†	12.80	32.83	†
Career/technical/vocational or alternative school	35.57	†	†	†
Private	6.63	8.40	12.40	12.33
Student's school region (2012)				
Northeast	4.78	7.45	3.36	17.76
Midwest	3.43	5.44	13.53	12.99
South	2.03	4.18	†	†
West	2.04	8.13	5.43	22.28
Student's school locale (2012)				
City	3.05	6.46	9.16	16.48
Suburb	0.98	4.23	10.26	15.81
Town	5.18	8.78	†	†
Rural	2.97	6.03	14.64	16.07
Student's school size (2012)				
Fewer than 500 students	4.86	7.58	17.98	18.84
500 to 1,199 students	3.05	4.89	13.55	15.55
1,200 or more students	1.46	4.16	3.28	15.22
Student's school percentage of students who received free or reduced-price lunch (2012)				
Lowest fifth (0–18 percent of students)	3.00	5.16	8.80	16.29
Middle three-fifths (19–67 percent of students)	1.74	3.99	4.61	16.73
Highest fifth (68–100 percent of students)	3.95	9.27	18.86	†
Student's school percentage of students who were non-Hispanic Black or African American, non-Hispanic American Indian or Alaska Native, and Hispanic or Latino students of any race (2009)				
Lowest fifth (0–7 percent of students)	3.86	6.36	13.23	13.51
Middle three-fifths (8–64 percent of students)	1.72	3.43	6.07	15.84
Highest fifth (65–100 percent of students)	3.63	11.04	19.09	†

See notes at end of table.

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Table S4.

Standard errors for table 4: Among fall 2009 ninth-graders who received a high school diploma from their ninth-grade school by the fall of 2013, percentage who had the option to take courses for high school credit at community colleges and 4-year colleges and universities, by dual-enrollment program offering and selected student and parent characteristics: 2013—Continued

Selected student and parent characteristics	Student's school offered dual-enrollment program		Student's school did not offer dual-enrollment program	
	Courses may be taken for credit at community colleges	Courses may be taken for credit at 4-year colleges and universities	Courses may be taken for credit at community colleges	Courses may be taken for credit at 4-year colleges and universities
Student's school percentage of English language learners (2012)				
0 percent	5.73	7.91	13.87	14.68
1 to 5 percent	1.47	3.82	10.47	12.99
More than 5 percent	2.69	6.31	4.23	†

† Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School Longitudinal Study of 2009 (HSL:09) 2013 Update and High School Transcripts Restricted-use Data File.

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Table 5.

Among fall 2009 ninth-graders who received a high school diploma by the fall of 2013, percentage earning any high school credits in Advanced Placement (AP), International Baccalaureate (IB), and dual-enrollment courses and average number of high school credits earned, by selected student and parent characteristics: 2013

Selected student and parent characteristics	Percent earning any high school credit in specified courses			Average high school credits earned in specified courses by students earning any credit in specified courses		
	Any AP, IB, or dual-enrollment courses ¹	Any AP or IB courses	Any dual-enrollment courses ²	AP, IB, or dual-enrollment courses ³	AP or IB courses	Dual-enrollment courses ⁴
Total	46.3	42.2	10.9	3.6	3.3	2.5
Student's sex (2009)						
Female	50.6	46.4	12.0	3.5	3.2	2.5
Male	41.9	37.8	9.7	3.7	3.4	2.6
Student's race/ethnicity (2009) ⁵						
Asian	76.8	75.8	10.1	5.2	4.8	3.2
Black/African American	34.2	30.2	6.5	3.0	2.9	2.3
Hispanic/Latino	42.0	39.5	8.7	3.5	3.2	2.4
Other	43.6	40.0	9.3	3.4	3.2	2.2
White	49.0	44.0	13.0	3.6	3.2	2.6
Student's native language (2009)						
English	45.5	41.0	11.8	3.5	3.2	2.5
English and a non-English language	47.5	46.0	7.2	4.3	4.0	2.8
Non-English	53.8	51.0	7.2	3.7	3.5	2.5
Parents' socioeconomic status (2009) ⁶						
Lowest fifth	30.9	28.0	5.8	2.8	2.6	2.1
Middle three-fifths	41.9	37.5	10.4	3.3	3.0	2.5
Highest fifth	69.3	65.4	15.9	4.3	3.9	2.7
Parents' highest level of education (2009)						
High school credential or less	35.6	32.1	7.8	3.0	2.8	2.3
Undergraduate degree	52.5	47.8	13.1	3.7	3.3	2.6
Graduate degree	70.1	66.2	15.4	4.5	4.2	2.7
Student's educational expectations (2009)						
High school credential	21.2	17.6	4.4	2.2	2.3	1.4
Undergraduate degree	42.9	39.1	10.3	3.2	2.9	2.4
Graduate degree	59.4	55.3	13.6	4.0	3.7	2.7
Don't know	36.8	32.2	9.5	3.0	2.8	2.3

See notes at end of table.

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Table 5.

Among fall 2009 ninth-graders who received a high school diploma by the fall of 2013, percentage earning any high school credits in Advanced Placement (AP), International Baccalaureate (IB), and dual-enrollment courses and average number of high school credits earned, by selected student and parent characteristics: 2013—Continued

Selected student and parent characteristics	Percent earning any high school credit in specified courses			Average high school credits earned in specified courses by students earning any credit in specified courses		
	Any AP, IB, or dual-enrollment courses ¹	Any AP or IB courses	Any dual-enrollment courses ²	AP, IB, or dual-enrollment courses ³	AP or IB courses	Dual-enrollment courses ⁴
Student's mathematics achievement (2009) ⁷						
Lowest fifth	14.4	11.4	3.9	1.8	1.6	2.1
Middle three-fifths	41.9	37.4	10.2	3.0	2.7	2.2
Highest fifth	77.9	74.2	17.2	4.7	4.2	3.1
Student's school sector (2012)						
Public	45.5	41.4	10.9	3.7	3.3	2.6
Regular	45.3	41.0	11.6	3.6	3.2	2.6
Charter or special-program school	59.2	58.0	4.6 !	4.5	4.4	3.2 !
Career/technical/vocational or alternative school	‡	‡	‡	2.2 !	2.2 !	1.6 !
Private	59.8	56.1	10.1	3.1	3.0	1.8
Student's school region (2012)						
Northeast	42.4	40.1	8.1 !	3.7	3.3	3.0
Midwest	46.4	40.2	12.3	2.9	2.7	2.0
South	48.5	44.4	13.2	4.1	3.6	2.6
West	46.5	43.3	7.7	3.4	3.2	2.5
Student's school locale (2012)						
City	52.0	49.5	9.6	4.0	3.7	2.3
Suburb	51.3	48.3	9.8	3.7	3.4	2.7
Town	37.2	30.2	9.9	2.5	2.3	2.3
Rural	39.9	34.4	13.7	3.4	2.9	2.7
Student's school size (2012)						
Fewer than 500 students	35.8	28.4	12.2	2.8	2.5	2.4
500 to 1,199 students	43.7	38.4	11.9	3.4	3.1	2.7
1,200 or more students	51.5	49.2	9.8	3.9	3.6	2.5

See notes at end of table.

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Table 5.

Among fall 2009 ninth-graders who received a high school diploma by the fall of 2013, percentage earning any high school credits in Advanced Placement (AP), International Baccalaureate (IB), and dual-enrollment courses and average number of high school credits earned, by selected student and parent characteristics: 2013—Continued

Selected student and parent characteristics	Percent earning any high school credit in specified courses			Average high school credits earned in specified courses by students earning any credit in specified courses		
	Any AP, IB, or dual-enrollment courses ¹	Any AP or IB courses	Any dual-enrollment courses ²	AP, IB, or dual-enrollment courses ³	AP or IB courses	Dual-enrollment courses ⁴
Student's school percentage of students who received free or reduced-price lunch (2012) ⁸						
Lowest fifth (0–18 percent of students)	59.7	56.0	11.7	3.6	3.3	2.5
Middle three-fifths (19–67 percent of students)	44.8	40.2	11.9	3.7	3.4	2.6
Highest fifth (68–100 percent of students)	37.2	33.7	7.4	3.3	3.1	2.3
Student's school percentage of students who were non-Hispanic Black or African American, non-Hispanic American Indian or Alaska Native, and Hispanic or Latino students of any race (2009) ⁹						
Lowest fifth (0–7 percent of students)	43.4	36.3	15.6	3.0	2.6	2.3
Middle three-fifths (8–64 percent of students)	50.0	46.1	10.9	3.8	3.5	2.7
Highest fifth (65–100 percent of students)	46.7	45.2	8.1	4.1	3.8	2.6
Student's school percentage of English language learners (2012)						
0 percent	43.6	37.7	11.3	3.3	3.1	2.3
1 to 5 percent	47.2	43.6	11.8	3.7	3.3	2.7
More than 5 percent	48.0	43.8	9.7	3.7	3.5	2.4
Student's school offerings (2012) ¹⁰						
Offered AP and/or IB course only	56.4	56.0	2.0 !	3.4	3.4	3.1 !
Offered dual-enrollment program only ¹¹	21.1	7.7 !	14.3 !	2.5	1.5 !	2.9
Offered AP or IB courses and dual-enrollment program ¹²	49.8	45.7	12.6	3.7	3.4	2.5
High school from which student received diploma (2013)						
Ninth-grade school	48.0	43.6	11.5	3.7	3.4	2.5
Another high school	35.7	33.3	6.9	3.0	2.7	2.5

See notes at end of table.

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Table 5.

Among fall 2009 ninth-graders who received a high school diploma by the fall of 2013, percentage earning any high school credits in Advanced Placement (AP), International Baccalaureate (IB), and dual-enrollment courses and average number of high school credits earned, by selected student and parent characteristics: 2013—Continued

! Interpret data with caution. Estimate is unstable because the standard error is between 30 and 50 percent of the estimate.

‡ Reporting standards not met either because the standard error is greater than 50 percent of the estimate or because there were too few cases for a reliable estimate.

¹ Dual enrollment refers to taking postsecondary courses while also enrolled in high school. Students may take dual-enrollment courses through a program offered by their high school or independently. A high school dual-enrollment program is an organized system with special guidelines that might have to do with, for example, entrance or eligibility requirements, funding, and limits on coursetaking. These estimates include students who earned any credits in AP courses, IB courses, and dual-enrollment courses that were offered through a program, and dual-enrollment credits taken independently.

² These estimates include students who earned credits in dual-enrollment courses that were offered through a program and dual-enrollment courses taken independently. See footnote 1 for a definition of dual enrollment and dual-enrollment programs.

³ These estimates include credits earned in AP courses, IB courses, and dual-enrollment courses that were offered through a program, and dual-enrollment courses taken independently. See footnote 1 for a definition of dual enrollment and dual-enrollment programs.

⁴ These estimates include credits earned in dual-enrollment courses that were offered through a program and dual-enrollment courses taken independently. See footnote 1 for a definition of dual enrollment and dual-enrollment programs.

⁵ All race categories exclude Hispanic or Latino origin unless specified. "Other" includes American Indian, Alaska Native, Native Hawaiian, other Pacific Islander, and individuals who indicated Two or more races or Other.

⁶ Parents' socioeconomic status was calculated using parents' education, occupation, and family income.

⁷ Student's mathematics achievement was measured by a two-stage adaptive assessment in algebraic reasoning developed for HSLs:09.

⁸ To be eligible for free lunch under the National School Lunch Program (NSLP), a federally assisted meal program, a student must be from a household with an income at or below 130 percent of the poverty threshold. To be eligible for reduced-price lunch, a student must be from a household with an income between 130 percent and 185 percent of the poverty threshold. Therefore, the percentage of students receiving free or reduced-price lunch (FRPL) under the NSLP provides a proxy measure for the concentration of low-income students within a school. However, this percentage cannot be used as a strict measure of the percentage of children at or below 185 percent of the poverty threshold because some students are eligible for FRPL based on criteria other than income, and some schools and districts provide FRPL to all students regardless of income.

⁹ Students in these racial/ethnic groups tend to be underrepresented in AP, IB, and dual-enrollment courses. These data were only collected from students' ninth-grade schools in the base year of the study; data were not collected for any schools students had transferred to as of the first follow-up data collection. Therefore, estimates are based on 2009 data for students who received their high school diploma from their ninth-grade school.

¹⁰ These data were only collected from students' ninth-grade schools; data were not collected from any schools students had transferred to as of the first follow-up data collection. Estimates are based on 2012 data for students who received their high school diploma from their ninth-grade school.

¹¹ Students and credits earned by students whose ninth-grade schools offered a dual-enrollment program but did not offer AP or IB courses are included in these estimates. Students and credits earned by students whose schools did not offer a dual-enrollment program are excluded even if they took dual-enrollment courses independently. See footnote 1 for a definition of dual enrollment and dual-enrollment programs.

¹² Students and credits earned by students whose ninth-grade schools offered AP or IB courses and a dual-enrollment program are included in these estimates. Students and credits earned by students whose schools did not offer a dual-enrollment program are excluded even if they took dual-enrollment courses independently. See footnote 1 for a definition of dual enrollment and dual-enrollment programs.

NOTE: Estimates are based on fall 2009 ninth-graders who had received a high school diploma from any high school before September 2013, when the high school transcript data collection began. Students in this group whose exact graduation date is unknown are included. Students who had not received a diploma, received a diploma in the fall of 2013 or later, or for whom transcript data were incomplete are excluded. Students' high school credits earned were collected from the high school transcripts and reflect Carnegie units. The Carnegie unit is a standard of measurement that represents one credit for 120 hours of classroom time over the course of a year at the secondary-school level in the United States, equivalent to the completion of a 1-year academic course taken one period a day, 5 days a week. The lowest fifth, middle three-fifths, and highest fifth categories are based on the distribution of fall-term ninth-grade students. Data were weighted using the weight W3W1W2STUTR. This weight accounts for (1) base-year school nonresponse; (2) high school transcript nonresponse; and (3) student nonresponse in the base year, first follow-up, and 2013 Update.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School Longitudinal Study of 2009 (HSLs:09) 2013 Update and High School Transcripts Restricted-use Data File.

National Center for Education Statistics

Table S5.

Standard errors for table 5: Among fall 2009 ninth-graders who received a high school diploma by the fall of 2013, percentage earning any high school credits in Advanced Placement (AP), International Baccalaureate (IB), and dual-enrollment courses and average number of high school credits earned, by selected student and parent characteristics: 2013

Selected student and parent characteristics	Percent earning any high school credit in specified courses			Average high school credits earned in specified courses by students earning any credit in specified courses		
	Any AP, IB, or dual-enrollment courses	Any AP or IB courses	Any dual-enrollment courses	AP, IB, or dual-enrollment courses	AP or IB courses	Dual-enrollment courses
Total	1.32	1.39	1.01	0.08	0.08	0.12
Student's sex (2009)						
Female	1.59	1.67	1.19	0.09	0.09	0.14
Male	1.45	1.46	0.95	0.13	0.10	0.17
Student's race/ethnicity (2009)						
Asian	3.89	3.94	1.49	0.25	0.26	0.53
Black/African American	2.79	2.58	2.02	0.21	0.23	0.36
Hispanic/Latino	2.54	2.63	1.34	0.23	0.19	0.31
Other	3.24	3.45	1.66	0.21	0.22	0.23
White	1.48	1.51	1.44	0.09	0.08	0.17
Student's native language (2009)						
English	1.31	1.38	1.13	0.09	0.08	0.14
English and a non-English language	4.41	4.41	1.63	0.30	0.26	0.49
Non-English	3.70	3.76	1.51	0.22	0.22	0.38
Parents' socioeconomic status (2009)						
Lowest fifth	2.42	2.36	1.21	0.19	0.22	0.22
Middle three-fifths	1.45	1.50	1.10	0.10	0.09	0.15
Highest fifth	1.52	1.66	1.55	0.14	0.12	0.20
Parents' highest level of education (2009)						
High school credential or less	1.48	1.54	1.05	0.13	0.13	0.18
Undergraduate degree	1.80	1.84	1.31	0.11	0.10	0.14
Graduate degree	1.69	1.83	1.59	0.16	0.14	0.25
Student's educational expectations (2009)						
High school credential	2.81	2.80	1.01	0.26	0.31	0.15
Undergraduate degree	1.74	1.69	1.14	0.11	0.11	0.17
Graduate degree	1.64	1.73	1.38	0.10	0.09	0.15
Don't know	1.93	2.00	1.25	0.14	0.13	0.23

See notes at end of table.

National Center for Education Statistics

Table S5.

Standard errors for table 5: Among fall 2009 ninth-graders who received a high school diploma by the fall of 2013, percentage earning any high school credits in Advanced Placement (AP), International Baccalaureate (IB), and dual-enrollment courses and average number of high school credits earned, by selected student and parent characteristics: 2013—Continued

Selected student and parent characteristics	Percent earning any high school credit in specified courses			Average high school credits earned in specified courses by students earning any credit in specified courses		
	Any AP, IB, or dual-enrollment courses	Any AP or IB courses	Any dual-enrollment courses	AP, IB, or dual-enrollment courses	AP or IB courses	Dual-enrollment courses
Student's mathematics achievement (2009)						
Lowest fifth	1.70	1.62	0.88	0.20	0.20	0.43
Middle three-fifths	1.39	1.45	1.06	0.10	0.09	0.14
Highest fifth	1.58	1.71	1.69	0.14	0.11	0.22
Student's school sector (2012)						
Public	1.43	1.52	1.09	0.09	0.08	0.13
Regular	1.44	1.54	1.17	0.10	0.09	0.13
Charter or special-program school	6.73	6.90	2.12	0.48	0.49	1.01
Career/technical/vocational or alternative school	†	†	†	0.85	0.91	0.52
Private	3.43	3.53	2.24	0.14	0.15	0.18
Student's school region (2012)						
Northeast	3.93	3.94	2.68	0.22	0.18	0.55
Midwest	2.60	2.82	2.35	0.16	0.14	0.20
South	1.74	1.80	1.51	0.15	0.14	0.13
West	3.53	3.60	1.66	0.17	0.18	0.37
Student's school locale (2012)						
City	2.80	2.82	1.80	0.15	0.14	0.20
Suburb	1.94	2.06	1.65	0.18	0.16	0.31
Town	2.50	3.56	2.67	0.17	0.17	0.24
Rural	2.82	2.68	2.14	0.15	0.16	0.23
Student's school size (2012)						
Fewer than 500 students	3.52	3.20	2.53	0.16	0.17	0.29
500 to 1,199 students	2.49	2.57	2.09	0.19	0.18	0.28
1,200 or more students	1.81	1.77	1.28	0.11	0.11	0.16

See notes at end of table.

National Center for Education Statistics

Table S5.

Standard errors for table 5: Among fall 2009 ninth-graders who received a high school diploma by the fall of 2013, percentage earning any high school credits in Advanced Placement (AP), International Baccalaureate (IB), and dual-enrollment courses and average number of high school credits earned, by selected student and parent characteristics: 2013—Continued

Selected student and parent characteristics	Percent earning any high school credit in specified courses			Average high school credits earned in specified courses by students earning any credit in specified courses		
	Any AP, IB, or dual-enrollment courses	Any AP or IB courses	Any dual-enrollment courses	AP, IB, or dual-enrollment courses	AP or IB courses	Dual-enrollment courses
Student's school percentage of students who received free or reduced-price lunch (2012)						
Lowest fifth (0–18 percent of students)	2.20	2.24	1.96	0.14	0.13	0.19
Middle three-fifths (19–67 percent of students)	1.78	1.87	1.44	0.12	0.10	0.18
Highest fifth (68–100 percent of students)	3.08	3.04	2.00	0.32	0.35	0.27
Student's school percentage of students who were non-Hispanic Black or African American, non-Hispanic American Indian or Alaska Native, and Hispanic or Latino students of any race (2009)						
Lowest fifth (0–7 percent of students)	2.93	2.95	3.02	0.17	0.12	0.26
Middle three-fifths (8–64 percent of students)	1.82	1.87	1.30	0.11	0.11	0.21
Highest fifth (65–100 percent of students)	5.06	5.12	2.30	0.38	0.38	0.43
Student's school percentage of English language learners (2012)						
0 percent	3.48	3.19	2.65	0.22	0.24	0.20
1 to 5 percent	1.77	1.80	1.36	0.13	0.12	0.19
More than 5 percent	2.34	2.49	1.58	0.17	0.18	0.26
Student's school offerings (2012)						
Offers AP and/or IB course only	3.84	3.80	1.02	0.19	0.20	1.19
Offers dual-enrollment program only	6.05	3.43	5.57	0.47	0.64	0.53
Offers AP or IB courses and dual-enrollment program	1.49	1.52	1.29	0.11	0.10	0.14
High school from which student received diploma (2013)						
Ninth-grade school	1.41	1.51	1.10	0.09	0.08	0.13
Another high school	2.44	2.36	1.40	0.18	0.13	0.32

† Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School Longitudinal Study of 2009 (HSL:09) 2013 Update and High School Transcripts Restricted-use Data File.

