

Issue Tables

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The High School Senior Class of 2003–04: Steps Toward Postsecondary Enrollment

Introduction

Preparing to attend a postsecondary institution often involves many steps. In addition to academic preparation, high school students who plan to pursue postsecondary education must apply for admission to a college. For those who want to attend a 4-year institution, most also need to take a college entrance examination and obtain financial aid information. This set of Issue Tables, one of a series examining students' preparation for college,¹ draws on data from the Education Longitudinal Study of 2002 (ELS:02) to examine the extent to which the senior class of 2003–04 took or planned to take these steps toward postsecondary enrollment. The following provides a summary of this set of Issue Tables.

Table 1 shows the percentage of seniors who took or planned to take the College Board Preliminary Scholastic Assessment Test (PSAT), or college entrance examinations such as the College Board Scholastic Assessment Test (SAT) and American College Test (ACT).

Tables 2 and 3 explore high school seniors' preparation in more detail. Table 2 shows how students who took or planned to take the SAT or ACT prepared for these tests during high school. Table

¹ Three other sets of Issue Tables (see Related NCES Reports) examine students' academic preparation; postsecondary expectations and plans; and financial concerns and preparation. These tables are available at <http://nces.ed.gov/pubsearch/>.

3 examines where students with postsecondary plans sought information about college entrance requirements.

Tables 4 and 5 examine high school seniors' college application activities. Table 4 focuses on college applications during high school and shows the number of postsecondary institutions to which students applied. Table 5 looks at students' college applications up to 2 years after high school and provides detailed information about when students applied (during high school, after high school, or at both times).

Table 6 restricts the sample to 2004 high school seniors who applied to college as of 2006 and examines the selectivity of the postsecondary institutions to which they applied.

Estimates in all tables are shown for all specified students in the high school senior class of 2004 and by a wide range of student, family, and high school characteristics.²

Data

All information presented in these Issue Tables is based on data collected in the Education Longitudinal Study of 2002 (ELS:02). ELS:02 followed a nationally representative cohort of 2002 high school sophomores as they progressed through high school and then into postsecondary education and/or work. After the initial data collection in 2002, data were collected again in 2004, when most students were high school seniors, and in 2006, when most had entered postsecondary education or the workforce. Seniors in 2004 who were not in the base-year sample were given a chance of selection into the sample. This procedure, referred to as “freshening,” made the ELS spring 2004 senior cohort nationally representative of the 12th-grade class. The study collected high school transcripts that covered students' 4 years of coursetaking, administered standardized tests, and surveyed students,

parents, teachers, and schools. It thus provides a rich source of information on how this cohort prepared for college.

The analysis sample for this set of Issue Tables consists of all high school seniors in spring 2004. Some tables focus on a more restricted sample because the questions of interest were not asked of all students. For more detailed information on ELS:02, see <http://nces.ed.gov/surveys/ELS2002/>.

References

- Ingels, S.J., Planty, M., and Bozick, R. (2005). *A Profile of the American High School Senior in 2004: A First Look—Initial Results from the First Follow-up of the Educational Longitudinal Study of 2002 (ELS:02)* (NCES 2006-348). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC.
- U.S. Department of Education, National Center for Education Statistics. (2003). *NCES Statistical Standards* (NCES 2003-601). Washington, DC. Retrieved July 15, 2009, from <http://nces.ed.gov/pubs2003/2003601.pdf>.

Related NCES Reports

- Academic Preparation for College in the High School Senior Class of 2003–04* (NCES 2010-169)
- Getting Ready for College: Financial Concerns and Preparation Among the High School Senior Class of 2003–04* (NCES 2010-204) (forthcoming)
- Postsecondary Expectations and Plans for the High School Senior Class of 2003–04* (NCES 2010-170)

² For more information on student, family, and high school characteristics, see Ingels, Planty, and Bozick (2005).