National Center for Education Statistics

Table 6.

Among fall 2009 ninth-graders who received a high school diploma by the fall of 2013, percentage of students in various racial/ethnic groups earning any high school credits in Advanced Placement (AP), International Baccalaureate (IB), and dual-enrollment courses and average number of high school credits earned, by selected student and parent characteristics: 2013

Selected student and parent characteristics	Percent earning any high school credits in AP, IB, and dual-enrollment courses ¹					Average high school credits earned by students earning any high school credits in AP, IB, and dual-enrollment courses ²				
	Asian	Black/African American	Hispanic/Latino	Other ³	White	Asian	Black/African American	Hispanic/Latino	Other ³	White
	Total	76.8	34.2	42.0	43.6	49.0	5.2	3.0	3.5	3.4
Student's sex (2009)										
Female	80.3	39.7	47.3	45.3	53.5	5.1	3.2	3.3	3.2	3.6
Male	73.3	26.9	36.4	41.7	44.6	5.3	2.6	3.7	3.7	3.6
Student's native language (2009)										
English	75.5	33.9	39.5	42.4	48.8	4.8	3.1	3.7	3.4	3.6
English and a non-English language	79.8	‡	37.4	64.0	57.2	5.5	‡	3.5	4.7	4.5
Non-English	77.2	36.9!	49.1	52.9	63.3	5.4	1.7!	3.3	2.8	3.6
Parents' socioeconomic status (2009) ⁴										
Lowest fifth	57.1	23.7	36.1	25.3	25.0	4.4	2.0	2.9	2.1	2.5
Middle three-fifths	72.7	34.2	41.5	40.6	42.3	4.7	2.9	3.4	3.0	3.3
Highest fifth	89.7	55.9	71.8	64.3	69.0	5.9	4.2	5.0	4.6	4.1
Parents' highest level of education (2009)										
High school credential or less	73.9	25.0	37.9	35.2	35.6	4.9	2.3	3.0	2.4	3.1
Undergraduate degree	77.5	45.1	47.3	53.4	53.4	4.6	3.4	4.1	3.9	3.5
Graduate degree	94.6	49.1	71.2	59.1	71.2	6.8	4.5	4.4	4.6	4.3
Student's educational expectations (2009)										
High school credential	60.5	26.7!	26.2	17.2!	15.7	‡	‡	2.3	‡	1.9
Undergraduate degree	64.8	32.8	39.7	40.2	45.3	3.7	3.6	3.3	2.9	3.2
Graduate degree	87.2	45.0	57.0	54.5	62.3	6.4	2.9	4.2	3.8	4.0
Don't know	70.6	10.4!	33.6	41.9	39.4	3.9	2.1	2.5	3.5	3.1
Student's mathematics achievement (2009) ⁵										
Lowest fifth	‡	13.9	12.9	17.2!	14.8	‡	1.4	1.3	‡	2.1
Middle three-fifths	69.6	35.7	42.4	40.4	42.0	3.8	2.9	3.2	2.9	2.8
Highest fifth	90.3	75.4	76.6	74.8	77.3	6.3	3.9	4.6	4.5	4.6

See notes at end of table.

National Center for Education Statistics

Table 6.

Among fall 2009 ninth-graders who received a high school diploma by the fall of 2013, percentage of students in various racial/ethnic groups earning any high school credits in Advanced Placement (AP), International Baccalaureate (IB), and dual-enrollment courses and average number of high school credits earned, by selected student and parent characteristics: 2013—Continued

Selected student and parent characteristics	Percent earning any high school credits in AP, IB, and dual-enrollment courses ¹					Average high school credits earned by students earning any high school credits in AP, IB, and dual-enrollment courses ²				
	Asian	Black/African American	Hispanic/Latino	Other ³	White	Asian	Black/African American	Hispanic/Latino	Other ³	White
	Student's school sector (2012)									
Public	77.3	33.6	41.2	42.8	47.9	5.2	3.1	3.5	3.4	3.7
Regular	75.7	32.9	39.1	43.7	48.3	5.1	2.8	3.3	3.5	3.7
Charter or special-program school	96.1	45.9	74.8	39.5	54.5	6.3	5.0	4.6	3.4	4.0
Career/technical/vocational or alternative school	‡	‡	‡	‡	‡	1.9!	‡	‡	‡	‡
Private	70.0	47.9	67.5	60.3	58.9	4.6	2.1	3.4	3.2	3.1
Student's school region (2012)										
Northeast	71.0	23.4!	30.6!	33.9	47.7	4.3	3.9	3.8	3.5	3.7
Midwest	72.3	40.3	40.2	48.1	46.9	5.2	2.3	3.5	2.3	2.9
South	79.8	35.4	52.9	45.5	50.6	6.5	3.0	4.2	3.7	4.1
West	79.2	33.0	37.0	44.9	51.8	4.7	3.4	2.4	3.7	3.6
Student's school locale (2012)										
City	83.7	38.1	43.8	46.9	61.1	5.3	3.2	3.6	3.6	4.2
Suburb	72.4	38.7	46.5	52.9	53.8	5.3	3.1	3.9	3.5	3.6
Town	46.6!	24.7!	34.2	30.4!	39.8	3.6!	1.7!	1.8	2.6	2.6
Rural	72.8	26.9	35.2	39.2	42.4	4.7	2.6	3.1	3.5	3.5
Student's school size (2012)										
Fewer than 500 students	50.6	43.7!	26.8	28.2	36.9	3.7	2.9	3.2	2.6	2.7
500 to 1,199 students	72.7	27.5	48.6	34.4	46.4	4.9	2.9	3.7	3.4	3.4
1,200 or more students	80.3	36.3	42.8	52.9	57.0	5.4	3.3	3.4	3.6	4.0

See notes at end of table.

National Center for Education Statistics

Table 6.

Among fall 2009 ninth-graders who received a high school diploma by the fall of 2013, percentage of students in various racial/ethnic groups earning any high school credits in Advanced Placement (AP), International Baccalaureate (IB), and dual-enrollment courses and average number of high school credits earned, by selected student and parent characteristics: 2013—Continued

Selected student and parent characteristics	Percent earning any high school credits in AP, IB, and dual-enrollment courses ¹					Average high school credits earned by students earning any high school credits in AP, IB, and dual-enrollment courses ²				
	Asian	Black/African American	Hispanic/Latino	Other ³	White	Asian	Black/African American	Hispanic/Latino	Other ³	White
	Student's school percentage of students who received free or reduced-price lunch (2012) ⁶									
Lowest fifth (0–18 percent of students)	82.2	47.6	53.6	52.1	60.5	5.4	3.7	3.3	3.9	3.4
Middle three-fifths (19–67 percent of students)	76.4	33.0	41.3	45.3	45.7	5.4	3.0	3.5	3.3	3.8
Highest fifth (68–100 percent of students)	60.7	34.4	41.6	25.1	33.9	4.2	3.0	3.4	3.1	3.2
Student's school percentage of students who were non-Hispanic Black or African American, non-Hispanic American Indian or Alaska Native, and Hispanic or Latino students of any race (2009) ⁷										
Lowest fifth (0–7 percent of students)	72.3	38.1	22.2	44.1	43.7	5.2	‡	2.5	2.7	3.0
Middle three-fifths (8–64 percent of students)	72.7	31.7	44.9	47.5	53.5	5.4	2.8	3.2	3.4	3.9
Highest fifth (65–100 percent of students)	87.3	32.1	47.9	43.6	59.4	4.5	3.7	4.1	4.2	4.6
Student's school percentage of English language learners (2012)										
0 percent	85.5	45.2	57.9	40.6	40.8	6.1	3.0!	3.4	3.3	3.1
1 to 5 percent	73.0	30.6	45.0	41.8	50.5	5.7	3.1	4.2	3.1	3.6
More than 5 percent	76.8	37.0	40.3	46.9	55.2	4.8	3.1	3.0	3.8	4.1
Student's school offerings (2012) ⁸										
Offered AP and/or IB course only	80.5	27.4!	41.4	57.3	65.7	4.7	2.7	2.2	3.9	3.6
Offered dual-enrollment program only ⁹	‡	44.1!	‡	23.3!	18.7!	‡	2.0!	2.0!	2.0!	2.7
Offered AP or IB courses and dual-enrollment program ¹⁰	79.2	32.7	47.3	47.6	52.5	5.4	3.4	3.7	3.4	3.7
High school from which student received diploma (2013)										
Ninth-grade school	76.6	33.1	44.6	46.3	50.3	5.3	3.2	3.5	3.4	3.6
Another high school	79.2	38.4	30.6	26.4	37.2	4.2	2.3	3.3	3.2	3.0

See notes at end of table.

National Center for Education Statistics

Table 6.

Among fall 2009 ninth-graders who received a high school diploma by the fall of 2013, percentage of students in various racial/ethnic groups earning any high school credits in Advanced Placement (AP), International Baccalaureate (IB), and dual-enrollment courses and average number of high school credits earned, by selected student and parent characteristics: 2013—Continued

! Interpret data with caution. Estimate is unstable because the standard error is between 30 and 50 percent of the estimate.

‡ Reporting standards not met either because the standard error is greater than 50 percent of the estimate or because there were too few cases for a reliable estimate.

¹ Dual enrollment refers to taking postsecondary courses while also enrolled in high school. Students may take dual-enrollment courses through a program offered by their high school or independently. A high school dual-enrollment program is an organized system with special guidelines that might have to do with, for example, entrance or eligibility requirements, funding, and limits on coursetaking. These estimates include students who earned any credits in AP courses, IB courses, and dual-enrollment courses that were offered through a program, and dual-enrollment credits taken independently.

² These estimates include credits earned in AP courses, IB courses, and dual-enrollment courses that were offered through a program, and dual-enrollment courses taken independently. See footnote 1 for a definition of dual enrollment and dual-enrollment programs.

³ “Other” includes American Indian, Alaska Native, Native Hawaiian, other Pacific Islander, and individuals who indicated Two or more races or Other. It excludes students of Hispanic or Latino origin.

⁴ Parents’ socioeconomic status was calculated using parents’ education, occupation, and family income.

⁵ Student’s mathematics achievement was measured by a two-stage adaptive assessment in algebraic reasoning developed for HSLS:09.

⁶ To be eligible for free lunch under the National School Lunch Program (NSLP), a federally assisted meal program, a student must be from a household with an income at or below 130 percent of the poverty threshold. To be eligible for reduced-price lunch, a student must be from a household with an income between 130 percent and 185 percent of the poverty threshold. Therefore, the percentage of students receiving free or reduced-price lunch (FRPL) under the NSLP provides a proxy measure for the concentration of low-income students within a school. However, this percentage cannot be used as a strict measure of the percentage of children at or below 185 percent of the poverty threshold because some students are eligible for FRPL based on criteria other than income, and some schools and districts provide FRPL to all students regardless of income.

⁷ Students in these racial/ethnic groups tend to be underrepresented in AP, IB, and dual-enrollment courses. These data were only collected from students’ ninth-grade schools in the base year of the study; data were not collected for any schools students had transferred to as of the first follow-up data collection. Therefore, estimates are based on 2009 data for students who received their high school diploma from their ninth-grade school.

⁸ These data were only collected from students’ ninth-grade schools; data were not collected from any schools students had transferred to as of the first follow-up data collection. Estimates are based on 2012 data for students who received their high school diploma from their ninth-grade school.

⁹ Students and credits earned by students whose ninth-grade schools offered a dual-enrollment program but did not offer AP or IB courses are included in these estimates. Students and credits earned by students whose schools did not offer a dual-enrollment program are excluded even if they took dual-enrollment courses independently. See footnote 1 for a definition of dual enrollment and dual-enrollment programs.

¹⁰ Students and credits earned by students whose ninth-grade schools offered AP or IB courses and a dual-enrollment program are included in these estimates. Students and credits earned by students whose schools did not offer a dual-enrollment program are excluded even if they took dual-enrollment courses independently. See footnote 1 for a definition of dual enrollment and dual-enrollment programs.

NOTE: Estimates are based on fall 2009 ninth-graders who had received a high school diploma from any high school before September 2013, when the high school transcript data collection began. Students in this group whose exact graduation date is unknown are included. Students who had not received a diploma, received a diploma in the fall of 2013 or later, or for whom transcript data were incomplete are excluded. Students’ high school credits earned were collected from the high school transcripts and reflect Carnegie units. The Carnegie unit is a standard of measurement that represents one credit for 120 hours of classroom time over the course of a year at the secondary-school level in the United States, equivalent to the completion of a 1-year academic course taken one period a day, 5 days a week. All race categories exclude Hispanic or Latino origin unless specified. The lowest fifth, middle three-fifths, and highest fifth categories are based on the distribution of fall-term ninth-grade students. Data were weighted using the weight W3W1W2STUTR. This weight accounts for (1) base-year school nonresponse; (2) high school transcript nonresponse; and (3) student nonresponse in the base year, first follow-up, and 2013 Update.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School Longitudinal Study of 2009 (HSLS:09) 2013 Update and High School Transcripts Restricted-use Data File.

National Center for Education Statistics

Table S6.

Standard errors for table 6: Among fall 2009 ninth-graders who received a high school diploma by the fall of 2013, percentage of students in various racial/ethnic groups earning any high school credits in Advanced Placement (AP), International Baccalaureate (IB), and dual-enrollment courses and average number of high school credits earned, by selected student and parent characteristics: 2013

Selected student and parent characteristics	Percent earning any high school credits in AP, IB, and dual-enrollment courses					Average high school credits earned by students earning any high school credits in AP, IB, and dual-enrollment courses				
	Asian	Black/African American	Hispanic/Latino	Other	White	Asian	Black/African American	Hispanic/Latino	Other	White
	Total	3.89	2.79	2.54	3.24	1.48	0.25	0.21	0.23	0.21
Student's sex (2009)										
Female	4.27	3.99	3.33	4.83	1.76	0.28	0.28	0.24	0.24	0.11
Male	4.61	3.62	2.95	3.46	1.60	0.38	0.38	0.44	0.32	0.12
Student's native language (2009)										
English	5.41	2.90	3.31	3.24	1.52	0.40	0.22	0.42	0.23	0.10
English and a non-English language	5.46	†	5.43	13.86	8.59	0.46	†	0.52	0.76	0.67
Non-English	5.38	16.87	4.35	13.81	8.66	0.38	0.66	0.29	0.72	0.46
Parents' socioeconomic status (2009)										
Lowest fifth	10.72	4.50	3.98	6.55	2.63	0.76	0.31	0.32	0.47	0.23
Middle three-fifths	5.25	3.50	2.95	3.83	1.64	0.34	0.26	0.34	0.21	0.10
Highest fifth	3.10	5.10	5.56	5.24	1.58	0.40	0.65	0.48	0.38	0.14
Parents' highest level of education (2009)										
High school credential or less	5.67	3.82	3.01	4.31	1.91	0.43	0.26	0.33	0.23	0.16
Undergraduate degree	5.50	5.18	5.45	5.20	1.89	0.36	0.37	0.37	0.29	0.13
Graduate degree	1.86	6.48	6.36	6.63	1.79	0.56	0.56	0.56	0.49	0.17
Student's educational expectations (2009)										
High school credential	12.22	10.10	6.31	7.16	1.88	†	†	0.41	†	0.21
Undergraduate degree	9.03	5.66	4.49	5.10	2.00	0.37	0.58	0.38	0.38	0.11
Graduate degree	2.89	4.22	3.13	4.07	1.75	0.40	0.20	0.33	0.23	0.12
Don't know	7.65	3.15	4.23	5.89	2.37	0.48	0.35	0.32	0.51	0.17
Student's mathematics achievement (2009)										
Lowest fifth	†	4.09	3.52	6.02	1.99	†	0.20	0.17	†	0.28
Middle three-fifths	6.28	3.89	2.72	3.26	1.61	0.26	0.25	0.25	0.22	0.10
Highest fifth	2.86	5.77	4.87	4.85	1.72	0.37	0.53	0.49	0.34	0.14

See notes at end of table.

National Center for Education Statistics

Table S6.

Standard errors for table 6: Among fall 2009 ninth-graders who received a high school diploma by the fall of 2013, percentage of students in various racial/ethnic groups earning any high school credits in Advanced Placement (AP), International Baccalaureate (IB), and dual-enrollment courses and average number of high school credits earned, by selected student and parent characteristics: 2013
—Continued

Selected student and parent characteristics	Percent earning any high school credits in AP, IB, and dual-enrollment courses					Average high school credits earned by students earning any high school credits in AP, IB, and dual-enrollment courses				
		Black/African	Hispanic/				Black/African	Hispanic/		
	Asian	American	Latino	Other	White	Asian	American	Latino	Other	White
Student's school sector (2012)										
Public	4.09	3.00	2.60	3.45	1.61	0.27	0.23	0.25	0.23	0.11
Regular	4.13	3.13	2.39	3.67	1.66	0.29	0.21	0.26	0.24	0.11
Charter or special-program school	4.88	12.60	12.07	8.95	6.47	1.24	1.10	0.76	0.82	0.53
Career/technical/vocational or alternative school	†	†	†	†	†	0.81	†	†	†	†
Private	9.04	9.01	8.73	6.21	4.26	0.87	0.32	0.35	0.42	0.15
Student's school region (2012)										
Northeast	13.66	7.82	9.70	6.16	3.46	0.39	0.67	0.71	0.66	0.25
Midwest	4.87	5.34	4.46	4.95	3.08	0.52	0.36	0.51	0.27	0.16
South	4.92	3.95	3.36	4.28	1.90	0.40	0.33	0.40	0.30	0.15
West	6.06	6.45	4.48	7.12	4.51	0.48	0.53	0.22	0.49	0.24
Student's school locale (2012)										
City	3.65	5.44	4.19	4.72	2.62	0.42	0.41	0.34	0.32	0.20
Suburb	7.54	4.53	4.04	4.20	1.93	0.40	0.41	0.41	0.35	0.19
Town	17.84	7.91	8.94	9.18	2.57	1.30	0.84	0.53	0.45	0.16
Rural	8.73	5.57	6.08	6.18	3.33	0.49	0.36	0.30	0.59	0.18
Student's school size (2012)										
Fewer than 500 students	12.69	13.54	6.78	5.66	3.83	0.46	0.47	0.76	0.44	0.17
500 to 1,199 students	9.58	4.22	8.46	6.99	2.48	0.81	0.43	0.60	0.40	0.20
1,200 or more students	4.20	4.24	2.93	4.10	1.80	0.30	0.36	0.27	0.28	0.12

See notes at end of table.

National Center for Education Statistics

Table S6.