National Center for Education Statistics

Table 1. Percentage of high school seniors who took or planned to take college entrance examinations, by selected student, family, and high school characteristics: 2004

Selected student, family, and high school characteristics	College Board Preliminary Scholastic Assessment Test (PSAT) ¹		College Board Scholastic Assessment Test (SAT) or American College Test (ACT)	
	Pct.	95% CI	Pct.	95% CI
Total	56.5	[54.9–58.2]	81.9	[80.9–83.0]
Sex				
Male	53.1	[51.0–55.1]	78.5	[77.2–79.9]
Female	59.9	[58.0–61.9]	85.3	[84.1–86.6]
Race/ethnicity ²				
White	58.9	[56.9–60.9]	84.2	[83.0–85.3]
Black	54.0	[50.1–57.9]	83.6	[81.5–85.8]
Hispanic	45.6	[42.1–49.2]	71.3	[68.3–74.3]
Asian	69.4	[65.0–73.8]	87.1	[83.9–90.3]
American Indian	43.7	[31.9–55.4]	67.3	[57.8–76.7]
Two or more races	56.3	[51.0–61.6]	78.9	[74.7–83.2]
First language learned to speak as a child				
Non-English	48.5	[45.1–51.9]	73.2	[70.2–76.2]
English	57.8	[56.0–59.5]	83.3	[82.3–84.3]
Highest level of parents' education				
High school or less	42.1	[39.7–44.6]	71.2	[69.3–73.1]
Some college	51.5	[49.3–53.7]	80.3	[78.7–81.8]
College graduation	65.6	[63.2–68.0]	88.4	[87.0–89.8]
Graduate/professional degree	74.7	[71.9–77.4]	92.0	[90.3–93.7]
Family income in 2001				
\$35,000 or lower	45.2	[42.9–47.5]	74.6	[72.7–76.5]
\$35,001–75,000	55.1	[53.0–57.1]	81.0	[79.6–82.4]
More than \$75,000	71.1	[68.7–73.5]	91.4	[90.1–92.6]
Family composition				
Mother and father	60.9	[59.0–62.7]	85.0	[83.8–86.1]
Mother or father and guardian	48.2	[45.4–50.9]	77.7	[75.4–80.1]
Single parent (mother or father)	51.9	[49.2–54.6]	78.2	[76.2–80.3]
Other	47.1	[41.7–52.6]	71.4	[66.6–76.3]
Highest mathematics course taken				
Pre-algebra or below	29.5	[25.2–33.7]	47.4	[43.1–51.7]
Algebra I/geometry	33.4	[30.7–36.0]	59.6	[57.0–62.3]
Algebra II	50.1	[47.3–52.8]	83.4	[81.5–85.2]
Trigonometry/analytic geometry/statistics	63.5	[60.2–66.8]	92.3	[90.6–93.9]
Pre-calculus/calculus	78.4	[76.3–80.6]	97.7	[97.0–98.3]
Highest science course taken				
Low-level science	25.4	[20.3–30.5]	40.0	[35.2–44.9]
Secondary physical science/basic biology	27.0	[20.9–33.2]	47.4	[40.8–54.0]
General biology	39.0	[36.4–41.5]	69.1	[66.6–71.5]
Chemistry I or physics I	60.0	[57.5–62.6]	88.4	[87.1–89.7]
Chemistry I and physics I	74.4	[71.3–77.6]	97.0	[96.0–97.9]
Chemistry II, physics II, or advanced biology	72.6	[69.1–76.1]	93.1	[91.3–94.8]

See notes at end of table.

National Center for Education Statistics

Table 1. Percentage of high school seniors who took or planned to take college entrance examinations, by selected student, family, and high school characteristics: 2004—Continued

Selected student, family, and high school characteristics	College Board Preliminary Scholastic Assessment Test (PSAT) ¹		College Board Scholastic Assessment Test (SAT) or American College Test (ACT)	
	Pct.	95% CI	Pct.	95% CI
High-level academic coursework				
Did not complete	47.2	[45.3–49.1]	75.8	[74.5–77.1]
Completed	80.2	[77.8–82.6]	98.1	[97.5–98.6]
Mathematics achievement test in senior year				
Lowest quarter	35.9	[33.4–38.4]	62.1	[59.9–64.3]
Middle two quarters	55.8	[54.0–57.6]	84.4	[83.2–85.6]
Highest quarter	78.0	[75.7–80.4]	96.5	[95.6–97.3]
High school GPA				
2.0 or lower	38.6	[35.4–41.9]	59.7	[56.6–62.8]
2.1–3.0	49.1	[46.9–51.3]	77.1	[75.5–78.7]
Higher than 3.0	69.8	[67.6–71.9]	94.8	[93.9–95.6]
Student's educational expectations				
High school or less	19.0	[15.1–22.8]	33.2	[28.6–37.7]
Some college	33.4	[30.7–36.0]	61.3	[58.7–64.0]
College graduation	58.8	[56.5–61.1]	91.1	[89.9–92.3]
Graduate/professional degree	75.0	[73.2–76.8]	94.9	[94.0–95.8]
Do not know	41.4	[37.6–45.2]	63.6	[60.0–67.1]
Parent's 2002 educational expectations for students				
High school or less	27.4	[22.1–32.8]	49.4	[43.4–55.4]
Some college	27.9	[24.6–31.2]	54.9	[51.0–58.7]
College graduation	55.4	[53.4–57.4]	82.6	[81.4–83.8]
Graduate/professional degree	66.2	[64.1–68.3]	89.6	[88.4–90.7]
Plans for postsecondary education after high school				
Do not plan to continue education	13.4	[7.5–19.4]	18.7	[12.2–25.3]
Do not know if will continue education	29.5	[25.3–33.8]	46.6	[42.1–51.1]
Plan to attend 4-year institution	69.3	[67.6–71.0]	95.2	[94.5–95.9]
Plan to attend 2-year community college	41.7	[39.0–44.4]	69.9	[67.8–72.1]
Plan to attend vocational, technical, or trade school	30.3	[26.9–33.7]	54.2	[50.2–58.2]
Sector of high school last attended				
Public	53.9	[52.1–55.7]	80.7	[79.6–81.8]
Catholic	89.1	[86.0–92.1]	95.8	[94.4–97.3]
Other private	83.2	[78.5–87.9]	95.2	[93.5–96.8]
Urbanicity of high school last attended				
Urban	59.7	[56.7–62.7]	82.5	[80.7–84.3]
Suburban	56.4	[54.0–58.7]	82.0	[80.5–83.5]
Rural	51.6	[47.7–55.5]	80.9	[78.6–83.3]

¹ The Preliminary Scholastic Assessment Test (PSAT) is a standardized test that provides practice for the College Board Scholastic Assessment Test (SAT). High school students can take this test in their sophomore or junior year. The score on the PSAT is not used for college admission but determines a student's eligibility for a National Merit Scholarship.

² Black includes African American, Hispanic includes Latino, Asian includes Native Hawaiian or other Pacific Islander, and American Indian includes Alaska Native. All race categories exclude individuals of Hispanic or Latino origin.

NOTE: See the Technical Notes for the definition of 95% CI (confidence interval). This table shows, for example, that 56.5 percent of high school seniors took or planned to take the PSAT. Estimates in this table are based on all high school seniors in spring 2004.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Education Longitudinal Study of 2002 (ELS:2002), "Base-year, 2002" and "First Follow-up, 2004."

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Table 2. Among high school seniors who took or planned to take the College Board Scholastic Assessment Test (SAT) or American College Test (ACT), percentage who took or planned to take various steps to prepare for these tests, by selected student, family, and high school characteristics: 2004