Standard errors for table 6: Among fall 2009 ninth-graders who received a high school diploma by the fall of 2013, percentage of students in various racial/ethnic groups earning any high school credits in Advanced Placement (AP), International Baccalaureate (IB), and dual-enrollment courses and average number of high school credits earned, by selected student and parent characteristics: 2013
—Continued

Selected student and parent characteristics	Percent earning any high school credits in AP, IB, and dual-enrollment courses					Average high school credits earned by students earning any high school credits in AP, IB, and dual-enrollment courses				
	Asian	Black/African American	Hispanic/Latino	Other	White	Asian	Black/African American	Hispanic/Latino	Other	White
Student's school percentage of students who received free or reduced-price lunch (2012)										
Lowest fifth (0–18 percent of students)	4.51	6.28	6.96	5.14	2.43	0.43	0.34	0.45	0.43	0.14
Middle three-fifths (19–67 percent of students)	4.80	4.19	3.64	3.95	2.04	0.45	0.38	0.34	0.29	0.14
Highest fifth (68–100 percent of students)	14.79	5.51	4.50	7.28	3.73	0.43	0.45	0.44	0.77	0.32
Student's school percentage of students who were non-Hispanic Black or African American, non-Hispanic American Indian or Alaska Native, and Hispanic or Latino students of any race (2009)										
Lowest fifth (0–7 percent of students)	7.88	11.08	5.23	5.57	3.05	0.83	†	0.40	0.34	0.18
Middle three-fifths (8–64 percent of students)	5.14	4.00	3.17	4.13	1.91	0.39	0.21	0.25	0.27	0.14
Highest fifth (65–100 percent of students)	9.58	5.76	6.08	12.98	7.60	0.77	0.65	0.47	0.82	0.66
Student's school percentage of English language learners (2012)										
0 percent	8.25	9.11	10.40	5.77	3.71	0.79	1.00	0.36	0.42	0.17
1 to 5 percent	5.97	3.43	4.12	3.86	1.91	0.60	0.30	0.40	0.25	0.14
More than 5 percent	5.04	6.01	3.64	6.34	3.19	0.31	0.45	0.25	0.49	0.23
Student's school offerings (2012)										
Offers AP and/or IB course only	5.45	9.20	6.36	8.59	3.87	0.30	0.47	0.31	0.58	0.25
Offers dual-enrollment program only	†	20.46	†	11.40	6.32	†	0.81	0.89	0.75	0.74
Offers AP or IB courses and dual-enrollment program	4.74	3.20	3.07	4.44	1.51	0.37	0.33	0.28	0.25	0.12
High school from which student received diploma (2013)										
Ninth-grade school	4.23	2.93	2.74	3.74	1.58	0.27	0.27	0.24	0.23	0.10
Another high school	6.31	6.89	5.01	5.68	2.37	0.57	0.46	0.65	0.63	0.18

† Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School Longitudinal Study of 2009 (HLS:09) 2013 Update and High School Transcripts Restricted-use Data File.

National Center for Education Statistics

Table 7.

Among fall 2009 ninth-graders who received a high school diploma by the fall of 2013, percentage of students in different socioeconomic status (SES) groups earning any high school credits in Advanced Placement (AP), International Baccalaureate (IB), and dual-enrollment courses and average number of high school credits earned, by selected student and parent characteristics: 2013

Selected student and parent characteristics	Percent earning any high school credits in AP, IB, and dual-enrollment courses ¹			Average high school credits earned by students earning any high school credits in AP, IB, and dual-enrollment courses ²		
	Lowest fifth	Middle three-fifths	Highest fifth	Lowest fifth	Middle three-fifths	Highest fifth
	SES ³	SES ³	SES ³	SES ³	SES ³	SES ³
Total	30.9	41.9	69.3	2.8	3.3	4.3
Student's sex (2009)						
Female	35.8	46.1	74.5	2.7	3.2	4.4
Male	25.6	37.6	64.2	2.9	3.5	4.3
Student's race/ethnicity (2009) ⁴						
Asian	57.1	72.7	89.7	4.4	4.7	5.9
Black/African American	23.7	34.2	55.9	2.0	2.9	4.2
Hispanic/Latino	36.1	41.5	71.8	2.9	3.4	5.0
Other	25.3	40.6	64.3	2.1	3.0	4.6
White	25.0	42.3	69.0	2.5	3.3	4.1
Student's native language (2009)						
English	22.6	40.9	67.9	2.4	3.3	4.2
English and a non-English language	33.1	45.5	81.3	2.9	4.2	5.5
Non-English	49.6	51.0	86.3	3.1	3.5	5.8
Parents' highest level of education (2009)						
High school credential or less	32.4	37.4	‡	2.7	3.2	‡
Undergraduate degree	27.4	47.1	67.5	2.1	3.5	4.0
Graduate degree	‡	59.9	71.9	‡	3.6	4.7
Student's educational expectations (2009)						
High school credential	20.2	19.7	39.9	2.1	2.3	2.2
Undergraduate degree	29.3	40.5	62.3	2.4	3.0	4.0
Graduate degree	43.6	54.1	75.4	3.4	3.7	4.7
Don't know	26.7	32.8	62.2	2.3	2.9	3.5
Student's mathematics achievement (2009) ⁵						
Lowest fifth	12.0	13.6	31.5	1.5	1.9	1.8
Middle three-fifths	32.7	39.5	58.7	2.7	2.8	3.5
Highest fifth	72.5	72.7	84.9	3.6	4.5	5.1
Student's school sector (2012)						
Public	29.9	42.0	69.2	2.8	3.4	4.5
Regular	27.5	42.3	68.6	2.5	3.3	4.5
Charter or special-program school	65.8	50.8	80.4	4.2	4.1	5.8
Career/technical/vocational or alternative school	‡	‡	‡	‡	2.0!	‡
Private	69.9 !	44.4	68.8	2.7	2.7	3.3
Student's school region (2012)						
Northeast	34.4 !	36.0	63.2	3.6	3.5	4.0
Midwest	29.5	41.8	67.2	2.3	2.5	3.7
South	29.8	44.7	74.3	2.8	3.8	4.9
West	32.1	43.2	69.5	2.4	3.1	4.3

See notes at end of table.

National Center for Education Statistics

Table 7.

Among fall 2009 ninth-graders who received a high school diploma by the fall of 2013, percentage of students in different socioeconomic status (SES) groups earning any high school credits in Advanced Placement (AP), International Baccalaureate (IB), and dual-enrollment courses and average number of high school credits earned, by selected student and parent characteristics: 2013—Continued

Selected student and parent characteristics	Percent earning any high school credits in AP, IB, and dual-enrollment courses ¹			Average high school credits earned by students earning any high school credits in AP, IB, and dual-enrollment courses ²		
	Lowest fifth	Middle three-fifths	Highest fifth	Lowest fifth	Middle three-fifths	Highest fifth
	SES ³	SES ³	SES ³	SES ³	SES ³	SES ³
Student's school locale (2012)						
City	40.0	46.8	76.0	3.2	3.5	5.0
Suburb	34.1	46.0	72.1	2.6	3.6	4.2
Town	21.5	35.0	61.4	1.7	2.3	3.1
Rural	18.9	37.4	61.6	2.3	3.2	4.0
Student's school size (2012)						
Fewer than 500 students	17.7	31.5	56.2	2.2	2.7	3.0
500 to 1,199 students	32.9	38.9	68.0	3.4	3.1	4.1
1,200 or more students	33.3	47.5	73.8	2.5	3.6	4.8
Student's school percentage of students who received free or reduced-price lunch (2012) ⁶						
Lowest fifth (0–18 percent of students)	50.1	50.3	70.2	2.9	3.3	3.9
Middle three-fifths (19–67 percent of students)	28.2	41.8	68.2	2.8	3.4	4.7
Highest fifth (68–100 percent of students)	32.4	37.7	59.3	2.7	3.3	5.0
Student's school percentage of students who were non-Hispanic Black or African American, non-Hispanic American Indian or Alaska Native, and Hispanic or Latino students of any race (2009) ⁷						
Lowest fifth (0–7 percent of students)	20.1	38.4	62.0	2.9	2.7	3.4
Middle three-fifths (8–64 percent of students)	29.3	45.5	72.3	2.5	3.4	4.6
Highest fifth (65–100 percent of students)	43.6	43.2	79.4	3.4	4.2	5.2
Student's school percentage of English language learners (2012)						
0 percent	30.4	35.4	64.6	2.4	2.9	3.9
1 to 5 percent	28.4	42.9	69.2	3.3	3.4	4.3
More than 5 percent	34.0	46.1	72.1	2.4	3.5	4.9
Student's school offerings (2012) ⁸						
Offered AP and/or IB course only	32.2	47.3	77.1	2.1	2.9	4.1
Offered dual-enrollment program only ⁹	15.7 !	20.7	29.0 !	1.6	2.4	3.3 !
Offered AP or IB courses and dual-enrollment program ¹⁰	35.2	45.6	71.1	2.9	3.5	4.5
High school from which student received diploma (2013)						
Ninth-grade school	32.4	43.4	69.8	2.8	3.4	4.4
Another high school	24.2	32.6	64.5	2.4	2.7	3.9

See notes at end of table.

National Center for Education Statistics

Table 7.

Among fall 2009 ninth-graders who received a high school diploma by the fall of 2013, percentage of students in different socioeconomic status (SES) groups earning any high school credits in Advanced Placement (AP), International Baccalaureate (IB), and dual-enrollment courses and average number of high school credits earned, by selected student and parent characteristics: 2013—Continued

! Interpret data with caution. Estimate is unstable because the standard error is between 30 and 50 percent of the estimate.

‡ Reporting standards not met either because the standard error is greater than 50 percent of the estimate or because there were too few cases for a reliable estimate.

¹ Dual enrollment refers to taking postsecondary courses while also enrolled in high school. Students may take dual-enrollment courses through a program offered by their high school or independently. A high school dual-enrollment program is an organized system with special guidelines that might have to do with, for example, entrance or eligibility requirements, funding, and limits on coursetaking. These estimates include students who earned any credits in AP courses, IB courses, and dual-enrollment courses that were offered through a program, and dual-enrollment credits taken independently.

² These estimates include credits earned in AP courses, IB courses, and dual-enrollment courses that were offered through a program, and dual-enrollment courses taken independently. See footnote 1 for a definition of dual enrollment and dual-enrollment programs.

³ Parents' socioeconomic status was calculated using parents' education, occupation, and family income.

⁴ All race categories exclude Hispanic or Latino origin unless specified. "Other" includes American Indian, Alaska Native, Native Hawaiian, other Pacific Islander, and individuals who indicated Two or more races or Other.

⁵ Student's mathematics achievement was measured by a two-stage adaptive assessment in algebraic reasoning developed for HSLs:09.

⁶ To be eligible for free lunch under the National School Lunch Program (NSLP), a federally assisted meal program, a student must be from a household with an income at or below 130 percent of the poverty threshold. To be eligible for reduced-price lunch, a student must be from a household with an income between 130 percent and 185 percent of the poverty threshold. Therefore, the percentage of students receiving free or reduced-price lunch (FRPL) under the NSLP provides a proxy measure for the concentration of low-income students within a school. However, this percentage cannot be used as a strict measure of the percentage of children at or below 185 percent of the poverty threshold because some students are eligible for FRPL based on criteria other than income, and some schools and districts provide FRPL to all students regardless of income.

⁷ Students in these racial/ethnic groups tend to be underrepresented in AP, IB, and dual-enrollment courses. These data were only collected from students' ninth-grade schools in the base year of the study; data were not collected for any schools students had transferred to as of the first follow-up data collection. Therefore, estimates are based on 2009 data for students who received their high school diploma from their ninth-grade school.

⁸ These data were only collected from students' ninth-grade schools; data were not collected from any schools students had transferred to as of the first follow-up data collection. Estimates are based on 2012 data for students who received their high school diploma from their ninth-grade school.

⁹ Students and credits earned by students whose ninth-grade schools offered a dual-enrollment program but did not offer AP or IB courses are included in these estimates. Students and credits earned by students whose schools did not offer a dual-enrollment program are excluded even if they took dual-enrollment courses independently. See footnote 1 for a definition of dual enrollment and dual-enrollment programs.

¹⁰ Students and credits earned by students whose ninth-grade schools offered AP or IB courses and a dual-enrollment program are included in these estimates. Students and credits earned by students whose schools did not offer a dual-enrollment program are excluded even if they took dual-enrollment courses independently. See footnote 1 for a definition of dual enrollment and dual-enrollment programs. NOTE: Estimates are based on fall 2009 ninth-graders who had received a high school diploma from any high school before September 2013, when the high school transcript data collection began. Students in this group whose exact graduation date is unknown are included. Students who had not received a diploma, received a diploma in the fall of 2013 or later, or for whom transcript data were incomplete are excluded. Students' high school credits earned were collected from the high school transcripts and reflect Carnegie units. The Carnegie unit is a standard of measurement that represents one credit for 120 hours of classroom time over the course of a year at the secondary-school level in the United States, equivalent to the completion of a 1-year academic course taken one period a day, 5 days a week. The lowest fifth, middle three-fifths, and highest fifth categories are based on the distribution of fall-term ninth-grade students. Data were weighted using the weight W3W1W2STUTR. This weight accounts for (1) base-year school nonresponse; (2) high school transcript nonresponse; and (3) student nonresponse in the base year, first follow-up, and 2013 Update.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School Longitudinal Study of 2009 (HSLs:09) 2013 Update and High School Transcripts Restricted-use Data File.

National Center for Education Statistics

Table S7.

Standard errors for table 7: Among fall 2009 ninth-graders who received a high school diploma by the fall of 2013, percentage of students in different socioeconomic status (SES) groups earning any high school credits in Advanced Placement (AP), International Baccalaureate (IB), and dual-enrollment courses and average number of high school credits earned, by selected student and parent characteristics: 2013

Selected student and parent characteristics	Percent earning any high school credits in AP, IB, and dual-enrollment courses			Average high school credits earned by students earning any high school credits in AP, IB, and dual-enrollment courses		
	Lowest fifth SES	Middle three-fifths SES	Highest fifth SES	Lowest fifth SES	Middle three-fifths SES	Highest fifth SES
	Total	2.42	1.45	1.52	0.19	0.10
Student's sex (2009)						
Female	3.07	1.81	1.87	0.21	0.11	0.16
Male	2.79	1.73	1.96	0.27	0.19	0.17
Student's race/ethnicity (2009)						
Asian	10.72	5.25	3.10	0.76	0.34	0.40
Black/African American	4.50	3.50	5.10	0.31	0.26	0.65
Hispanic/Latino	3.98	2.95	5.56	0.32	0.34	0.48
Other	6.55	3.83	5.24	0.47	0.21	0.38
White	2.63	1.64	1.58	0.23	0.10	0.14
Student's native language (2009)						
English	1.98	1.47	1.56	0.16	0.10	0.15
English and a non-English language	7.45	4.74	5.81	0.48	0.49	0.46
Non-English	5.58	4.24	3.51	0.32	0.29	0.44
Parents' highest level of education (2009)						
High school credential or less	2.39	1.81	†	0.19	0.16	†
Undergraduate degree	6.53	2.09	2.02	0.29	0.13	0.17
Graduate degree	†	4.67	1.59	†	0.31	0.17
Student's educational expectations (2009)						
High school credential	5.44	2.69	7.48	0.49	0.29	0.33
Undergraduate degree	4.33	2.01	2.67	0.27	0.14	0.23
Graduate degree	4.10	2.11	1.71	0.29	0.13	0.16
Don't know	4.60	2.13	3.23	0.31	0.19	0.22
Student's mathematics achievement (2009)						
Lowest fifth	2.74	1.94	4.99	0.36	0.28	0.22
Middle three-fifths	2.57	1.61	2.00	0.21	0.10	0.20
Highest fifth	7.38	2.17	1.62	0.31	0.20	0.17
Student's school sector (2012)						
Public						
Regular	2.26	1.56	1.75	0.20	0.11	0.16
Charter or special-program school	2.13	1.59	1.86	0.14	0.12	0.16
Career/technical/vocational or alternative school	14.87	6.44	6.25	0.82	0.53	0.89
Private	†	†	†	†	0.93	†
Private	24.02	4.08	3.30	0.67	0.15	0.19
Student's school region (2012)						
Northeast	10.98	4.04	3.63	0.44	0.27	0.31
Midwest	3.29	2.76	3.07	0.28	0.15	0.24
South	3.07	2.11	2.22	0.34	0.21	0.21
West	5.65	3.88	3.67	0.28	0.19	0.30

See notes at end of table.

National Center for Education Statistics

Table S7.

Standard errors for table 7: Among fall 2009 ninth-graders who received a high school diploma by the fall of 2013, percentage of students in different socioeconomic status (SES) groups earning any high school credits in Advanced Placement (AP), International Baccalaureate (IB), and dual-enrollment courses and average number of high school credits earned, by selected student and parent characteristics: 2013—Continued

Selected student and parent characteristics	Percent earning any high school credits in AP, IB, and dual-enrollment courses			Average high school credits earned by students earning any high school credits in AP, IB, and dual-enrollment courses		
	Lowest fifth	Middle three-fifths	Highest fifth	Lowest fifth	Middle three-fifths	Highest fifth
	SES	SES	SES	SES	SES	SES
Student's school locale (2012)						
City	4.88	3.34	2.85	0.34	0.16	0.27
Suburb	3.97	2.16	2.27	0.27	0.26	0.19
Town	4.95	2.41	4.39	0.21	0.15	0.39
Rural	3.16	2.97	3.58	0.28	0.17	0.23
Student's school size (2012)						
Fewer than 500 students	4.34	3.73	4.53	0.23	0.20	0.24
500 to 1,199 students	6.24	2.45	2.98	0.47	0.22	0.27
1,200 or more students	3.08	2.15	1.93	0.19	0.15	0.17
Student's school percentage of students who received free or reduced-price lunch (2012)						
Lowest fifth (0–18 percent of students)	13.05	2.65	2.35	0.55	0.19	0.17
Middle three-fifths (19–67 percent of students)	2.87	2.01	2.11	0.25	0.13	0.21
Highest fifth (68–100 percent of students)	3.88	3.49	7.76	0.37	0.39	0.68
Student's school percentage of students who were non-Hispanic Black or African American, non-Hispanic American Indian or Alaska Native, and Hispanic or Latino students of any race (2009)						
Lowest fifth (0–7 percent of students)	4.26	3.21	3.36	0.57	0.18	0.24
Middle three-fifths (8–64 percent of students)	2.94	2.16	1.96	0.16	0.12	0.17
Highest fifth (65–100 percent of students)	6.91	5.65	6.52	0.48	0.51	0.62
Student's school percentage of English language learners (2012)						
0 percent	8.21	3.47	3.76	0.36	0.20	0.32
1 to 5 percent	3.60	1.98	2.03	0.37	0.16	0.19
More than 5 percent	3.76	2.73	3.12	0.19	0.21	0.29
Student's school offerings (2012)						
Offers AP and/or IB course only	8.08	5.61	3.04	0.38	0.30	0.30
Offers dual-enrollment program only	6.33	5.78	10.77	0.28	0.41	1.27
Offers AP or IB courses and dual-enrollment program	2.83	1.70	1.69	0.24	0.13	0.17
High school from which student received diploma (2013)						
Ninth-grade school	2.45	1.65	1.60	0.20	0.11	0.14
Another high school	5.04	2.93	4.10	0.33	0.21	0.41

† Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School Longitudinal Study of 2009 (HSL:09) 2013 Update and High School Transcripts Restricted-use Data File.

National Center for Education Statistics

Table 8.

Among fall 2009 ninth-graders who took selected Advanced Placement (AP) exams and received a high school diploma by the fall of 2013, percentage of test takers scoring 3 or above, by selected student and parent characteristics: 2013

Selected student and parent characteristics	Percent of test takers scoring 3 or above on the AP exam			
	AP Calculus AB exam	AP Biology exam	AP English literature and composition exam	AP U.S. History exam
Total	53.4	50.3	52.8	49.6
Student's sex (2009)				
Female	50.3	45.1	53.9	45.6
Male	56.3	57.9	51.1	54.4
Student's race/ethnicity (2009) ¹				
Asian	63.8	62.3	53.4	53.3
Black/African American	‡	‡	31.9!	38.2!
Hispanic/Latino	40.6	29.0!	31.3!	21.4!
Other	70.0	56.3	69.5	46.6
White	55.4	57.1	60.7	61.3
Student's native language (2009)				
English	55.5	51.1	56.9	53.8
English and a non-English language	48.9	47.1	62.4	46.3
Non-English	46.0	46.2	25.4!	26.3!
Parents' socioeconomic status (2009) ²				
Lowest fifth	17.9!	‡	‡	‡
Middle three-fifths	50.3	48.3	50.1	42.7
Highest fifth	65.9	59.6	70.2	68.5
Parents' highest level of education (2009)				
High school credential or less	39.7	35.3	41.1	39.2
Undergraduate degree	49.5	50.3	58.0	47.6
Graduate degree	75.6	63.0	67.7	71.2
Student's educational expectations (2009)				
High school credential	‡	‡	‡	‡
Undergraduate degree	46.2	48.6	50.2	43.6
Graduate degree	55.3	50.6	56.2	52.3
Don't know	53.1	47.4	36.9	46.6
Student's mathematics achievement (2009) ³				
Lowest fifth	‡	‡	‡	‡
Middle three-fifths	30.0	29.0	33.8	32.0
Highest fifth	67.3	67.5	71.5	65.7

See notes at end of table.