Selected student, family, and high school characteristics	Took or planned to take a special course at high school		Took or planned to take commercial SAT/ACT preparation course		Took or planned to take private one-to- one tutoring for SAT/ACT		Studied or planned to study from SAT/ACT preparation books		Used or planned to use SAT/ACT preparation video tape		Used or planned to use SAT/ACT preparation computer program	
	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI
Total	21.4	[19.8–23.0]	14.0	[12.9–15.2]	10.6	[9.7–11.6]	62.2	[60.7–63.6]	4.4	[3.8–5.1]	36.5	[35.1–37.9]
Sex												
Male	21.7	[19.9–23.5]	12.8	[11.4–14.2]	9.8	[8.5–11.2]	53.1	[51.0–55.3]	4.6	[3.7–5.4]	32.1	[30.0–34.1]
Female	21.1	[19.1–23.1]	15.1	[13.7–16.6]	11.3	[10.1–12.6]	70.1	[68.5–71.8]	4.3	[3.5–5.2]	40.3	[38.6–42.1]
Race/ethnicity ¹												
White	19.0	[17.0–20.9]	11.9	[10.6–13.1]	8.8	[7.8–9.9]	58.2	[56.4–60.0]	3.4	[2.7–4.1]	33.8	[32.1–35.4]
Black	29.2	[25.6–32.9]	19.2	[16.5–21.9]	20.0	[16.7–23.4]	76.6	[73.4–79.8]	8.1	[6.0–10.2]	49.1	[45.3–52.8]
Hispanic	24.5	[21.1–27.9]	15.1	[12.3–18.0]	10.9	[8.8–13.1]	64.4	[60.1–68.8]	7.6	[5.6–9.6]	37.0	[33.2–40.8]
Asian	26.1	[21.6–30.7]	27.7	[23.0–32.4]	10.6	[8.1–13.1]	76.3	[72.3–80.3]	1.6	[0.9–2.4]	37.6	[32.5–42.8]
American Indian	15.2	[0.6–29.8]	12.0	[4.6–19.4]	7.9	[0.0–18.0]	62.5	[47.1–78.0]	8.9	[0.0–19.3]	36.0	[22.1–49.9]
Two or more races	24.2	[18.5–29.9]	17.8	[12.1–23.4]	11.4	[7.2–15.6]	61.5	[54.2–68.8]	4.1	[1.2–6.9]	39.7	[33.3–46.0]
First language learned to speak as a child												
Non-English	25.9	[22.2–29.6]	18.9	[16.0–21.7]	12.7	[10.2–15.2]	71.0	[67.4–74.7]	6.4	[4.5–8.2]	37.9	[33.9–41.9]
English	20.8	[19.1–22.5]	13.5	[12.3–14.7]	10.4	[9.4–11.4]	61.1	[59.6–62.6]	4.2	[3.6–4.9]	36.3	[34.8–37.8]
Highest level of parents' education												
High school or less	19.0	[16.4–21.5]	10.1	[8.4–11.9]	11.0	[9.0–13.1]	63.0	[60.0–65.9]	6.8	[5.3–8.3]	33.5	[30.6–36.4]
Some college	20.4	[18.5–22.3]	10.4	[9.0–11.7]	8.9	[7.6–10.2]	60.1	[58.0–62.2]	4.6	[3.6–5.6]	36.2	[33.9–38.5]
College graduation	22.0	[19.4–24.5]	15.8	[13.7–17.9]	10.5	[8.9–12.1]	62.3	[59.6–65.0]	3.0	[2.2–3.9]	38.3	[35.7–40.8]
Graduate/professional degree	24.7	[21.9–27.4]	21.8	[19.2–24.5]	13.3	[11.1–15.5]	64.6	[61.8–67.5]	3.6	[2.5–4.7]	37.5	[34.5–40.6]

See notes at end of table.

National Center for Education Statistics

Table 2. Among high school seniors who took or planned to take the College Board Scholastic Assessment Test (SAT) or American College Test (ACT), percentage who took or planned to take various steps to prepare for these tests, by selected student, family, and high school characteristics: 2004—Continued

Selected student, family, and high school characteristics	Took or planned to take a special course at high school		Took or planned to take commercial SAT/ACT preparation course		Took or planned to take private one-to- one tutoring for SAT/ACT		Studied or planned to study from SAT/ACT preparation books		Used or planned to use SAT/ACT preparation video tape		Used or planned to use SAT/ACT preparation computer program	
	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI
Family income in 2001												
\$35,000 or lower	22.3	[20.1–24.5]	12.7	[11.0–14.5]	13.2	[11.4–15.1]	66.4	[63.9–69.0]	7.2	[5.9–8.5]	37.1	[34.7–39.5]
\$35,001–75,000	19.6	[17.7–21.5]	11.3	[9.9–12.6]	7.9	[6.7–9.0]	59.4	[57.4–61.4]	4.0	[3.2–4.9]	35.5	[33.3–37.7]
More than \$75,000	22.9	[20.4–25.4]	18.7	[16.5–20.8]	12.1	[10.3–13.8]	62.2	[59.7–64.7]	2.7	[2.0–3.5]	37.2	[35.0–39.4]
Family composition												
Mother and father	21.2	[19.3–23.1]	14.5	[13.0–15.9]	10.1	[9.0–11.2]	61.4	[59.7–63.1]	3.8	[3.1–4.4]	35.9	[34.3–37.5]
Mother or father and guardian	22.0	[18.9–25.0]	11.8	[9.6–13.9]	10.8	[8.6–13.1]	61.4	[57.9–64.9]	5.3	[3.6–7.1]	36.3	[32.9–39.8]
Single parent (mother or father)	21.1	[18.6–23.5]	14.2	[12.3–16.2]	11.6	[9.7–13.5]	64.5	[61.4–67.7]	5.4	[4.1–6.7]	38.2	[35.2–41.2]
Other	24.9	[18.3–31.4]	14.0	[9.0–19.1]	14.6	[9.3–19.8]	67.5	[60.4–74.6]	8.2	[3.8–12.5]	38.7	[31.6–45.9]
Highest mathematics course taken												
Pre-algebra or below	32.0	[25.2–38.7]	14.2	[8.7–19.6]	15.4	[9.5–21.3]	55.9	[48.0–63.9]	12.5	[6.9–18.0]	33.3	[25.9–40.7]
Algebra I/geometry	18.2	[14.9–21.5]	10.1	[7.6–12.6]	13.0	[10.4–15.5]	58.4	[54.7–62.0]	7.9	[6.0–9.9]	32.9	[29.1–36.7]
Algebra II	17.2	[14.8–19.6]	10.4	[8.7–12.1]	10.4	[8.7–12.2]	60.9	[58.0–63.9]	4.3	[3.2–5.4]	35.1	[32.6–37.6]
Trigonometry/analytic geometry/statistics	23.0	[20.1–25.9]	14.5	[12.2–16.7]	10.9	[8.7–13.1]	61.4	[58.5–64.4]	4.7	[3.2–6.2]	39.4	[36.4–42.4]
Pre-calculus/calculus	22.8	[20.3–25.2]	16.9	[15.2–18.7]	9.2	[7.9–10.6]	64.3	[62.2–66.3]	2.7	[1.9–3.4]	36.7	[34.6–38.8]
Highest science course taken												
Low-level science	41.3	[29.3–53.3]	15.1	[7.0–23.2]	16.0	[7.3–24.7]	54.8	[42.7–66.9]	14.9	[6.4–23.4]	35.9	[25.2–46.6]
Secondary physical science/basic biology	23.3	[14.3–32.3]	17.4	[8.9–25.9]	14.9	[7.8–22.0]	57.8	[48.0–67.6]	12.3	[5.0–19.6]	34.7	[23.6–45.9]
General biology	17.1	[14.7–19.6]	11.4	[9.2–13.6]	12.9	[10.6–15.2]	59.5	[56.2–62.9]	6.1	[4.6–7.6]	35.0	[32.1–38.0]
Chemistry I or physics I	21.7	[19.6–23.9]	12.6	[10.9–14.3]	9.8	[8.4–11.1]	62.2	[59.9–64.5]	4.1	[3.2–5.1]	37.3	[35.0–39.6]
Chemistry I and physics I	22.9	[19.6–26.2]	15.2	[12.8–17.7]	9.0	[7.1–10.8]	62.5	[59.5–65.5]	3.1	[2.0–4.2]	36.1	[33.2–39.1]
Chemistry II, physics II, or advanced biology	20.7	[17.9–23.5]	16.8	[14.4–19.2]	10.2	[8.2–12.2]	63.9	[60.9–67.0]	3.2	[2.0–4.3]	36.0	[33.0–39.0]

See notes at end of table.