National Center for Education Statistics

Table 8.

Among fall 2009 ninth-graders who took selected Advanced Placement (AP) exams and received a high school diploma by the fall of 2013, percentage of test takers scoring 3 or above, by selected student and parent characteristics: 2013—Continued

Selected student and parent characteristics	Percent of test takers scoring 3 or above on the AP exam			
	AP Calculus AB exam	AP Biology exam	AP English literature and composition exam	AP U.S. History exam
Student's school sector (2012)				
Public	51.6	49.3	50.9	48.0
Regular	51.6	49.5	55.5	53.0
Charter or special-program school	56.4	47.5 !	‡	‡
Career/technical/vocational or alternative school	‡	‡	‡	‡
Private	69.3	69.8	79.1	68.7
Student's school region (2012)				
Northeast	59.1	53.8	49.5	57.6
Midwest	49.5	50.0	57.2	57.5
South	55.5	46.7	50.5	44.3
West	48.3	53.1	60.6	48.2
Student's school locale (2012)				
City	48.1	43.8	45.4	37.9
Suburb	60.3	48.5	58.2	60.1
Town	42.9	53.7	54.5	42.9
Rural	56.7	68.2	57.2	54.1
Student's school size (2012)				
Fewer than 500 students	50.1	66.8	69.7	59.9
500 to 1,199 students	47.4	50.6	43.2	44.9
1,200 or more students	58.0	49.8	58.7	51.2
Student's school percentage of students who received free or reduced-price lunch (2012) ⁴				
Lowest fifth (0–18 percent of students)	63.4	66.3	79.8	68.4
Middle three-fifths (19–67 percent of students)	58.6	49.7	51.8	49.8
Highest fifth (68–100 percent of students)	18.0 !	‡	25.2	15.1 !
Student's school percentage of students who were non-Hispanic Black or African American, non-Hispanic American Indian or Alaska Native, and Hispanic or Latino students of any race (2009) ⁵				
Lowest fifth (0–7 percent of students)	63.9	59.5	59.8	63.5
Middle three-fifths (8–64 percent of students)	53.8	57.4	64.1	60.6
Highest fifth (65–100 percent of students)	40.0 !	‡	30.2 !	13.0 !

See notes at end of table.

National Center for Education Statistics

Table 8.

Among fall 2009 ninth-graders who took selected Advanced Placement (AP) exams and received a high school diploma by the fall of 2013, percentage of test takers scoring 3 or above, by selected student and parent characteristics: 2013—Continued

Selected student and parent characteristics	Percent of test takers scoring 3 or above on the AP exam			
	AP Calculus AB exam	AP Biology exam	AP English literature and composition exam	AP U.S. History exam
Student's school percentage of English language learners (2012)				
0 percent	70.7	73.5	72.2	67.3
1 to 5 percent	52.3	46.4	52.8	49.8
More than 5 percent	47.0	46.4	48.0	41.6
High school from which student received diploma (2013)				
Ninth-grade school	53.2	50.9	53.9	50.4
Another high school	56.9	39.7	39.1	39.1

! Interpret data with caution. Estimate is unstable because the standard error is between 30 and 50 percent of the estimate.

‡ Reporting standards not met either because the standard error is greater than 50 percent of the estimate or because there were too few cases for a reliable estimate.

¹ All race categories exclude Hispanic or Latino origin unless specified. "Other" includes American Indian, Alaska Native, Native Hawaiian, other Pacific Islander, and individuals who indicated Two or more races or Other.

² Parents' socioeconomic status was calculated using parents' education, occupation, and family income.

³ Student's mathematics achievement was measured by a two-stage adaptive assessment in algebraic reasoning developed for HSLs:09.

⁴ To be eligible for free lunch under the National School Lunch Program (NSLP), a federally assisted meal program, a student must be from a household with an income at or below 130 percent of the poverty threshold. To be eligible for reduced-price lunch, a student must be from a household with an income between 130 percent and 185 percent of the poverty threshold. Therefore, the percentage of students receiving free or reduced-price lunch (FRPL) under the NSLP provides a proxy measure for the concentration of low-income students within a school. However, this percentage cannot be used as a strict measure of the percentage of children at or below 185 percent of the poverty threshold because some students are eligible for FRPL based on criteria other than income, and some schools and districts provide FRPL to all students regardless of income.

⁵ Students in these racial/ethnic groups tend to be underrepresented in AP, IB, and dual-enrollment courses. These data were only collected from students' ninth-grade schools in the base year of the study; data were not collected for any schools students had transferred to as of the first follow-up data collection. Therefore, estimates are based on 2009 data for students who received their high school diploma from their ninth-grade school.

NOTE: Estimates are based on fall 2009 ninth-graders who had taken selected Advanced Placement exams and received a high school diploma from any high school before September 2013, when the high school transcript data collection began. Students in this group whose exact graduation date is unknown are included. Students who had not received a diploma, received a diploma in the fall of 2013 or later, or for whom transcript data were incomplete are excluded. Students' AP exam scores were collected from the College Board and high school transcripts. The lowest fifth, middle three-fifths, and highest fifth categories are based on the distribution of fall-term ninth-grade students. Data were weighted using the weight W3W1W2STUTR. This weight accounts for (1) base-year school nonresponse; (2) high school transcript nonresponse; and (3) student nonresponse in the base year, first follow-up, and 2013 Update.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School Longitudinal Study of 2009 (HSLs:09) 2013 Update and High School Transcripts Restricted-use Data File.

National Center for Education Statistics

Table S8.

Standard errors for table 8: Among fall 2009 ninth-graders who took selected Advanced Placement (AP) exams and received a high school diploma by the fall of 2013, percentage of test takers scoring 3 or above, by selected student and parent characteristics: 2013

Selected student and parent characteristics	Percent of test takers scoring 3 or above on the AP exam			
	AP Calculus AB exam	AP Biology exam	AP English literature and composition exam	AP U.S. History exam
Total	4.06	4.57	4.07	4.10
Student's sex (2009)				
Female	5.32	6.10	5.55	4.72
Male	4.56	6.53	4.74	4.54
Student's race/ethnicity (2009)				
Asian	8.09	9.19	11.80	7.70
Black/African American	†	†	11.36	12.91
Hispanic/Latino	10.27	11.81	9.63	6.94
Other	11.09	13.26	8.13	7.23
White	4.53	4.94	3.67	4.12
Student's native language (2009)				
English	4.50	4.74	3.36	4.08
English and a non-English language	9.64	13.02	8.15	10.78
Non-English	11.76	12.27	12.15	8.66
Parents' socioeconomic status (2009)				
Lowest fifth	7.01	†	†	†
Middle three-fifths	6.00	6.89	4.26	5.90
Highest fifth	4.23	6.76	3.85	3.53
Parents' highest level of education (2009)				
High school credential or less	7.24	7.96	6.20	8.54
Undergraduate degree	7.44	7.47	5.04	5.02
Graduate degree	4.39	6.73	5.42	3.93
Student's educational expectations (2009)				
High school credential	†	†	†	†
Undergraduate degree	7.58	9.23	6.16	5.72
Graduate degree	4.70	5.74	5.18	4.99
Don't know	9.11	9.53	7.54	6.88
Student's mathematics achievement (2009)				
Lowest fifth	†	†	†	†
Middle three-fifths	7.67	7.20	5.36	4.85
Highest fifth	3.42	4.47	4.27	3.92

See notes at end of table.

National Center for Education Statistics

Table S8.

Standard errors for table 8: Among fall 2009 ninth-graders who took selected Advanced Placement (AP) exams and received a high school diploma by the fall of 2013, percentage of test takers scoring 3 or above, by selected student and parent characteristics: 2013—Continued

Selected student and parent characteristics	Percent of test takers scoring 3 or above on the AP exam			
	AP Calculus AB exam	AP Biology exam	AP English literature and composition exam	AP U.S. History exam
Student's school sector (2012)				
Public	4.55	5.13	4.21	4.52
Regular	4.96	4.75	3.67	4.43
Charter or special-program school	14.67	23.08	†	†
Career/technical/vocational or alternative school	†	†	†	†
Private	5.41	6.06	6.05	6.09
Student's school region (2012)				
Northeast	9.15	7.83	12.73	12.17
Midwest	9.24	8.82	9.79	7.27
South	4.91	7.65	4.85	3.90
West	11.68	11.90	8.96	12.39
Student's school locale (2012)				
City	6.48	8.51	7.14	6.24
Suburb	6.71	5.93	5.38	5.49
Town	11.90	14.78	13.03	9.41
Rural	10.88	9.73	5.83	9.18
Student's school size (2012)				
Fewer than 500 students	9.44	9.39	6.62	8.46
500 to 1,199 students	6.54	8.82	7.30	8.94
1,200 or more students	5.75	5.81	4.58	5.35
Student's school percentage of students who received free or reduced-price lunch (2012)				
Lowest fifth (0–18 percent of students)	5.07	6.30	3.97	5.01
Middle three-fifths (19–67 percent of students)	5.94	7.38	5.43	6.12
Highest fifth (68–100 percent of students)	7.66	†	6.80	6.11
Student's school percentage of students who were non-Hispanic Black or African American, non-Hispanic American Indian or Alaska Native, and Hispanic or Latino students of any race (2009)				
Lowest fifth (0–7 percent of students)	7.50	10.39	6.30	6.84
Middle three-fifths (8–64 percent of students)	4.79	4.92	3.73	4.06
Highest fifth (65–100 percent of students)	14.84	†	9.43	5.74

See notes at end of table.

National Center for Education Statistics

Table S8.

Standard errors for table 8: Among fall 2009 ninth-graders who took selected Advanced Placement (AP) exams and received a high school diploma by the fall of 2013, percentage of test takers scoring 3 or above, by selected student and parent characteristics: 2013—Continued

Selected student and parent characteristics	Percent of test takers scoring 3 or above on the AP exam			
	AP Calculus AB exam	AP Biology exam	AP English literature and composition exam	AP U.S. History exam
Student's school percentage of English language learners (2012)				
0 percent	6.60	7.59	6.66	8.02
1 to 5 percent	4.94	6.22	5.38	5.10
More than 5 percent	9.37	8.52	6.76	9.15
High school from which student received diploma (2013)				
Ninth-grade school	4.23	4.70	4.33	4.33
Another high school	11.84	11.64	9.28	7.42

† Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School Longitudinal Study of 2009 (HLS:09) 2013 Update and High School Transcripts Restricted-use Data File.

National Center for Education Statistics

Table 9.

Among fall 2009 ninth-graders who took either the SAT or ACT college entrance exam and received a high school diploma by the fall of 2013, average SAT or ACT exam score on the SAT scale, by number of high school credits earned in Advanced Placement (AP), International Baccalaureate (IB), and dual-enrollment courses and selected student and parent characteristics: 2013

Selected student and parent characteristics	Average SAT or ACT exam score on the SAT scale ¹		
	Earned no AP, IB, or dual-enrollment credits ²	Earned up to 3 AP, IB, and dual-enrollment credits ³	Earned more than 3 AP, IB, and dual-enrollment credits ⁴
Total	881	1006	1145
Student's sex (2009)			
Female	870	983	1109
Male	894	1038	1186
Student's race/ethnicity (2009) ⁵			
Asian	860	1004	1202
Black/African American	790	866	1055
Hispanic/Latino	831	928	1049
Other	841	993	1141
White	928	1052	1180
Student's native language (2009)			
English	894	1021	1156
English and a non-English language	814	987	1143
Non-English	778	905	1077
Parents' socioeconomic status (2009) ⁶			
Lowest fifth	800	888	994
Middle three-fifths	878	985	1120
Highest fifth	971	1080	1210
Parents' highest level of education (2009)			
High school credential or less	843	955	1079
Undergraduate degree	914	1026	1151
Graduate degree	955	1087	1227
Student's educational expectations (2009)			
High school credential	809	869	‡
Undergraduate degree	898	1007	1113
Graduate degree	922	1025	1157
Don't know	831	981	1144
Student's mathematics achievement (2009) ⁷			
Lowest fifth	731	808	‡
Middle three-fifths	884	963	1049
Highest fifth	1057	1123	1228
Student's school sector (2012)			
Public	877	1001	1140
Regular	889	1007	1147
Charter or special-program school	759	941	1108
Career/technical/vocational or alternative school	688	‡	981 !
Private	970	1085	1249

See notes at end of table.

National Center for Education Statistics

Table 9.

Among fall 2009 ninth-graders who took either the SAT or ACT college entrance exam and received a high school diploma by the fall of 2013, average SAT or ACT exam score on the SAT scale, by number of high school credits earned in Advanced Placement (AP), International Baccalaureate (IB), and dual-enrollment courses and selected student and parent characteristics: 2013—Continued

Selected student and parent characteristics	Average SAT or ACT exam score on the SAT scale ¹		
	Earned no AP, IB, or dual-enrollment credits ²	Earned up to 3 AP, IB, and dual-enrollment credits ³	Earned more than 3 AP, IB, and dual-enrollment credits ⁴
Student's school region (2012)			
Northeast	885	1045	1145
Midwest	909	1022	1212
South	859	975	1121
West	875	1001	1149
Student's school locale (2012)			
City	835	976	1134
Suburb	897	1012	1160
Town	877	1035	1167
Rural	901	1016	1135
Student's school size (2012)			
Fewer than 500 students	952	1057	1180
500 to 1,199 students	856	1007	1128
1,200 or more students	871	1000	1152
Student's school percentage of students who received free or reduced-price lunch (2012) ⁸			
Lowest fifth (0–18 percent of students)	968	1083	1228
Middle three-fifths (19–67 percent of students)	882	1000	1132
Highest fifth (68–100 percent of students)	800	892	1060
Student's school percentage of students who were non-Hispanic Black or African American, non-Hispanic American Indian or Alaska Native, and Hispanic or Latino students of any race (2009) ⁹			
Lowest fifth (0–7 percent of students)	934	1052	1185
Middle three-fifths (8–64 percent of students)	891	1023	1162
Highest fifth (65–100 percent of students)	741	887	1059
Student's school percentage of English language learners (2012)			
0 percent	937	1058	1212
1 to 5 percent	883	1016	1135
More than 5 percent	845	971	1138
High school from which student received diploma (2013)			
Ninth-grade school	881	1011	1145
Another high school	880	962	1144

See notes at end of table.

National Center for Education Statistics

Table 9.

Among fall 2009 ninth-graders who took either the SAT or ACT college entrance exam and received a high school diploma by the fall of 2013, average SAT or ACT exam score on the SAT scale, by number of high school credits earned in Advanced Placement (AP), International Baccalaureate (IB), and dual-enrollment courses and selected student and parent characteristics: 2013—Continued

! Interpret data with caution. Estimate is unstable because the standard error is between 30 and 50 percent of the estimate.

‡ Reporting standards not met either because the standard error is greater than 50 percent of the estimate or because there were too few cases for a reliable estimate.

¹ These estimates represent a composite of math and reading college-entrance exam scores. ACT scores were standardized to the SAT scale using the ACT-to-SAT concordance scale.

² Dual enrollment refers to taking postsecondary courses while also enrolled in high school. Students may take dual-enrollment courses through a program offered by their high school or independently. A high school dual-enrollment program is an organized system with special guidelines that might have to do with, for example, entrance or eligibility requirements, funding, and limits on coursetaking. These estimates include college-entrance exam scores of students who did not earn any credits in AP courses, IB courses, and dual-enrollment courses that were offered through a program, or dual-enrollment courses taken independently.

³ These estimates include college-entrance exam scores of students who earned up to a total of 3 credits in AP courses, IB courses, and dual-enrollment courses that were offered through a program, and dual-enrollment courses taken independently. See footnote 2 for a definition of dual enrollment and dual-enrollment programs.

⁴ These estimates include college-entrance exam scores of students who earned a total of more than 3 credits in AP courses, IB courses, and dual-enrollment courses that were offered through a program, and dual-enrollment courses taken independently. See footnote 2 for a definition of dual enrollment and dual-enrollment programs.

⁵ All race categories exclude Hispanic or Latino origin unless specified. "Other" includes American Indian, Alaska Native, Native Hawaiian, other Pacific Islander, and individuals who indicated Two or more races or Other.

⁶ Parents' socioeconomic status was calculated using parents' education, occupation, and family income.

⁷ Student's mathematics achievement was measured by a two-stage adaptive assessment in algebraic reasoning developed for HSLs:09.

⁸ To be eligible for free lunch under the National School Lunch Program (NSLP), a federally assisted meal program, a student must be from a household with an income at or below 130 percent of the poverty threshold. To be eligible for reduced-price lunch, a student must be from a household with an income between 130 percent and 185 percent of the poverty threshold. Therefore, the percentage of students receiving free or reduced-price lunch (FRPL) under the NSLP provides a proxy measure for the concentration of low-income students within a school. However, this percentage cannot be used as a strict measure of the percentage of children at or below 185 percent of the poverty threshold because some students are eligible for FRPL based on criteria other than income, and some schools and districts provide FRPL to all students regardless of income.

⁹ Students in these racial/ethnic groups tend to be underrepresented in AP, IB, and dual-enrollment courses. These data were only collected from students' ninth-grade schools in the base year of the study; data were not collected for any schools students had transferred to as of the first follow-up data collection. Therefore, estimates are based on 2009 data for students who received their high school diploma from their ninth-grade school.

NOTE: Estimates are based on fall 2009 ninth-graders who had taken either the SAT or ACT and received a high school diploma from any high school before September 2013, when the high school transcript data collection began. Students in this group whose exact graduation date is unknown are included. Students who had not received a diploma, received a diploma in the fall of 2013 or later, or for whom transcript data were incomplete are excluded. Students' high school credits earned were collected from the high school transcripts and reflect Carnegie units. The Carnegie unit is a standard of measurement that represents one credit for 120 hours of classroom time over the course of a year at the secondary-school level in the United States, equivalent to the completion of a 1-year academic course taken one period a day, 5 days a week. Among fall 2009 ninth-graders who received a high school diploma by the fall of 2013, those who earned any high school credits in AP, IB, or dual-enrollment courses earned on average 3.6 credits in these courses combined. College-entrance exam scores were collected from the College Board, ACT, and high school transcripts. The lowest fifth, middle three-fifths, and highest fifth categories are based on the distribution of fall-term ninth-grade students. Data were weighted using the weight W3W1W2STUTR. This weight accounts for (1) base-year school nonresponse; (2) high school transcript nonresponse; and (3) student nonresponse in the base year, first follow-up, and 2013 Update.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School Longitudinal Study of 2009 (HSLs:09) 2013 Update and High School Transcripts Restricted-use Data File.

National Center for Education Statistics

Table S9.