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Table 2. Among high school seniors who took or planned to take the College Board Scholastic Assessment Test (SAT) or American College Test (ACT), percentage who took or planned to take various steps to prepare for these tests, by selected student, family, and high school characteristics: 2004—Continued

Selected student, family, and high school characteristics	Took or planned to take a special course at high school		Took or planned to take commercial SAT/ACT preparation course		Took or planned to take private one-to- one tutoring for SAT/ACT		Studied or planned to study from SAT/ACT preparation books		Used or planned to use SAT/ACT preparation video tape		Used or planned to use SAT/ACT preparation computer program	
	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI
High-level academic coursework												
Did not complete	19.8	[18.2–21.5]	12.1	[10.9–13.4]	11.2	[10.0–12.4]	60.8	[59.0–62.7]	5.3	[4.5–6.2]	35.3	[33.5–37.1]
Completed	23.5	[21.0–26.0]	17.0	[15.2–18.8]	9.3	[7.8–10.8]	63.7	[61.4–66.1]	2.9	[2.1–3.7]	38.0	[35.8–40.2]
Mathematics achievement test in senior year												
Lowest quarter	25.4	[22.6–28.2]	15.7	[13.4–18.0]	18.7	[15.9–21.4]	63.8	[60.7–66.9]	9.2	[7.4–11.1]	38.7	[35.6–41.8]
Middle two quarters	20.8	[18.9–22.7]	12.2	[11.0–13.5]	9.8	[8.7–10.9]	63.7	[61.9–65.5]	4.3	[3.5–5.2]	37.6	[35.8–39.5]
Highest quarter	20.1	[17.5–22.7]	16.0	[13.9–18.0]	7.8	[6.4–9.2]	58.9	[56.4–61.4]	2.1	[1.4–2.8]	33.5	[31.3–35.8]
High school GPA												
2.0 or lower	21.9	[17.9–25.9]	13.6	[10.2–17.0]	18.8	[14.7–22.9]	58.7	[54.0–63.4]	8.1	[5.5–10.7]	34.7	[29.7–39.7]
2.1–3.0	20.3	[18.5–22.2]	13.2	[11.7–14.7]	11.0	[9.7–12.4]	59.8	[57.6–61.9]	5.7	[4.7–6.7]	36.1	[34.0–38.1]
Higher than 3.0	21.6	[19.4–23.9]	14.5	[12.9–16.1]	8.8	[7.6–9.9]	64.0	[62.1–65.9]	2.9	[2.2–3.7]	36.7	[34.6–38.7]
Student's educational expectations												
High school or less	27.7	[18.9–36.6]	10.2	[5.0–15.4]	18.7	[12.5–24.9]	47.8	[38.0–57.6]	13.3	[7.0–19.5]	35.7	[27.5–44.0]
Some college	16.6	[13.8–19.4]	9.5	[7.0–12.0]	6.7	[4.5–8.9]	55.1	[51.5–58.7]	7.1	[5.2–9.0]	31.3	[27.8–34.9]
College graduation	20.8	[18.7–22.8]	11.7	[10.2–13.2]	9.7	[8.5–10.9]	60.4	[58.2–62.7]	3.7	[2.8–4.6]	33.6	[31.3–35.9]
Graduate/professional degree	23.6	[21.3–25.9]	18.4	[16.7–20.1]	11.6	[10.2–13.0]	67.6	[65.6–69.7]	3.6	[2.7–4.4]	41.7	[39.7–43.8]
Do not know	16.8	[12.7–21.0]	9.4	[6.1–12.7]	15.6	[11.5–19.7]	54.4	[48.3–60.5]	6.7	[3.6–9.8]	28.5	[22.6–34.3]
Parent's 2002 educational expectations for students												
High school or less	18.9	[12.1–25.6]	10.6	[5.0–16.2]	14.3	[7.7–20.9]	63.0	[54.0–72.1]	7.0	[1.9–12.1]	23.7	[15.1–32.4]
Some college	17.4	[13.4–21.5]	10.6	[6.9–14.2]	10.7	[7.2–14.1]	54.4	[48.7–60.1]	4.9	[2.6–7.2]	31.7	[26.3–37.1]
College graduation	19.1	[17.2–20.9]	11.4	[10.1–12.8]	9.0	[7.8–10.2]	59.6	[57.7–61.6]	4.5	[3.6–5.4]	34.4	[32.5–36.3]
Graduate/professional degree	24.0	[21.8–26.1]	17.0	[15.3–18.6]	12.1	[10.7–13.5]	65.4	[63.4–67.4]	4.3	[3.5–5.1]	39.4	[37.5–41.3]

See notes at end of table.

National Center for Education Statistics

Table 2. Among high school seniors who took or planned to take the College Board Scholastic Assessment Test (SAT) or American College Test (ACT), percentage who took or planned to take various steps to prepare for these tests, by selected student, family, and high school characteristics: 2004—Continued

Selected student, family, and high school characteristics	Took or planned to take a special course at high school		Took or planned to take commercial SAT/ACT preparation course		Took or planned to take private one-to- one tutoring for SAT/ACT		Studied or planned to study from SAT/ACT preparation books		Used or planned to use SAT/ACT preparation video tape		Used or planned to use SAT/ACT preparation computer program	
	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI
Plans for postsecondary education after high school												
Do not plan to continue education	12.1	[0.1–24.0]	12.2	[0.1–24.3]	29.6	[12.0–47.3]	28.4	[11.9–44.9]	12.6	[0.0–26.1]	22.9	[6.5–39.3]
Do not know if will continue education	13.7	[9.0–18.4]	5.6	[2.3–8.9]	9.9	[5.5–14.3]	43.7	[35.3–52.1]	5.0	[1.9–8.1]	27.7	[21.0–34.3]
Plan to attend 4-year institution	22.7	[20.8–24.6]	15.9	[14.5–17.3]	11.0	[9.9–12.1]	64.1	[62.5–65.7]	3.6	[2.9–4.2]	38.0	[36.5–39.5]
Plan to attend 2-year community college	17.8	[15.2–20.3]	8.6	[6.8–10.3]	9.3	[7.4–11.2]	61.0	[57.7–64.3]	7.7	[5.9–9.4]	34.6	[31.3–37.8]
Plan to attend vocational, technical, or trade school	18.3	[13.8–22.8]	10.1	[6.5–13.7]	7.6	[4.2–11.0]	51.0	[44.7–57.3]	5.7	[3.0–8.4]	26.5	[21.1–31.8]
Sector of high school last attended												
Public	20.4	[18.7–22.1]	13.1	[11.9–14.3]	10.1	[9.1–11.1]	61.7	[60.1–63.3]	4.6	[3.9–5.3]	36.8	[35.2–38.3]
Catholic	30.2	[24.3–36.0]	19.4	[16.5–22.2]	14.3	[11.3–17.4]	65.7	[62.0–69.5]	3.9	[2.2–5.5]	33.4	[30.2–36.5]
Other private	30.2	[22.6–37.8]	26.5	[20.0–33.0]	16.8	[12.5–21.2]	66.5	[62.5–70.6]	2.1	[1.2–2.9]	33.9	[28.8–39.1]
Urbanicity of high school last attended												
Urban	23.4	[20.9–26.0]	17.5	[15.4–19.7]	14.0	[11.9–16.1]	66.4	[64.1–68.7]	5.0	[3.9–6.2]	37.9	[35.5–40.3]
Suburban	21.2	[19.0–23.4]	14.4	[12.8–16.1]	10.2	[8.9–11.5]	61.7	[59.7–63.7]	3.8	[3.1–4.5]	35.8	[33.9–37.8]
Rural	19.0	[14.9–23.2]	8.2	[6.4–10.0]	7.1	[5.2–9.0]	57.5	[53.6–61.4]	5.3	[3.4–7.2]	36.1	[32.7–39.4]

¹ Black includes African American, Hispanic includes Latino, Asian includes Native Hawaiian or other Pacific Islander, and American Indian includes Alaska Native. All race categories exclude individuals of Hispanic or Latino origin.

NOTE: See the Technical Notes for the definition of 95% CI (confidence interval). This table shows, for example, that 21.4 percent of high school seniors who took or planned to take the SAT or ACT took or planned to take a special course at high school to prepare for these tests. Estimates in this table are based on all high school seniors in spring 2004 who took or planned to take the SAT or ACT.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Education Longitudinal Study of 2002 (ELS:2002), "Base-year, 2002" and "First Follow-up, 2004."