Standard errors for table 9: Among fall 2009 ninth-graders who took either the SAT or ACT college entrance exam and received a high school diploma by the fall of 2013, average SAT or ACT exam score on the SAT scale, by number of high school credits earned in Advanced Placement (AP), International Baccalaureate (IB), and dual-enrollment courses and selected student and parent characteristics: 2013

Selected student and parent characteristics	Average SAT or ACT exam score on the SAT scale		
	Earned no AP, IB, or dual-enrollment credits	Earned up to 3 AP, IB, and dual-enrollment credits	Earned more than 3 AP, IB, and dual-enrollment credits
Total	8.5	7.7	9.3
Student's sex (2009)			
Female	11.8	8.7	11.3
Male	9.1	10.5	10.3
Student's race/ethnicity (2009)			
Asian	24.5	24.1	26.0
Black/African American	15.8	22.3	35.7
Hispanic/Latino	17.9	17.7	17.7
Other	27.8	19.2	26.4
White	6.6	6.8	10.0
Student's native language (2009)			
English	9.3	7.1	9.6
English and a non-English language	24.8	28.9	31.1
Non-English	21.0	22.5	28.7
Parents' socioeconomic status (2009)			
Lowest fifth	11.9	20.1	21.0
Middle three-fifths	10.8	8.7	10.4
Highest fifth	12.1	10.1	12.0
Parents' highest level of education (2009)			
High school credential or less	11.0	13.8	13.9
Undergraduate degree	13.1	8.9	11.6
Graduate degree	15.4	12.4	13.7
Student's educational expectations (2009)			
High school credential	18.7	47.4	†
Undergraduate degree	10.2	13.2	15.6
Graduate degree	10.8	8.5	11.9
Don't know	13.8	17.4	15.5
Student's mathematics achievement (2009)			
Lowest fifth	12.4	22.5	†
Middle three-fifths	7.5	7.7	10.5
Highest fifth	11.6	8.2	8.5
Student's school sector (2012)			
Public	9.0	7.9	9.8
Regular	7.2	7.5	10.2
Charter or special-program school	55.9	43.2	34.2
Career/technical/vocational or alternative school	64.5	†	488.6
Private	14.9	23.4	14.9

See notes at end of table.

National Center for Education Statistics

Table S9.

Standard errors for table 9: Among fall 2009 ninth-graders who took either the SAT or ACT college entrance exam and received a high school diploma by the fall of 2013, average SAT or ACT exam score on the SAT scale, by number of high school credits earned in Advanced Placement (AP), International Baccalaureate (IB), and dual-enrollment courses and selected student and parent characteristics: 2013—Continued

Selected student and parent characteristics	Average SAT or ACT exam score on the SAT scale		
	Earned no AP, IB, or dual-enrollment credits	Earned up to 3 AP, IB, and dual-enrollment credits	Earned more than 3 AP, IB, and dual-enrollment credits
Student's school region (2012)			
Northeast	21.6	21.4	20.5
Midwest	14.5	14.2	21.5
South	12.0	11.7	11.7
West	18.1	20.7	26.7
Student's school locale (2012)			
City	27.4	17.4	16.3
Suburb	8.0	12.0	13.0
Town	18.0	18.8	33.2
Rural	10.4	10.6	16.9
Student's school size (2012)			
Fewer than 500 students	13.8	14.2	29.0
500 to 1,199 students	16.4	14.8	21.3
1,200 or more students	11.0	9.6	11.9
Student's school percentage of students who received free or reduced-price lunch (2012)			
Lowest fifth (0–18 percent of students)	12.2	9.9	11.0
Middle three-fifths (19–67 percent of students)	11.6	9.2	11.4
Highest fifth (68–100 percent of students)	16.8	22.2	29.1
Student's school percentage of students who were non-Hispanic Black or African American, non-Hispanic American Indian or Alaska Native, and Hispanic or Latino students of any race (2009)			
Lowest fifth (0–7 percent of students)	11.2	11.0	26.5
Middle three-fifths (8–64 percent of students)	10.7	9.7	10.3
Highest fifth (65–100 percent of students)	21.4	22.4	19.7
Student's school percentage of English language learners (2012)			
0 percent	12.4	20.9	20.3
1 to 5 percent	11.3	9.2	11.8
More than 5 percent	15.5	16.9	20.1
High school from which student received diploma (2013)			
Ninth-grade school	9.0	8.0	9.9
Another high school	18.3	23.9	33.2

† Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School Longitudinal Study of 2009 (HSL:09) 2013 Update and High School Transcripts Restricted-use Data File.

National Center for Education Statistics

Table 10.

Among fall 2009 ninth-graders who took either the SAT or ACT college entrance exam and received a high school diploma by the fall of 2013, average SAT or ACT exam score on the SAT scale, by type of high school credits earned and selected student and parent characteristics: 2013

Selected student and parent characteristics	Average SAT or ACT exam score on the SAT scale ¹			
	Earned no AP, IB, or dual-enrollment credits ²	Earned AP or IB credits only	Earned dual-enrollment credits only ³	Earned both AP or IB and dual-enrollment credits ⁴
Total	881	1075	973	1093
Student's sex (2009)				
Female	870	1044	960	1051
Male	894	1114	988	1151
Student's race/ethnicity (2009) ⁵				
Asian	860	1135	‡	1159
Black/African American	790	968	793	964
Hispanic/Latino	831	983	906	1006
Other	841	1058	1013	1086
White	928	1117	1003	1125
Student's native language (2009)				
English	894	1090	981	1093
English and a non-English language	814	1069	926	1131
Non-English	778	996	806	1067
Parents' socioeconomic status (2009) ⁶				
Lowest fifth	800	937	‡	995
Middle three-fifths	878	1045	966	1068
Highest fifth	971	1156	1040	1144
Parents' highest level of education (2009)				
High school credential or less	843	1012	937	1034
Undergraduate degree	914	1095	985	1082
Graduate degree	955	1167	1046	1177
Student's educational expectations (2009)				
High school credential	809	977	‡	‡
Undergraduate degree	898	1056	997	1057
Graduate degree	922	1094	999	1113
Don't know	831	1050	943	1077
Student's mathematics achievement (2009) ⁷				
Lowest fifth	731	809	‡	‡
Middle three-fifths	884	1000	937	1015
Highest fifth	1057	1190	1106	1185
Student's school sector (2012)				
Public	877	1069	980	1097
Regular	889	1072	981	1095
Charter or special-program school	759	1063	928 !	1144
Career/technical/vocational or alternative school	688	740 !	‡	‡
Private	970	1154	1016	1166

See notes at end of table.

National Center for Education Statistics

Table 10.

Among fall 2009 ninth-graders who took either the SAT or ACT college entrance exam and received a high school diploma by the fall of 2013, average SAT or ACT exam score on the SAT scale, by type of high school credits earned and selected student and parent characteristics: 2013—Continued

Selected student and parent characteristics	Average SAT or ACT exam score on the SAT scale ¹			
	Earned no AP, IB, or dual-enrollment credits ²	Earned AP or IB credits only	Earned dual-enrollment credits only ³	Earned both AP or IB and dual-enrollment credits ⁴
Student's school region (2012)				
Northeast	885	1102	‡	1110
Midwest	909	1090	949	1140
South	859	1054	974	1075
West	875	1068	1036	1065
Student's school locale (2012)				
City	835	1065	911	1084
Suburb	897	1084	952	1101
Town	877	1067	1036	1163
Rural	901	1078	977	1085
Student's school size (2012)				
Fewer than 500 students	952	1114	1023	1125
500 to 1,199 students	856	1061	955	1119
1,200 or more students	871	1079	973	1088
Student's school percentage of students who received free or reduced-price lunch (2012) ⁸				
Lowest fifth (0–18 percent of students)	968	1156	1031	1140
Middle three-fifths (19–67 percent of students)	882	1065	983	1097
Highest fifth (68–100 percent of students)	800	971	811	1017
Student's school percentage of students who were non-Hispanic Black or African American, non-Hispanic American Indian or Alaska Native, and Hispanic or Latino students of any race (2009) ⁹				
Lowest fifth (0–7 percent of students)	934	1108	997	1118
Middle three-fifths (8–64 percent of students)	891	1095	1006	1104
Highest fifth (65–100 percent of students)	741	989	838	1012
Student's school percentage of English language learners (2012)				
0 percent	937	1139	994	1150
1 to 5 percent	883	1073	980	1096
More than 5 percent	845	1053	981	1084
High school from which student received diploma (2013)				
Ninth-grade school	881	1077	985	1096
Another high school	880	1050	‡	1054

See notes at end of table.

National Center for Education Statistics

Table 10.

Among fall 2009 ninth-graders who took either the SAT or ACT college entrance exam and received a high school diploma by the fall of 2013, average SAT or ACT exam score on the SAT scale, by type of high school credits earned and selected student and parent characteristics: 2013—Continued

! Interpret data with caution. Estimate is unstable because the standard error is between 30 and 50 percent of the estimate.

‡ Reporting standards not met either because the standard error is greater than 50 percent of the estimate or because there were too few cases for a reliable estimate.

¹ These estimates represent a composite of math and reading college-entrance exam scores. ACT scores were standardized to the SAT scale using the ACT-to-SAT concordance scale.

² Dual enrollment refers to taking postsecondary courses while also enrolled in high school. Students may take dual-enrollment courses through a program offered by their high school or independently. A high school dual-enrollment program is an organized system with special guidelines that might have to do with, for example, entrance or eligibility requirements, funding, and limits on coursetaking. These estimates include college-entrance exam scores of students who did not earn any credits in AP courses, IB courses, and dual-enrollment courses that were offered through a program, or dual-enrollment courses taken independently.

³ These estimates include college-entrance exam scores of students who earned credits in dual-enrollment courses that were offered through a program or taken independently but who did not earn any credits in AP or IB courses. See footnote 2 for a definition of dual enrollment and dual-enrollment programs.

⁴ These estimates include college-entrance exam scores of students who earned credits in AP or IB courses and credits in dual-enrollment courses that were offered through a program or taken independently. See footnote 2 for a definition of dual enrollment and dual-enrollment programs.

⁵ All race categories exclude Hispanic or Latino origin unless specified. "Other" includes American Indian, Alaska Native, Native Hawaiian, other Pacific Islander, and individuals who indicated Two or more races or Other.

⁶ Parents' socioeconomic status was calculated using parents' education, occupation, and family income.

⁷ Student's mathematics achievement was measured by a two-stage adaptive assessment in algebraic reasoning developed for HSL:09.

⁸ To be eligible for free lunch under the National School Lunch Program (NSLP), a federally assisted meal program, a student must be from a household with an income at or below 130 percent of the poverty threshold. To be eligible for reduced-price lunch, a student must be from a household with an income between 130 percent and 185 percent of the poverty threshold. Therefore, the percentage of students receiving free or reduced-price lunch (FRPL) under the NSLP provides a proxy measure for the concentration of low-income students within a school. However, this percentage cannot be used as a strict measure of the percentage of children at or below 185 percent of the poverty threshold because some students are eligible for FRPL based on criteria other than income, and some schools and districts provide FRPL to all students regardless of income.

⁹ Students in these racial/ethnic groups tend to be underrepresented in AP, IB, and dual-enrollment courses. These data were only collected from students' ninth-grade schools in the base year of the study; data were not collected for any schools students had transferred to as of the first follow-up data collection. Therefore, estimates are based on 2009 data for students who received their high school diploma from their ninth-grade school.

NOTE: AP = Advanced Placement; IB = International Baccalaureate. Estimates are based on fall 2009 ninth-graders who had taken either the SAT or ACT and received a high school diploma from any high school before September 2013, when the high school transcript data collection began. Students in this group whose exact graduation date is unknown are included. Students who had not received a diploma, received a diploma in the fall of 2013 or later, or for whom transcript data were incomplete are excluded. Students' high school credits earned were collected from the high school transcripts and reflect Carnegie units. The Carnegie unit is a standard of measurement that represents one credit for 120 hours of classroom time over the course of a year at the secondary-school level in the United States, equivalent to the completion of a 1-year academic course taken one period a day, 5 days a week. College-entrance exam scores were collected from the College Board, ACT, and high school transcripts. The lowest fifth, middle three-fifths, and highest fifth categories are based on the distribution of fall-term ninth-grade students. Data were weighted using the weight W3W1W2STUTR. This weight accounts for (1) base-year school nonresponse; (2) high school transcript nonresponse; and (3) student nonresponse in the base year, first follow-up, and 2013 Update.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School Longitudinal Study of 2009 (HSL:09) 2013 Update and High School Transcripts Restricted-use Data File.

National Center for Education Statistics

Table S10.

Standard errors for table 10: Among fall 2009 ninth-graders who took either the SAT or ACT college entrance exam and received a high school diploma by the fall of 2013, average SAT or ACT exam score on the SAT scale, by type of high school credits earned and selected student and parent characteristics: 2013

Selected student and parent characteristics	Average SAT or ACT exam score on the SAT scale			
	Earned no AP, IB, or dual-enrollment credits	Earned AP or IB credits only	Earned dual-enrollment credits only	Earned both AP or IB and dual-enrollment credits
Total	8.5	7.9	19.8	11.4
Student's sex (2009)				
Female	11.8	8.4	27.9	14.9
Male	9.1	10.6	22.0	13.6
Student's race/ethnicity (2009)				
Asian	24.5	28.2	†	32.1
Black/African American	15.8	27.0	53.0	51.1
Hispanic/Latino	17.9	16.0	49.4	28.4
Other	27.8	19.7	47.0	32.2
White	6.6	7.4	16.1	10.7
Student's native language (2009)				
English	9.3	7.4	17.3	13.0
English and a non-English language	24.8	20.7	21.1	31.6
Non-English	21.0	26.6	90.0	35.2
Parents' socioeconomic status (2009)				
Lowest fifth	11.9	21.4	†	35.3
Middle three-fifths	10.8	8.5	20.8	14.5
Highest fifth	12.1	10.8	21.6	19.5
Parents' highest level of education (2009)				
High school credential or less	11.0	13.4	27.6	21.8
Undergraduate degree	13.1	8.6	21.5	16.2
Graduate degree	15.4	12.4	22.1	22.2
Student's educational expectations (2009)				
High school credential	18.7	69.0	†	†
Undergraduate degree	10.2	12.2	25.1	24.4
Graduate degree	10.8	9.7	17.6	15.1
Don't know	13.8	15.6	30.2	40.2
Student's mathematics achievement (2009)				
Lowest fifth	12.4	26.4	†	†
Middle three-fifths	7.5	7.5	18.8	12.7
Highest fifth	11.6	6.7	22.5	13.9
Student's school sector (2012)				
Public	9.0	7.9	18.2	11.3
Regular	7.2	8.2	18.5	11.5
Charter or special-program school	55.9	24.4	309.2	88.5
Career/technical/vocational or alternative school	64.5	298.0	†	†
Private	14.9	23.0	44.9	25.0

See notes at end of table.

National Center for Education Statistics

Table S10.

Standard errors for table 10: Among fall 2009 ninth-graders who took either the SAT or ACT college entrance exam and received a high school diploma by the fall of 2013, average SAT or ACT exam score on the SAT scale, by type of high school credits earned and selected student and parent characteristics: 2013—Continued

Selected student and parent characteristics	Average SAT or ACT exam score on the SAT scale			
	Earned no AP, IB, or dual-enrollment credits	Earned AP or IB credits only	Earned dual-enrollment credits only	Earned both AP or IB and dual-enrollment credits
Student's school region (2012)				
Northeast	21.6	17.0	†	32.5
Midwest	14.5	13.9	45.3	28.4
South	12.0	11.3	23.4	13.9
West	18.1	23.5	27.8	34.7
Student's school locale (2012)				
City	27.4	15.3	68.3	28.4
Suburb	8.0	10.4	45.7	21.1
Town	18.0	22.3	25.9	46.5
Rural	10.4	15.7	24.6	12.5
Student's school size (2012)				
Fewer than 500 students	13.8	16.6	20.7	37.2
500 to 1,199 students	16.4	15.2	38.2	17.9
1,200 or more students	11.0	10.3	24.9	15.7
Student's school percentage of students who received free or reduced-price lunch (2012)				
Lowest fifth (0–18 percent of students)	12.2	10.7	21.5	16.7
Middle three-fifths (19–67 percent of students)	11.6	9.7	17.5	14.1
Highest fifth (68–100 percent of students)	16.8	23.6	116.6	30.0
Student's school percentage of students who were non-Hispanic Black or African American, non-Hispanic American Indian or Alaska Native, and Hispanic or Latino students of any race (2009)				
Lowest fifth (0–7 percent of students)	11.2	12.7	23.9	20.2
Middle three-fifths (8–64 percent of students)	10.7	9.8	22.3	17.7
Highest fifth (65–100 percent of students)	21.4	21.7	106.0	16.6
Student's school percentage of English language learners (2012)				
0 percent	12.4	21.1	39.5	27.6
1 to 5 percent	11.3	8.5	21.5	11.5
More than 5 percent	15.5	18.7	46.9	29.1
High school from which student received diploma (2013)				
Ninth-grade school	9.0	8.4	15.9	11.1
Another high school	18.3	23.0	†	57.9

† Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School Longitudinal Study of 2009 (HSL:09) 2013 Update and High School Transcripts Restricted-use Data File.

National Center for Education Statistics

Table 11.

Among fall 2009 ninth-graders who took either the SAT or ACT college entrance exam and received a high school diploma by the fall of 2013, average SAT or ACT exam score on the SAT scale, by location of dual-enrollment courses and selected student and parent characteristics: 2013

Selected student and parent characteristics	Average SAT or ACT exam score on the SAT scale ¹		
	Earned no dual-enrollment credits ²	Earned any dual-enrollment credits on college campus ³	Earned dual-enrollment credits off college campus only ⁴
Total	981	1056	1056
Student's sex (2009)			
Female	962	1032	1025
Male	1003	1089	1093
Student's race/ethnicity (2009) ⁵			
Asian	1090	‡	1124
Black/African American	862	893	885
Hispanic/Latino	912	989	985
Other	950	1046	1054
White	1024	1098	1084
Student's native language (2009)			
English	990	1063	1057
English and a non-English language	976	1081	1116
Non-English	913	994	1002
Parents' socioeconomic status (2009) ⁶			
Lowest fifth	852	‡	936
Middle three-fifths	955	1016	1037
Highest fifth	1099	1143	1116
Parents' highest level of education (2009)			
High school credential or less	914	990	1002
Undergraduate degree	1011	1042	1057
Graduate degree	1103	1129	1146
Student's educational expectations (2009)			
High school credential	854	‡	‡
Undergraduate degree	973	1047	1038
Graduate degree	1029	1099	1079
Don't know	916	953	1049
Student's mathematics achievement (2009) ⁷			
Lowest fifth	745	‡	‡
Middle three-fifths	936	977	987
Highest fifth	1160	1191	1165
Student's school sector (2012)			
Public	975	1064	1060
Regular	980	1063	1059
Charter or special-program school	961	1077	1142
Career/technical/vocational or alternative school	703	‡	‡
Private	1075	1040	1120

See notes at end of table.

National Center for Education Statistics

Table 11.

Among fall 2009 ninth-graders who took either the SAT or ACT college entrance exam and received a high school diploma by the fall of 2013, average SAT or ACT exam score on the SAT scale, by location of dual-enrollment courses and selected student and parent characteristics: 2013—Continued

Selected student and parent characteristics	Average SAT or ACT exam score on the SAT scale ¹		
	Earned no dual-enrollment credits ²	Earned any dual-enrollment credits on college campus ³	Earned dual-enrollment credits off college campus only ⁴
Student's school region (2012)			
Northeast	992	‡	1059
Midwest	989	1033	1067
South	965	1073	1046
West	987	998	1066
Student's school locale (2012)			
City	978	1007	1058
Suburb	1002	1101	1060
Town	951	1113	1066
Rural	972	1063	1048
Student's school size (2012)			
Fewer than 500 students	1008	‡	1064
500 to 1,199 students	954	1082	1063
1,200 or more students	994	1051	1067
Student's school percentage of students who received free or reduced-price lunch (2012) ⁸			
Lowest fifth (0–18 percent of students)	1085	‡	1106
Middle three-fifths (19–67 percent of students)	968	1064	1061
Highest fifth (68–100 percent of students)	885	1003	954
Student's school percentage of students who were non-Hispanic Black or African American, non-Hispanic American Indian or Alaska Native, and Hispanic or Latino students of any race (2009) ⁹			
Lowest fifth (0–7 percent of students)	1006	‡	1077
Middle three-fifths (8–64 percent of students)	1000	1084	1073
Highest fifth (65–100 percent of students)	884	1015	963
Student's school percentage of English language learners (2012)			
0 percent	1023	1055	1099
1 to 5 percent	983	1064	1064
More than 5 percent	960	1070	1039
High school from which student received diploma (2013)			
Ninth-grade school	982	1062	1063
Another high school	965	‡	980

See notes at end of table.

National Center for Education Statistics

Table 11.

Among fall 2009 ninth-graders who took either the SAT or ACT college entrance exam and received a high school diploma by the fall of 2013, average SAT or ACT exam score on the SAT scale, by location of dual-enrollment courses and selected student and parent characteristics: 2013—Continued

‡ Reporting standards not met either because the standard error is greater than 50 percent of the estimate or because there were too few cases for a reliable estimate.

¹ These estimates represent a composite of math and reading college-entrance exam scores. ACT scores were standardized to the SAT scale using the ACT-to-SAT concordance scale.

² Dual enrollment refers to taking postsecondary courses while also enrolled in high school. Students may take dual-enrollment courses through a program offered by their high school or independently. A high school dual-enrollment program is an organized system with special guidelines that might have to do with, for example, entrance or eligibility requirements, funding, and limits on coursetaking. These estimates include college-entrance exam scores of students who did not earn any credits in dual-enrollment courses that were offered through a program or taken independently.

³ These estimates include college-entrance exam scores of students who earned dual-enrollment credits in a course taken on a college campus. This includes dual-enrollment courses that were offered through a program and dual-enrollment courses taken independently. See footnote 2 for a definition of dual enrollment and dual-enrollment programs. Courses taken at community colleges and 4-year colleges and universities are included. Courses taken at high schools, career or vocational centers, and online are excluded.

⁴ These estimates include college-entrance exam scores of students who only earned dual-enrollment credits in a course taken off of a college campus. This includes dual-enrollment courses that were offered through a program and dual-enrollment courses taken independently. See footnote 2 for a definition of dual enrollment and dual-enrollment programs. Courses taken at high schools, career or vocational centers, and online are included. Courses taken at community colleges and 4-year colleges and universities are excluded.

⁵ All race categories exclude Hispanic or Latino origin unless specified. "Other" includes American Indian, Alaska Native, Native Hawaiian, other Pacific Islander, and individuals who indicated Two or more races or Other.

⁶ Parents' socioeconomic status was calculated using parents' education, occupation, and family income.

⁷ Student's mathematics achievement was measured by a two-stage adaptive assessment in algebraic reasoning developed for HSL:09.

⁸ To be eligible for free lunch under the National School Lunch Program (NSLP), a federally assisted meal program, a student must be from a household with an income at or below 130 percent of the poverty threshold. To be eligible for reduced-price lunch, a student must be from a household with an income between 130 percent and 185 percent of the poverty threshold. Therefore, the percentage of students receiving free or reduced-price lunch (FRPL) under the NSLP provides a proxy measure for the concentration of low-income students within a school. However, this percentage cannot be used as a strict measure of the percentage of children at or below 185 percent of the poverty threshold because some students are eligible for FRPL based on criteria other than income, and some schools and districts provide FRPL to all students regardless of income.

⁹ Students in these racial/ethnic groups tend to be underrepresented in Advanced Placement, International Baccalaureate, and dual-enrollment courses. These data were only collected from students' ninth-grade schools in the base year of the study; data were not collected for any schools students had transferred to as of the first follow-up data collection. Therefore, estimates are based on 2009 data for students who received their high school diploma from their ninth-grade school.

NOTE: Estimates are based on fall 2009 ninth-graders who had taken either the SAT or ACT and received a high school diploma from any high school before September 2013, when the high school transcript data collection began. Students in this group whose exact graduation date is unknown are included. Students who had not received a diploma, received a diploma in the fall of 2013 or later, or for whom transcript data were incomplete are excluded. Students' high school credits earned were collected from the high school transcripts and reflect Carnegie units. The Carnegie unit is a standard of measurement that represents one credit for 120 hours of classroom time over the course of a year at the secondary-school level in the United States, equivalent to the completion of a 1-year academic course taken one period a day, 5 days a week. College entrance exam scores were collected from the College Board, ACT, and high school transcripts. The lowest fifth, middle three-fifths, and highest fifth categories are based on the distribution of fall-term ninth-grade students. Data were weighted using the weight W3W1W2STUTR. This weight accounts for (1) base-year school nonresponse; (2) high school transcript nonresponse; and (3) student nonresponse in the base year, first follow-up, and 2013 Update.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School Longitudinal Study of 2009 (HSL:09) 2013 Update and High School Transcripts Restricted-use Data File.

National Center for Education Statistics

Table S11.

Standard errors for table 11: Among fall 2009 ninth-graders who took either the SAT or ACT college entrance exam and received a high school diploma by the fall of 2013, average SAT or ACT exam score on the SAT scale, by location of dual-enrollment courses and selected student and parent characteristics: 2013

Selected student and parent characteristics	Average SAT or ACT exam score on the SAT scale		
	Earned no dual-enrollment credits	Earned any dual-enrollment credits on college campus	Earned dual-enrollment credits off college campus only
Total	6.9	23.8	11.1
Student's sex (2009)			
Female	8.1	26.4	14.7
Male	8.7	39.9	15.3
Student's race/ethnicity (2009)			
Asian	26.1	†	46.4
Black/African American	12.8	204.4	37.4
Hispanic/Latino	13.5	73.2	26.2
Other	23.8	53.7	26.9
White	6.1	22.2	12.0
Student's native language (2009)			
English	6.7	29.6	10.5
English and a non-English language	21.0	55.7	31.0
Non-English	20.8	40.8	56.9
Parents' socioeconomic status (2009)			
Lowest fifth	13.1	†	33.9
Middle three-fifths	7.3	35.9	12.3
Highest fifth	9.4	29.5	17.3
Parents' highest level of education (2009)			
High school credential or less	10.4	27.8	18.4
Undergraduate degree	8.0	44.8	12.4
Graduate degree	11.1	44.8	20.1
Student's educational expectations (2009)			
High school credential	15.6	†	†
Undergraduate degree	8.2	42.2	18.9
Graduate degree	8.0	29.7	12.9
Don't know	13.6	67.0	24.1
Student's mathematics achievement (2009)			
Lowest fifth	12.1	†	†
Middle three-fifths	5.6	28.2	12.0
Highest fifth	5.9	26.4	12.6
Student's school sector (2012)			
Public			
Regular	7.0	25.3	10.2
Charter or special-program school	6.5	26.8	10.2
Career/technical/vocational or alternative school	34.1	319.4	110.7
Private	80.8	†	†
	17.8	59.2	24.0

See notes at end of table.

National Center for Education Statistics

Table S11.

Standard errors for table 11: Among fall 2009 ninth-graders who took either the SAT or ACT college entrance exam and received a high school diploma by the fall of 2013, average SAT or ACT exam score on the SAT scale, by location of dual-enrollment courses and selected student and parent characteristics: 2013—Continued

Selected student and parent characteristics	Average SAT or ACT exam score on the SAT scale		
	Earned no dual-enrollment credits	Earned any dual-enrollment credits on college campus	Earned dual-enrollment credits off college campus only
Student's school region (2012)			
Northeast	14.9	†	28.3
Midwest	13.0	59.1	38.5
South	10.3	25.2	12.4
West	20.2	46.5	20.2
Student's school locale (2012)			
City	18.5	61.5	33.4
Suburb	9.0	28.8	20.3
Town	16.3	143.9	30.6
Rural	10.4	32.4	12.9
Student's school size (2012)			
Fewer than 500 students	12.3	†	23.4
500 to 1,199 students	14.1	53.9	20.9
1,200 or more students	10.1	35.7	13.1
Student's school percentage of students who received free or reduced-price lunch (2012)			
Lowest fifth (0–18 percent of students)	10.4	†	17.0
Middle three-fifths (19–67 percent of students)	9.4	32.8	11.0
Highest fifth (68–100 percent of students)	17.9	46.6	50.8
Student's school percentage of students who were non-Hispanic Black or African American, non-Hispanic American Indian or Alaska Native, and Hispanic or Latino students of any race (2009)			
Lowest fifth (0–7 percent of students)	10.8	†	16.8
Middle three-fifths (8–64 percent of students)	9.5	42.7	13.0
Highest fifth (65–100 percent of students)	24.1	34.2	41.8
Student's school percentage of English language learners (2012)			
0 percent	15.9	84.0	36.0
1 to 5 percent	8.5	38.8	11.0
More than 5 percent	14.1	52.1	27.2
High school from which student received diploma (2013)			
Ninth-grade school	7.7	24.7	9.4
Another high school	15.9	†	50.1

† Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School Longitudinal Study of 2009 (HSL:09) 2013 Update and High School Transcripts Restricted-use Data File.

National Center for Education Statistics

Table 12.

Among fall 2009 ninth-graders who received a high school diploma by the fall of 2013, percentage of students who enrolled in an associate's or bachelor's degree program in fall of 2013, by number of high school credits earned in Advanced Placement (AP), International Baccalaureate (IB), and dual-enrollment courses and selected student and parent characteristics: 2013

Selected student and parent characteristics	Percent enrolled in associate's or bachelor's degree program		
	Earned no AP, IB, or dual-enrollment credits ¹	Earned up to 3 AP, IB, and dual-enrollment credits ²	Earned more than 3 AP, IB, and dual-enrollment credits ³
Total	45.0	71.8	87.1
Student's sex (2009)			
Female	47.9	72.1	86.2
Male	42.4	71.3	88.3
Student's race/ethnicity (2009) ⁴			
Asian	55.6	72.2	89.7
Black/African American	44.6	64.7	79.1
Hispanic/Latino	37.4	60.9	86.9
Other	39.9	69.3	84.5
White	49.0	77.2	88.3
Student's native language (2009)			
English	46.9	74.9	87.4
English and a non-English language	38.2	55.1	93.4
Non-English	36.6	58.6	82.0
Parents' socioeconomic status (2009) ⁵			
Lowest fifth	29.1	56.9	72.9
Middle three-fifths	44.7	68.3	84.4
Highest fifth	72.5	86.0	93.1
Parents' highest level of education (2009)			
High school credential or less	34.4	61.9	76.2
Undergraduate degree	58.1	78.7	89.3
Graduate degree	73.1	85.4	93.3
Student's educational expectations (2009)			
High school credential	27.4	62.5	88.1
Undergraduate degree	45.7	75.3	84.9
Graduate degree	57.1	76.5	89.3
Don't know	40.7	58.3	79.2
Student's mathematics achievement (2009) ⁶			
Lowest fifth	34.7	54.6	81.0
Middle three-fifths	46.3	69.3	84.8
Highest fifth	64.1	81.3	89.1
Student's school sector (2012)			
Public	43.9	70.0	87.3
Regular	44.2	70.7	87.3
Charter or special-program school	44.8	60.8	88.4
Career/technical/vocational or alternative school	35.5 !	‡	‡
Private	76.6	88.8	92.8

See notes at end of table.

National Center for Education Statistics

Table 12.

Among fall 2009 ninth-graders who received a high school diploma by the fall of 2013, percentage of students who enrolled in an associate's or bachelor's degree program in fall of 2013, by number of high school credits earned in Advanced Placement (AP), International Baccalaureate (IB), and dual-enrollment courses and selected student and parent characteristics: 2013—Continued

Selected student and parent characteristics	Percent enrolled in associate's or bachelor's degree program		
	Earned no AP, IB, or dual-enrollment credits ¹	Earned up to 3 AP, IB, and dual-enrollment credits ²	Earned more than 3 AP, IB, and dual-enrollment credits ³
Student's school region (2012)			
Northeast	52.6	84.6	90.8
Midwest	49.3	76.4	87.8
South	40.5	65.7	85.7
West	41.9	67.6	86.2
Student's school locale (2012)			
City	42.9	68.0	86.1
Suburb	50.0	73.8	88.9
Town	41.3	74.7	85.7
Rural	44.8	72.0	86.8
Student's school size (2012)			
Fewer than 500 students	50.8	76.6	90.5
500 to 1,199 students	43.5	77.3	87.1
1,200 or more students	45.1	68.3	87.5
Student's school percentage of students who received free or reduced-price lunch (2012) ⁷			
Lowest fifth (0–18 percent of students)	67.5	85.1	93.1
Middle three-fifths (19–67 percent of students)	42.7	69.5	86.3
Highest fifth (68–100 percent of students)	36.5	60.1	81.9
Student's school percentage of students who were non-Hispanic Black or African American, non-Hispanic American Indian or Alaska Native, and Hispanic or Latino students of any race (2009) ⁸			
Lowest fifth (0–7 percent of students)	52.8	81.4	88.4
Middle three-fifths (8–64 percent of students)	48.3	72.2	87.6
Highest fifth (65–100 percent of students)	36.2	64.1	87.8
Student's school percentage of English language learners (2012)			
0 percent	53.2	82.0	91.4
1 to 5 percent	44.3	73.5	88.6
More than 5 percent	42.8	65.4	84.2
High school from which student received diploma (2013)			
Ninth-grade school	47.7	73.1	87.6
Another high school	31.0	61.3	81.8

See notes at end of table.

National Center for Education Statistics

Table 12.

Among fall 2009 ninth-graders who received a high school diploma by the fall of 2013, percentage of students who enrolled in an associate's or bachelor's degree program in fall of 2013, by number of high school credits earned in Advanced Placement (AP), International Baccalaureate (IB), and dual-enrollment courses and selected student and parent characteristics: 2013—Continued

! Interpret data with caution. Estimate is unstable because the standard error is between 30 and 50 percent of the estimate.

‡ Reporting standards not met either because the standard error is greater than 50 percent of the estimate or because there were too few cases for a reliable estimate.

¹ Dual enrollment refers to taking postsecondary courses while also enrolled in high school. Students may take dual-enrollment courses through a program offered by their high school or independently. A high school dual-enrollment program is an organized system with special guidelines that might have to do with, for example, entrance or eligibility requirements, funding, and limits on coursetaking. These estimates include college-entrance exam scores of students who did not earn any credits in AP courses, IB courses, and dual-enrollment courses that were offered through a program, or dual-enrollment courses taken independently.

² These estimates include enrollment of students who earned up to a total of 3 credits in AP courses, IB courses, and dual-enrollment courses that were offered through a program, and dual-enrollment courses taken independently. See footnote 1 for a definition of dual enrollment and dual-enrollment programs.

³ These estimates include enrollment of students who earned a total of more than 3 credits in AP courses, IB courses, and dual-enrollment courses that were offered through a program, and dual-enrollment courses taken independently. See footnote 1 for a definition of dual enrollment and dual-enrollment programs.

⁴ All race categories exclude Hispanic or Latino origin unless specified. "Other" includes American Indian, Alaska Native, Native Hawaiian, other Pacific Islander, and individuals who indicated Two or more races or Other.

⁵ Parents' socioeconomic status was calculated using parents' education, occupation, and family income.

⁶ Student's mathematics achievement was measured by a two-stage adaptive assessment in algebraic reasoning developed for HSLS:09.

⁷ To be eligible for free lunch under the National School Lunch Program (NSLP), a federally assisted meal program, a student must be from a household with an income at or below 130 percent of the poverty threshold. To be eligible for reduced-price lunch, a student must be from a household with an income between 130 percent and 185 percent of the poverty threshold. Therefore, the percentage of students receiving free or reduced-price lunch (FRPL) under the NSLP provides a proxy measure for the concentration of low-income students within a school. However, this percentage cannot be used as a strict measure of the percentage of children at or below 185 percent of the poverty threshold because some students are eligible for FRPL based on criteria other than income, and some schools and districts provide FRPL to all students regardless of income.

⁸ Students in these racial/ethnic groups tend to be underrepresented in AP, IB, and dual-enrollment courses. These data were only collected from students' ninth-grade schools in the base year of the study; data were not collected for any schools students had transferred to as of the first follow-up data collection. Therefore, estimates are based on 2009 data for students who received their high school diploma from their ninth-grade school.

NOTE: Estimates are based on fall 2009 ninth-graders who had received a high school diploma from any high school before September 2013, when the high school transcript data collection began. Students in this group whose exact graduation date is unknown are included. Students who had not received a diploma, received a diploma in the fall of 2013 or later, or for whom transcript data were incomplete are excluded. Students' high school credits earned were collected from the high school transcripts and reflect Carnegie units. The Carnegie unit is a standard of measurement that represents one credit for 120 hours of classroom time over the course of a year at the secondary-school level in the United States, equivalent to the completion of a 1-year academic course taken one period a day, 5 days a week. Among fall 2009 ninth-graders who received a high school diploma by the fall of 2013, those who earned any high school credits in AP, IB, or dual-enrollment courses earned on average 3.6 credits in these courses combined. Students' associate's and bachelor's degree program enrollment status was collected in the 2013 Update. The lowest fifth, middle three-fifths, and highest fifth categories are based on the distribution of fall-term ninth-grade students. Data were weighted using the weight W3W1W2STUTR. This weight accounts for (1) base-year school nonresponse; (2) high school transcript nonresponse; and (3) student nonresponse in the base year, first follow-up, and 2013 Update.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School Longitudinal Study of 2009 (HSLS:09) 2013 Update and High School Transcripts Restricted-use Data File.

National Center for Education Statistics

Table S12.

Standard errors for table 12: Among fall 2009 ninth-graders who received a high school diploma by the fall of 2013, percentage of students who enrolled in an associate's or bachelor's degree program in fall of 2013, by number of high school credits earned in Advanced Placement (AP), International Baccalaureate (IB), and dual-enrollment courses and selected student and parent characteristics: 2013

Selected student and parent characteristics	Percent enrolled in associate's or bachelor's degree program		
	Earned no AP, IB, or dual-enrollment credits	Earned up to 3 AP, IB, and dual-enrollment credits	Earned more than 3 AP, IB, and dual-enrollment credits
Total	1.16	1.36	1.26
Student's sex (2009)			
Female	1.45	1.82	1.73
Male	1.62	1.92	1.51
Student's race/ethnicity (2009)			
Asian	4.63	5.01	2.33
Black/African American	3.27	5.36	7.71
Hispanic/Latino	2.69	3.65	3.48
Other	2.75	3.91	4.18
White	1.38	1.44	1.24
Student's native language (2009)			
English	1.08	1.43	1.55
English and a non-English language	5.34	5.98	2.36
Non-English	4.43	4.88	5.15
Parents' socioeconomic status (2009)			
Lowest fifth	2.51	5.58	7.63
Middle three-fifths	1.33	1.70	1.98
Highest fifth	1.90	1.46	1.25
Parents' highest level of education (2009)			
High school credential or less	1.65	2.98	3.63
Undergraduate degree	1.85	1.63	2.04
Graduate degree	2.42	1.93	1.34
Student's educational expectations (2009)			
High school credential	2.32	8.13	11.49
Undergraduate degree	2.32	2.65	3.30
Graduate degree	1.82	2.02	1.15
Don't know	2.36	3.34	3.56
Student's mathematics achievement (2009)			
Lowest fifth	2.81	5.60	9.28
Middle three-fifths	1.50	1.57	2.07
Highest fifth	3.10	2.21	1.22
Student's school sector (2012)			
Public	1.18	1.36	1.25
Regular	1.25	1.45	1.34
Charter or special-program school	4.43	6.22	4.76
Career/technical/vocational or alternative school	11.65	†	†
Private	3.34	2.77	4.25

See notes at end of table.

National Center for Education Statistics

Table S12.

Standard errors for table 12: Among fall 2009 ninth-graders who received a high school diploma by the fall of 2013, percentage of students who enrolled in an associate's or bachelor's degree program in fall of 2013, by number of high school credits earned in Advanced Placement (AP), International Baccalaureate (IB), and dual-enrollment courses and selected student and parent characteristics: 2013—Continued

Selected student and parent characteristics	Percent enrolled in associate's or bachelor's degree program		
	Earned no AP, IB, or dual-enrollment credits	Earned up to 3 AP, IB, and dual-enrollment credits	Earned more than 3 AP, IB, and dual-enrollment credits
Student's school region (2012)			
Northeast	2.88	2.89	3.19
Midwest	1.74	2.07	2.53
South	1.73	2.44	1.79
West	3.11	2.90	3.29
Student's school locale (2012)			
City	2.83	3.15	2.39
Suburb	2.01	2.06	1.73
Town	3.53	4.51	3.21
Rural	1.51	2.28	3.04
Student's school size (2012)			
Fewer than 500 students	2.56	3.18	2.51
500 to 1,199 students	1.85	2.74	2.48
1,200 or more students	1.64	1.75	1.57
Student's school percentage of students who received free or reduced-price lunch (2012)			
Lowest fifth (0–18 percent of students)	2.44	1.72	1.45
Middle three-fifths (19–67 percent of students)	1.43	1.54	1.61
Highest fifth (68–100 percent of students)	2.54	4.27	4.55
Student's school percentage of students who were non-Hispanic Black or African American, non-Hispanic American Indian or Alaska Native, and Hispanic or Latino students of any race (2009)			
Lowest fifth (0–7 percent of students)	2.07	2.08	2.19
Middle three-fifths (8–64 percent of students)	1.81	1.88	1.75
Highest fifth (65–100 percent of students)	3.72	4.76	3.40
Student's school percentage of English language learners (2012)			
0 percent	2.34	2.95	2.16
1 to 5 percent	1.56	1.74	1.54
More than 5 percent	2.12	2.73	2.66
High school from which student received diploma (2013)			
Ninth-grade school	1.24	1.35	1.23
Another high school	2.96	4.83	4.78

† Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School Longitudinal Study of 2009 (HLSL:09) 2013 Update and High School Transcripts Restricted-use Data File.

National Center for Education Statistics

Table 13.

Among fall 2009 ninth-graders who received a high school diploma by the fall of 2013, percentage of students who enrolled in an associate's or bachelor's degree program in fall of 2013, by type of high school credits earned and selected student and parent characteristics: 2013

Selected student and parent characteristics	Percent enrolled in associate's or bachelor's degree program			
	Earned no AP, IB, or dual-enrollment credits ¹	Earned AP or IB credits only	Earned dual-enrollment credits only ²	Earned both AP or IB and dual-enrollment credits ³
Total	45.0	78.1	67.3	84.6
Student's sex (2009)				
Female	47.9	78.3	67.0	81.7
Male	42.4	77.8	67.5	88.8
Student's race/ethnicity (2009) ⁴				
Asian	55.6	82.6	‡	94.6
Black/African American	44.6	73.0	59.4	52.7 !
Hispanic/Latino	37.4	68.9	50.8	86.4
Other	39.9	77.1	58.5	76.7
White	49.0	81.8	73.5	86.5
Student's native language (2009)				
English	46.9	80.3	71.0	83.7
English and a non-English language	38.2	72.2	‡	93.3
Non-English	36.6	68.5	28.5	88.9
Parents' socioeconomic status (2009) ⁵				
Lowest fifth	29.1	64.2	34.5	68.1
Middle three-fifths	44.7	73.9	67.6	81.0
Highest fifth	72.5	89.4	83.9	92.3
Parents' highest level of education (2009)				
High school credential or less	34.4	67.2	58.6	71.6
Undergraduate degree	58.1	84.0	74.3	84.2
Graduate degree	73.1	88.2	86.8	96.7
Student's educational expectations (2009)				
High school credential	27.4	72.2	49.2	‡
Undergraduate degree	45.7	77.8	77.0	84.7
Graduate degree	57.1	82.3	74.4	87.5
Don't know	40.7	65.4	53.2	72.2
Student's mathematics achievement (2009) ⁶				
Lowest fifth	34.7	64.5	30.3	‡
Middle three-fifths	46.3	74.3	67.9	79.0
Highest fifth	64.1	84.6	83.6	91.5
Student's school sector (2012)				
Public	43.9	77.1	66.5	84.4
Regular	44.2	77.0	67.2	84.4
Charter or special-program school	44.8	79.1	‡	‡
Career/technical/vocational or alternative school	35.5 !	‡	‡	‡
Private	76.6	90.9	80.4	90.4

See notes at end of table.

National Center for Education Statistics

Table 13.

Among fall 2009 ninth-graders who received a high school diploma by the fall of 2013, percentage of students who enrolled in an associate's or bachelor's degree program in fall of 2013, by type of high school credits earned and selected student and parent characteristics: 2013—Continued

Selected student and parent characteristics	Percent enrolled in associate's or bachelor's degree program			
	Earned no AP, IB, or dual-enrollment credits ¹	Earned AP or IB credits only	Earned dual-enrollment credits only ²	Earned both AP or IB and dual-enrollment credits ³
Student's school region (2012)				
Northeast	52.6	87.0	81.4	93.0
Midwest	49.3	80.5	65.5	90.9
South	40.5	73.8	66.3	82.4
West	41.9	75.8	63.7	74.4
Student's school locale (2012)				
City	42.9	77.7	45.6	81.3
Suburb	50.0	79.3	74.1	87.9
Town	41.3	76.8	73.2	90.9
Rural	44.8	77.4	70.1	83.7
Student's school size (2012)				
Fewer than 500 students	50.8	81.9	72.0	90.6
500 to 1,199 students	43.5	81.6	68.9	89.4
1,200 or more students	45.1	76.7	61.8	81.4
Student's school percentage of students who received free or reduced-price lunch (2012) ⁷				
Lowest fifth (0–18 percent of students)	67.5	88.8	78.1	91.2
Middle three-fifths (19–67 percent of students)	42.7	76.3	70.5	81.9
Highest fifth (68–100 percent of students)	36.5	68.3	44.0	86.5
Student's school percentage of students who were non-Hispanic Black or African American, non-Hispanic American Indian or Alaska Native, and Hispanic or Latino students of any race (2009) ⁸				
Lowest fifth (0–7 percent of students)	52.8	83.2	78.7	89.0
Middle three-fifths (8–64 percent of students)	48.3	79.9	63.3	81.9
Highest fifth (65–100 percent of students)	36.2	74.2	69.1	87.5
Student's school percentage of English language learners (2012)				
0 percent	53.2	88.6	65.8	89.4
1 to 5 percent	44.3	79.1	75.5	85.6
More than 5 percent	42.8	73.4	59.4	80.2
High school from which student received diploma (2013)				
Ninth-grade school	47.7	79.2	69.2	85.4
Another high school	31.0	68.8	44.0	77.1

See notes at end of table.

National Center for Education Statistics

Table 13.

Among fall 2009 ninth-graders who received a high school diploma by the fall of 2013, percentage of students who enrolled in an associate's or bachelor's degree program in fall of 2013, by type of high school credits earned and selected student and parent characteristics: 2013—Continued

! Interpret data with caution. Estimate is unstable because the standard error is between 30 and 50 percent of the estimate.

‡ Reporting standards not met either because the standard error is greater than 50 percent of the estimate or because there were too few cases for a reliable estimate.

¹ Dual enrollment refers to taking postsecondary courses while also enrolled in high school. Students may take dual-enrollment courses through a program offered by their high school or independently. A high school dual-enrollment program is an organized system with special guidelines that might have to do with, for example, entrance or eligibility requirements, funding, and limits on coursetaking. These estimates include college-entrance exam scores of students who did not earn any credits in AP courses, IB courses, and dual-enrollment courses that were offered through a program, or dual-enrollment courses taken independently.

² These estimates include enrollment of students who earned credits in dual-enrollment courses that were offered through a program or taken independently but who did not earn any credits in AP or IB courses. See footnote 1 for a definition of dual enrollment and dual-enrollment programs.

³ These estimates include enrollment of students who earned credits in AP or IB courses and credits in dual-enrollment courses that were offered through a program or taken independently. See footnote 1 for a definition of dual enrollment and dual-enrollment programs.

⁴ All race categories exclude Hispanic or Latino origin unless specified. "Other" includes American Indian, Alaska Native, Native Hawaiian, other Pacific Islander, and individuals who indicated Two or more races or Other.

⁵ Parents' socioeconomic status was calculated using parents' education, occupation, and family income.

⁶ Student's mathematics achievement was measured by a two-stage adaptive assessment in algebraic reasoning developed for HSLS:09.

⁷ To be eligible for free lunch under the National School Lunch Program (NSLP), a federally assisted meal program, a student must be from a household with an income at or below 130 percent of the poverty threshold. To be eligible for reduced-price lunch, a student must be from a household with an income between 130 percent and 185 percent of the poverty threshold. Therefore, the percentage of students receiving free or reduced-price lunch (FRPL) under the NSLP provides a proxy measure for the concentration of low-income students within a school. However, this percentage cannot be used as a strict measure of the percentage of children at or below 185 percent of the poverty threshold because some students are eligible for FRPL based on criteria other than income, and some schools and districts provide FRPL to all students regardless of income.

⁸ Students in these racial/ethnic groups tend to be underrepresented in AP, IB, and dual-enrollment courses. These data were only collected from students' ninth-grade schools in the base year of the study; data were not collected for any schools students had transferred to as of the first follow-up data collection. Therefore, estimates are based on 2009 data for students who received their high school diploma from their ninth-grade school.

NOTE: AP = Advanced Placement; IB = International Baccalaureate. Estimates are based on fall 2009 ninth-graders who had received a high school diploma from any high school before September 2013, when the high school transcript data collection began. Students in this group whose exact graduation date is unknown are included. Students who had not received a diploma, received a diploma in the fall of 2013 or later, or for whom transcript data were incomplete are excluded. Students' high school credits earned were collected from the high school transcripts and reflect Carnegie units. The Carnegie unit is a standard of measurement that represents one credit for 120 hours of classroom time over the course of a year at the secondary-school level in the United States, equivalent to the completion of a 1-year academic course taken one period a day, 5 days a week. Students' associate's and bachelor's degree program enrollment status was collected in the 2013 Update. The lowest fifth, middle three-fifths, and highest fifth categories are based on the distribution of fall-term ninth-grade students. Data were weighted using the weight W3W1W2STUTR. This weight accounts for (1) base-year school nonresponse; (2) high school transcript nonresponse; and (3) student nonresponse in the base year, first follow-up, and 2013 Update.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School Longitudinal Study of 2009 (HSLS:09) 2013 Update and High School Transcripts Restricted-use Data File.

National Center for Education Statistics

Table S13.

Standard errors for table 13: Among fall 2009 ninth-graders who received a high school diploma by the fall of 2013, percentage of students who enrolled in an associate's or bachelor's degree program in fall of 2013, by type of high school credits earned and selected student and parent characteristics: 2013

Selected student and parent characteristics	Percent enrolled in associate's or bachelor's degree program			
	Earned no AP, IB, or dual-enrollment credits	Earned AP or IB credits only	Earned dual-enrollment credits only	Earned both AP or IB and dual-enrollment credits
Total	1.16	1.18	4.09	2.23
Student's sex (2009)				
Female	1.45	1.41	5.33	3.46
Male	1.62	1.60	4.85	1.99
Student's race/ethnicity (2009)				
Asian	4.63	2.84	†	2.71
Black/African American	3.27	5.47	12.20	20.57
Hispanic/Latino	2.69	3.72	11.05	6.08
Other	2.75	3.19	12.94	10.17
White	1.38	1.27	3.59	2.10
Student's native language (2009)				
English	1.08	1.25	3.52	2.59
English and a non-English language	5.34	4.33	†	3.70
Non-English	4.43	4.56	14.67	4.62
Parents' socioeconomic status (2009)				
Lowest fifth	2.51	6.18	13.30	12.95
Middle three-fifths	1.33	1.37	4.33	3.36
Highest fifth	1.90	1.21	4.60	2.04
Parents' highest level of education (2009)				
High school credential or less	1.65	2.90	6.41	6.52
Undergraduate degree	1.85	1.50	5.11	3.27
Graduate degree	2.42	1.43	5.01	1.29
Student's educational expectations (2009)				
High school credential	2.32	9.45	13.42	†
Undergraduate degree	2.32	2.22	5.31	5.71
Graduate degree	1.82	1.46	3.38	2.07
Don't know	2.36	3.15	9.09	7.11
Student's mathematics achievement (2009)				
Lowest fifth	2.81	5.65	8.41	†
Middle three-fifths	1.50	1.53	4.65	3.18
Highest fifth	3.10	1.44	4.10	2.20
Student's school sector (2012)				
Public	1.18	1.16	4.49	2.45
Regular	1.25	1.24	4.64	2.51
Charter or special-program school	4.43	4.99	†	†
Career/technical/vocational or alternative school	11.65	†	†	†
Private	3.34	2.94	7.26	2.43

See notes at end of table.

National Center for Education Statistics

Table S13.

Standard errors for table 13: Among fall 2009 ninth-graders who received a high school diploma by the fall of 2013, percentage of students who enrolled in an associate's or bachelor's degree program in fall of 2013, by type of high school credits earned and selected student and parent characteristics: 2013—Continued

Selected student and parent characteristics	Percent enrolled in associate's or bachelor's degree program			
	Earned no AP, IB, or dual-enrollment credits	Earned AP or IB credits only	Earned dual-enrollment credits only	Earned both AP or IB and dual-enrollment credits
Student's school region (2012)				
Northeast	2.88	2.79	9.77	3.52
Midwest	1.74	1.93	5.65	2.65
South	1.73	1.95	5.86	2.76
West	3.11	2.66	14.74	9.07
Student's school locale (2012)				
City	2.83	2.50	10.89	4.65
Suburb	2.01	1.59	6.77	2.92
Town	3.53	4.82	5.92	4.88
Rural	1.51	2.29	6.41	4.47
Student's school size (2012)				
Fewer than 500 students	2.56	3.00	6.42	2.72
500 to 1,199 students	1.85	2.56	5.17	2.80
1,200 or more students	1.64	1.42	8.63	3.51
Student's school percentage of students who received free or reduced-price lunch (2012)				
Lowest fifth (0–18 percent of students)	2.44	1.38	6.03	2.02
Middle three-fifths (19–67 percent of students)	1.43	1.39	4.61	3.22
Highest fifth (68–100 percent of students)	2.54	4.26	13.30	5.93
Student's school percentage of students who were non-Hispanic Black or African American, non-Hispanic American Indian or Alaska Native, and Hispanic or Latino students of any race (2009)				
Lowest fifth (0–7 percent of students)	2.07	2.29	3.66	2.47
Middle three-fifths (8–64 percent of students)	1.81	1.49	6.86	3.99
Highest fifth (65–100 percent of students)	3.72	4.17	11.32	4.58
Student's school percentage of English language learners (2012)				
0 percent	2.34	2.03	8.04	3.25
1 to 5 percent	1.56	1.55	4.11	2.66
More than 5 percent	2.12	2.26	9.69	5.96
High school from which student received diploma (2013)				
Ninth-grade school	1.24	1.14	4.11	2.40
Another high school	2.96	4.64	12.53	7.78

† Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School Longitudinal Study of 2009 (HSL:09) 2013 Update and High School Transcripts Restricted-use Data File.

National Center for Education Statistics

Table 14.

Among fall 2009 ninth-graders who received a high school diploma by the fall of 2013, percentage of students who enrolled in an associate's or bachelor's degree program in fall of 2013, by location of dual-enrollment courses and selected student and parent characteristics: 2013

Selected student and parent characteristics	Percent enrolled in associate's or bachelor's degree program		
	Earned no dual-enrollment credits ¹	Earned any dual-enrollment credits on college campus ²	Earned dual-enrollment credits off college campus only ³
Total	58.1	75.2	77.8
Student's sex (2009)			
Female	61.2	77.9	75.7
Male	55.0	71.6	80.3
Student's race/ethnicity (2009) ⁴			
Asian	75.6	‡	85.2
Black/African American	53.0	‡	50.9
Hispanic/Latino	48.8	73.2	74.6
Other	53.9	‡	67.5
White	62.6	78.9	81.0
Student's native language (2009)			
English	59.7	73.8	79.2
English and a non-English language	53.3	‡	82.2
Non-English	52.3	‡	61.7
Parents' socioeconomic status (2009) ⁵			
Lowest fifth	38.3	‡	52.1
Middle three-fifths	55.0	69.0	75.1
Highest fifth	83.3	92.2	89.2
Parents' highest level of education (2009)			
High school credential or less	44.3	62.3	64.8
Undergraduate degree	69.9	74.6	81.6
Graduate degree	82.8	93.8	94.5
Student's educational expectations (2009)			
High school credential	34.9	‡	56.2
Undergraduate degree	57.4	80.4	81.4
Graduate degree	70.5	84.2	82.4
Don't know	48.3	45.3!	65.3
Student's mathematics achievement (2009) ⁶			
Lowest fifth	38.1	‡	43.7
Middle three-fifths	56.1	72.2	74.0
Highest fifth	79.3	92.8	88.1
Student's school sector (2012)			
Public	56.8	77.3	77.1
Regular	56.7	76.5	77.6
Charter or special-program school	64.2	‡	‡
Career/technical/vocational or alternative school	37.9	‡	‡
Private	84.8	‡	88.2

See notes at end of table.

National Center for Education Statistics

Table 14.

Among fall 2009 ninth-graders who received a high school diploma by the fall of 2013, percentage of students who enrolled in an associate's or bachelor's degree program in fall of 2013, by location of dual-enrollment courses and selected student and parent characteristics: 2013—Continued

Selected student and parent characteristics	Percent enrolled in associate's or bachelor's degree program		
	Earned no dual-enrollment credits ¹	Earned any dual-enrollment credits on college campus ²	Earned dual-enrollment credits off college campus only ³
Student's school region (2012)			
Northeast	65.4	‡	87.9
Midwest	61.5	71.0	78.7
South	54.1	76.8	76.1
West	56.1	65.1	70.9
Student's school locale (2012)			
City	59.2	62.4	73.2
Suburb	63.5	91.2	81.6
Town	51.9	‡	78.0
Rural	54.7	73.5	78.4
Student's school size (2012)			
Fewer than 500 students	59.1	71.6	81.9
500 to 1,199 students	57.2	77.0	79.9
1,200 or more students	59.8	78.8	75.2
Student's school percentage of students who received free or reduced-price lunch (2012) ⁷			
Lowest fifth (0–18 percent of students)	79.2	75.3	87.2
Middle three-fifths (19–67 percent of students)	55.2	77.1	77.2
Highest fifth (68–100 percent of students)	46.5	75.7	57.5
Student's school percentage of students who were non-Hispanic Black or African American, non-Hispanic American Indian or Alaska Native, and Hispanic or Latino students of any race (2009) ⁸			
Lowest fifth (0–7 percent of students)	62.8	‡	84.0
Middle three-fifths (8–64 percent of students)	62.2	74.2	75.2
Highest fifth (65–100 percent of students)	51.9	85.9	78.9
Student's school percentage of English language learners (2012)			
0 percent	66.3	63.0	79.8
1 to 5 percent	58.2	78.3	82.5
More than 5 percent	55.6	84.9	67.1
High school from which student received diploma (2013)			
Ninth-grade school	60.6	76.7	79.2
Another high school	42.8	59.3!	63.4

See notes at end of table.

National Center for Education Statistics

Table 14.

Among fall 2009 ninth-graders who received a high school diploma by the fall of 2013, percentage of students who enrolled in an associate's or bachelor's degree program in fall of 2013, by location of dual-enrollment courses and selected student and parent characteristics: 2013—Continued

! Interpret data with caution. Estimate is unstable because the standard error is between 30 and 50 percent of the estimate.

‡ Reporting standards not met either because the standard error is greater than 50 percent of the estimate or because there were too few cases for a reliable estimate.

¹ Dual enrollment refers to taking postsecondary courses while also enrolled in high school. Students may take dual-enrollment courses through a program offered by their high school or independently. A high school dual-enrollment program is an organized system with special guidelines that might have to do with, for example, entrance or eligibility requirements, funding, and limits on coursetaking. These estimates include college-entrance exam scores of students who did not earn any credits in dual-enrollment courses that were offered through a program or taken independently.

² These estimates include enrollment of students who earned dual-enrollment credits in a course taken on a college campus. This includes dual-enrollment courses that were offered through a program and dual-enrollment courses taken independently. See footnote 1 for a definition of dual enrollment and dual-enrollment programs. Courses taken at community colleges and 4-year colleges and universities are included. Courses taken at high schools, career or vocational centers, and online are excluded.

³ These estimates include enrollment of students who only earned dual-enrollment credits in a course taken off of a college campus. This includes dual-enrollment courses that were offered through a program and dual-enrollment courses taken independently. See footnote 1 for a definition of dual enrollment and dual-enrollment programs. Courses taken at high schools, career or vocational centers, and online are included. Courses taken at community colleges and 4-year colleges and universities are excluded.

⁴ All race categories exclude Hispanic or Latino origin unless specified. "Other" includes American Indian, Alaska Native, Native Hawaiian, other Pacific Islander, and individuals who indicated Two or more races or Other.

⁵ Parents' socioeconomic status was calculated using parents' education, occupation, and family income.

⁶ Student's mathematics achievement was measured by a two-stage adaptive assessment in algebraic reasoning developed for HSL:09.

⁷ To be eligible for free lunch under the National School Lunch Program (NSLP), a federally assisted meal program, a student must be from a household with an income at or below 130 percent of the poverty threshold. To be eligible for reduced-price lunch, a student must be from a household with an income between 130 percent and 185 percent of the poverty threshold. Therefore, the percentage of students receiving free or reduced-price lunch (FRPL) under the NSLP provides a proxy measure for the concentration of low-income students within a school. However, this percentage cannot be used as a strict measure of the percentage of children at or below 185 percent of the poverty threshold because some students are eligible for FRPL based on criteria other than income, and some schools and districts provide FRPL to all students regardless of income.

⁸ Students in these racial/ethnic groups tend to be AP, IB, and dual-enrollment courses. These data were only collected from students' ninth-grade schools in the base year of the study; data were not collected for any schools students had transferred to as of the first follow-up data collection. Therefore, estimates are based on 2009 data for students who received their high school diploma from their ninth-grade school.

NOTE: AP = Advanced Placement; IB = International Baccalaureate. Estimates are based on fall 2009 ninth-graders who had received a high school diploma from any high school before September 2013, when the high school transcript data collection began. Students in this group whose exact graduation date is unknown are included. Students who had not received a diploma, received a diploma in the fall of 2013 or later, or for whom transcript data were incomplete are excluded. Students' high school credits earned were collected from the high school transcripts and reflect Carnegie units. The Carnegie unit is a standard of measurement that represents one credit for 120 hours of classroom time over the course of a year at the secondary-school level in the United States, equivalent to the completion of a 1-year academic course taken one period a day, 5 days a week. Students' associate's and bachelor's degree program enrollment status was collected in the 2013 Update. The lowest fifth, middle three-fifths, and highest fifth categories are based on the distribution of fall-term ninth-grade students. Data were weighted using the weight W3W1W2STUTR. This weight accounts for (1) base-year school nonresponse; (2) high school transcript nonresponse; and (3) student nonresponse in the base year, first follow-up, and 2013 Update.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School Longitudinal Study of 2009 (HSL:09) 2013 Update and High School Transcripts Restricted-use Data File.

National Center for Education Statistics

Table S14.

Standard errors for table 14: Among fall 2009 ninth-graders who received a high school diploma by the fall of 2013, percentage of students who enrolled in an associate's or bachelor's degree program in fall of 2013, by location of dual-enrollment courses and selected student and parent characteristics: 2013

Selected student and parent characteristics	Percent enrolled in associate's or bachelor's degree program		
	Earned no dual-enrollment credits	Earned any dual-enrollment credits on college campus	Earned dual-enrollment credits off college campus only
Total	1.01	4.40	2.29
Student's sex (2009)			
Female	1.10	5.88	3.42
Male	1.44	5.83	2.57
Student's race/ethnicity (2009)			
Asian	2.80	†	4.80
Black/African American	3.18	†	14.87
Hispanic/Latino	2.29	11.70	7.00
Other	2.13	†	8.59
White	1.05	4.24	2.01
Student's native language (2009)			
English	0.98	4.82	2.16
English and a non-English language	4.46	†	6.70
Non-English	3.61	†	8.29
Parents' socioeconomic status (2009)			
Lowest fifth	2.53	†	9.64
Middle three-fifths	1.07	6.20	2.87
Highest fifth	1.02	3.66	2.19
Parents' highest level of education (2009)			
High school credential or less	1.57	7.56	5.04
Undergraduate degree	1.19	8.65	2.64
Graduate degree	1.31	4.51	1.63
Student's educational expectations (2009)			
High school credential	2.92	†	13.31
Undergraduate degree	1.92	7.00	4.50
Graduate degree	1.20	4.14	2.13
Don't know	1.81	15.41	6.02
Student's mathematics achievement (2009)			
Lowest fifth	2.64	†	9.24
Middle three-fifths	1.15	6.35	2.92
Highest fifth	1.36	3.89	2.24
Student's school sector (2012)			
Public	1.07	4.66	2.48
Regular	1.13	4.89	2.54
Charter or special-program school	4.06	†	†
Career/technical/vocational or alternative school	8.80	†	†
Private	2.52	†	2.73

See notes at end of table.

National Center for Education Statistics

Table S14.

Standard errors for table 14: Among fall 2009 ninth-graders who received a high school diploma by the fall of 2013, percentage of students who enrolled in an associate's or bachelor's degree program in fall of 2013, by location of dual-enrollment courses and selected student and parent characteristics: 2013—Continued

Selected student and parent characteristics	Percent enrolled in associate's or bachelor's degree program		
	Earned no dual-enrollment credits	Earned any dual-enrollment credits on college campus	Earned dual-enrollment credits off college campus only
Student's school region (2012)			
Northeast	2.53	†	3.81
Midwest	1.51	10.66	4.35
South	1.55	5.51	2.78
West	3.00	15.48	8.64
Student's school locale (2012)			
City	2.29	10.48	5.19
Suburb	1.59	3.37	3.43
Town	2.97	†	3.73
Rural	1.66	7.02	3.97
Student's school size (2012)			
Fewer than 500 students	2.15	9.27	3.82
500 to 1,199 students	1.81	7.52	3.70
1,200 or more students	1.36	6.43	3.82
Student's school percentage of students who received free or reduced-price lunch (2012)			
Lowest fifth (0–18 percent of students)	1.44	12.14	2.54
Middle three-fifths (19–67 percent of students)	1.20	6.32	2.95
Highest fifth (68–100 percent of students)	2.69	9.54	12.84
Student's school percentage of students who were non-Hispanic Black or African American, non-Hispanic American Indian or Alaska Native, and Hispanic or Latino students of any race (2009)			
Lowest fifth (0–7 percent of students)	1.79	†	2.16
Middle three-fifths (8–64 percent of students)	1.55	7.18	4.14
Highest fifth (65–100 percent of students)	3.54	5.48	6.70
Student's school percentage of English language learners (2012)			
0 percent	2.04	9.05	4.35
1 to 5 percent	1.34	4.48	2.38
More than 5 percent	1.96	9.78	6.10
High school from which student received diploma (2013)			
Ninth-grade school	1.08	4.49	2.41
Another high school	2.31	18.80	8.20

† Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School Longitudinal Study of 2009 (HSL:09) 2013 Update and High School Transcripts Restricted-use Data File.

National Center for Education Statistics

Table 15.

Percentage distribution of selected student and parent characteristics, by student population: 2013

Selected student and parent characteristics	Student populations			
	All fall 2009 ninth-graders	Fall 2009 ninth-graders who received a high school diploma by the fall of 2013	Fall 2009 ninth-graders who received a high school diploma by the fall of 2013 and had a complete transcript (tables 5–14)	Fall 2009 ninth-graders who received a high school diploma by the fall of 2013 from the schools they attended in the fall of 2009 and had a complete transcript (tables 1–4)
Weighted number of students	4,191,570	3,445,833	3,291,294	2,864,178
Total	100.0	100.0	100.0	100.0
Student's sex (2009)				
Female	49.7	50.6	51.0	50.8
Male	50.3	49.4	49.0	49.2
Student's race/ethnicity (2009) ¹				
Asian	3.6	3.8	3.8	4.0
Black/African American	13.7	12.5	12.2	11.2
Hispanic/Latino	22.0	21.0	21.1	20.1
Other	9.1	8.7	8.6	8.5
White	51.7	54.0	54.4	56.2
Student's native language (2009)				
English	82.6	82.9	82.9	83.3
English and a non-English language	6.0	5.9	5.9	5.6
Non-English	11.4	11.3	11.3	11.1
Parents' socioeconomic status (2009) ²				
Lowest fifth	19.6	16.9	16.8	15.9
Middle three-fifths	59.9	60.4	60.5	60.3
Highest fifth	20.4	22.7	22.7	23.8
Parents' highest level of education (2009)				
High school credential or less	46.7	43.7	43.4	42.4
Undergraduate degree	38.4	40.2	40.4	40.7
Graduate degree	14.9	16.1	16.2	16.9
Student's educational expectations (2009)				
High school credential	14.0	11.3	10.9	9.9
Undergraduate degree	23.5	24.4	24.4	24.6
Graduate degree	41.3	43.7	44.1	44.8
Don't know	21.2	20.6	20.6	20.7
Student's mathematics achievement (2009) ³				
Lowest fifth	17.9	14.9	14.5	13.8
Middle three-fifths	60.6	61.3	61.4	61.2
Highest fifth	21.4	23.8	24.0	25.0
Student's school sector (2012)				
Public	92.9	92.7	92.6	92.8
Regular	83.4	84.5	84.4	85.5
Charter or special-program school	6.1	5.9	6.1	5.6
Career/technical/vocational or alternative school	3.3	2.3	2.2	1.7
Private	7.1	7.3	7.4	7.2

See notes at end of table.

National Center for Education Statistics

Table 15.

**Percentage distribution of selected student and parent characteristics, by student population:
2013—Continued**

Selected student and parent characteristics	Student populations			
	All fall 2009 ninth-graders	Fall 2009 ninth-graders who received a high school diploma by the fall of 2013	Fall 2009 ninth-graders who received a high school diploma by the fall of 2013 and had a complete transcript (tables 5–14)	Fall 2009 ninth-graders who received a high school diploma by the fall of 2013 from the schools they attended in the fall of 2009 and had a complete transcript (tables 1–4)
Student's school region (2012)				
Northeast	17.7	18.3	18.5	19.2
Midwest	21.9	22.0	22.0	22.6
South	37.7	38.3	38.3	38.0
West	22.6	21.5	21.2	20.3
Student's school locale (2012)				
City	30.8	29.9	29.9	28.6
Suburb	28.5	28.8	28.9	29.1
Town	12.1	12.4	12.4	12.8
Rural	28.7	28.9	28.8	29.6
Student's school size (2012)				
Fewer than 500 students	18.7	17.1	16.7	15.9
500 to 1,199 students	29.4	30.3	30.7	30.8
1,200 or more students	51.9	52.7	52.6	53.2
Student's school percentage of students who received free or reduced-price lunch (2012) ⁴				
Lowest fifth (0–18 percent of students)	20.2	22.1	22.0	22.2
Middle three-fifths (19–67 percent of students)	59.9	59.9	59.9	60.3
Highest fifth (68–100 percent of students)	19.9	18.1	18.1	17.5
Student's school percentage of students who were non-Hispanic Black or African American, non-Hispanic American Indian or Alaska Native, and Hispanic or Latino students of any race (2009) ⁵				
Lowest fifth (0–7 percent of students)	24.4	24.5	24.1	24.1
Middle three-fifths (8–64 percent of students)	58.8	58.8	59.2	59.2
Highest fifth (65–100 percent of students)	16.8	16.7	16.7	16.7
Student's school percentage of English language learners (2012)				
0 percent	18.2	17.9	17.7	17.6
1 to 5 percent	48.9	50.1	50.9	51.4
More than 5 percent	32.9	32.0	31.4	31.0
Student's school offerings (2012) ⁶				
Offered AP and/or IB course only	—	—	—	11.0
Offered dual-enrollment program only ⁷	—	—	—	8.0
Offered AP or IB course and dual-enrollment program ⁸	—	—	—	81.0
High school from which student received diploma (2013)				
Ninth-grade school	86.5	86.8	87.2	100.0
Another high school	13.5	13.2	12.8	0.0

See notes at end of table.

National Center for Education Statistics

Table 15.

**Percentage distribution of selected student and parent characteristics, by student population:
2013—Continued**

— Not available.

¹ All race categories exclude Hispanic or Latino origin unless specified. "Other" includes American Indian, Alaska Native, Native Hawaiian, other Pacific Islander, and individuals who indicated Two or more races or Other.

² Parents' socioeconomic status was calculated using parents' education, occupation, and family income.

³ Student's mathematics achievement was measured by a two-stage adaptive assessment in algebraic reasoning developed for HSLs:09.

⁴ To be eligible for free lunch under the National School Lunch Program (NSLP), a federally assisted meal program, a student must be from a household with an income at or below 130 percent of the poverty threshold. To be eligible for reduced-price lunch, a student must be from a household with an income between 130 percent and 185 percent of the poverty threshold. Therefore, the percentage of students receiving free or reduced-price lunch (FRPL) under the NSLP provides a proxy measure for the concentration of low-income students within a school. However, this percentage cannot be used as a strict measure of the percentage of children at or below 185 percent of the poverty threshold because some students are eligible for FRPL based on criteria other than income, and some schools and districts provide FRPL to all students regardless of income.

⁵ Students in these racial/ethnic groups tend to be underrepresented in AP, IB, and dual-enrollment courses. These data were only collected from students' ninth-grade schools in the base year of the study; data were not collected for any schools students had transferred to as of the first follow-up data collection. Therefore, estimates are based on 2009 data for students who received their high school diploma from their ninth-grade school.

⁶ These data were only collected from students' ninth-grade schools; data were not collected from any schools students had transferred to as of the first follow-up data collection. Estimates are based on 2012 data for students who received their high school diploma from their ninth-grade school.

⁷ Dual enrollment refers to taking postsecondary courses while also enrolled in high school. Students may take dual-enrollment courses through a program offered by their high school or independently. A high school dual-enrollment program is an organized system with special guidelines that might have to do with, for example, entrance or eligibility requirements, funding, and limits on coursetaking. Students and credits earned by students whose ninth-grade schools offered a dual-enrollment program but did not offer AP or IB courses are included in these estimates. Students whose schools did not offer a dual-enrollment program are excluded even if they took dual-enrollment courses independently.

⁸ Students whose ninth-grade schools offered AP or IB courses and a dual-enrollment program are included in these estimates. Students whose schools did not offer a dual-enrollment program are excluded even if they took dual-enrollment courses independently. See footnote 7 for a definition of dual enrollment and dual-enrollment programs.

NOTE: AP = Advanced Placement; IB = International Baccalaureate. The lowest fifth, middle three-fifths, and highest fifth categories are based on the distribution of fall-term ninth-grade students. Data were weighted using the weight W3W1W2STUTR. This weight accounts for (1) base-year school nonresponse; (2) high school transcript nonresponse; and (3) student nonresponse in the base year, first follow-up, and 2013 Update. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School Longitudinal Study of 2009 (HSLs:09) 2013 Update and High School Transcripts Restricted-use Data File.

National Center for Education Statistics

Table S15.

Standard errors for table 15: Percentage distribution of selected student and parent characteristics, by student population: 2013

Selected student and parent characteristics	Student populations			
	All fall 2009 ninth-graders	Fall 2009 ninth-graders who received a high school diploma by the fall of 2013	Fall 2009 ninth-graders who received a high school diploma by the fall of 2013 and had a complete transcript (tables 5–14)	Fall 2009 ninth-graders who received a high school diploma by the fall of 2013 from the schools they attended in the fall of 2009 and had a complete transcript (tables 1–4)
Weighted number of students	†	†	†	†
Total	†	†	†	†
Student's sex (2009)				
Female	0.73	0.79	0.81	0.94
Male	0.73	0.79	0.81	0.94
Student's race/ethnicity (2009)				
Asian	0.36	0.40	0.41	0.47
Black/African American	0.90	0.87	0.87	0.87
Hispanic/Latino	1.04	1.02	1.03	1.13
Other	0.43	0.47	0.48	0.53
White	1.12	1.24	1.28	1.29
Student's native language (2009)				
English	0.93	0.88	0.90	0.98
English and a non-English language	0.37	0.41	0.41	0.43
Non-English	0.87	0.89	0.90	0.95
Parents' socioeconomic status (2009)				
Lowest fifth	0.80	0.85	0.87	0.79
Middle three-fifths	0.66	0.75	0.78	0.82
Highest fifth	0.70	0.77	0.79	0.81
Parents' highest level of education (2009)				
High school credential or less	1.09	1.15	1.12	1.15
Undergraduate degree	0.84	0.93	0.91	0.92
Graduate degree	0.55	0.58	0.59	0.63
Student's educational expectations (2009)				
High school credential	0.61	0.60	0.57	0.55
Undergraduate degree	0.61	0.66	0.68	0.69
Graduate degree	0.76	0.76	0.76	0.83
Don't know	0.56	0.58	0.59	0.61
Student's mathematics achievement (2009)				
Lowest fifth	0.92	0.93	0.94	1.00
Middle three-fifths	0.79	0.91	0.93	1.04
Highest fifth	0.76	0.85	0.86	0.92
Student's school sector (2012)				
Public	0.24	0.39	0.41	0.46
Regular	1.44	1.59	1.63	1.63
Charter or special-program school	1.29	1.46	1.52	1.51
Career/technical/vocational or alternative school	1.04	1.00	1.04	1.15
Private	0.24	0.39	0.41	0.46

See notes at end of table.

National Center for Education Statistics

Table S15.

Standard errors for table 15: Percentage distribution of selected student and parent characteristics, by student population: 2013—Continued

Selected student and parent characteristics	Student populations			
	All fall 2009 ninth-graders	Fall 2009 ninth-graders who received a high school diploma by the fall of 2013	Fall 2009 ninth-graders who received a high school diploma by the fall of 2013 and had a complete transcript (tables 5–14)	Fall 2009 ninth-graders who received a high school diploma by the fall of 2013 from the schools they attended in the fall of 2009 and had a complete transcript (tables 1–4)
Student's school region (2012)				
Northeast	0.07	0.60	0.71	0.76
Midwest	0.19	0.51	0.62	0.71
South	0.18	0.54	0.61	0.75
West	0.18	0.60	0.78	0.98
Student's school locale (2012)				
City	0.84	1.14	1.25	1.20
Suburb	1.25	1.37	1.38	1.44
Town	1.09	1.19	1.21	1.36
Rural	1.17	1.36	1.45	1.57
Student's school size (2012)				
Fewer than 500 students	1.45	1.49	1.50	1.63
500 to 1,199 students	1.93	2.06	2.10	2.21
1,200 or more students	1.99	2.15	2.20	2.29
Student's school percentage of students who received free or reduced-price lunch (2012)				
Lowest fifth (0–18 percent of students)	1.50	1.64	1.64	1.76
Middle three-fifths (19–67 percent of students)	2.06	2.14	2.14	2.31
Highest fifth (68–100 percent of students)	1.84	1.83	1.85	2.00
Student's school percentage of students who were non-Hispanic Black or African American, non-Hispanic American Indian or Alaska Native, and Hispanic or Latino students of any race (2009)				
Lowest fifth (0–7 percent of students)	1.78	1.78	1.83	1.83
Middle three-fifths (8–64 percent of students)	2.74	2.74	2.84	2.84
Highest fifth (65–100 percent of students)	2.34	2.35	2.42	2.42
Student's school percentage of English language learners (2012)				
0 percent	1.33	1.41	1.42	1.58
1 to 5 percent	2.05	2.17	2.22	2.46
More than 5 percent	1.81	1.95	1.99	2.20
Student's school offerings (2012)				
Offers AP and/or IB course only	†	†	†	1.61
Offers dual-enrollment program only	†	†	†	1.27
Offers AP or IB courses and dual-enrollment program	†	†	†	2.05
High school from which student received diploma (2013)				
Ninth-grade school	0.79	0.79	0.80	†
Another high school	0.79	0.79	0.80	†

† Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School Longitudinal Study of 2009 (HSL:09) 2013 Update and High School Transcripts Restricted-use Data File.