National Center for Education Statistics

Table 3. Among high school seniors who planned to continue their education after high school, percentage who went to various sources for information on college entrance requirements, by selected student, family, and high school characteristics: 2004

Selected student, family, and high school characteristics	School counselor, teacher, or coach		Parent, sibling, relative		Friend		College websites, publications, search guides		College representatives		School, public, or college library		None of these sources	
	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI
Total	84.8	[83.8–85.9]	70.1	[69.0–71.3]	52.4	[51.0–53.7]	74.1	[72.9–75.4]	58.7	[57.4–60.1]	19.9	[18.7–21.0]	2.8	[2.4–3.3]
Sex														
Male	83.2	[81.7–84.7]	67.1	[65.4–68.8]	48.1	[46.2–50.0]	67.9	[66.2–69.7]	55.5	[53.6–57.4]	18.5	[17.1–20.0]	4.5	[3.7–5.3]
Female	86.3	[85.1–87.5]	72.9	[71.3–74.4]	56.2	[54.5–57.9]	79.7	[78.1–81.4]	61.7	[60.0–63.4]	21.1	[19.6–22.5]	1.3	[0.9–1.7]
Race/ethnicity ¹														
White	84.6	[83.3–85.8]	71.3	[69.9–72.8]	51.1	[49.4–52.8]	76.2	[74.6–77.8]	59.0	[57.3–60.6]	18.0	[16.6–19.3]	3.0	[2.4–3.5]
Black	87.4	[85.0–89.8]	72.7	[69.7–75.8]	53.8	[50.6–56.9]	72.5	[69.3–75.7]	62.3	[58.7–65.9]	30.2	[27.2–33.3]	2.0	[0.8–3.1]
Hispanic	83.9	[80.7–87.2]	61.1	[58.0–64.2]	50.4	[46.5–54.2]	62.6	[59.3–65.9]	53.4	[49.5–57.3]	19.1	[16.3–21.8]	3.5	[2.2–4.8]
Asian	86.5	[83.2–89.8]	72.9	[68.6–77.1]	71.6	[67.2–76.0]	77.6	[73.8–81.5]	62.4	[57.8–67.1]	17.8	[15.1–20.6]	1.0	[0.0–2.1]
American Indian	79.3	[66.0–92.6]	62.2	[48.3–76.1]	42.7	[30.2–55.3]	73.9	[59.3–88.6]	60.1	[47.3–72.8]	33.4	[19.2–47.7]	3.2	[0.0–8.1]
Two or more races	82.8	[77.6–87.9]	69.8	[63.7–75.9]	56.9	[50.8–63.0]	77.7	[72.7–82.6]	56.8	[50.6–63.1]	21.1	[16.0–26.2]	2.7	[0.5–4.8]
First language learned to speak as a child														
Non-English	84.6	[81.8–87.4]	62.8	[59.7–65.9]	60.3	[56.9–63.6]	63.2	[59.9–66.6]	58.4	[55.1–61.8]	20.9	[18.0–23.7]	4.1	[2.5–5.8]
English	84.8	[83.7–86.0]	71.1	[69.9–72.4]	51.3	[49.9–52.7]	75.6	[74.2–77.0]	58.8	[57.4–60.2]	19.7	[18.5–20.9]	2.6	[2.2–3.1]
Highest level of parents' education														
High school or less	84.5	[82.4–86.6]	60.9	[58.4–63.4]	50.4	[47.8–53.1]	62.6	[59.8–65.5]	53.8	[51.1–56.6]	20.2	[18.0–22.4]	3.9	[2.7–5.1]
Some college	84.5	[82.9–86.1]	68.6	[66.8–70.5]	51.7	[49.6–53.8]	70.7	[68.8–72.5]	57.7	[55.7–59.8]	19.7	[17.9–21.4]	3.2	[2.5–4.0]
College graduation	85.5	[83.6–87.5]	75.1	[72.7–77.5]	54.1	[51.4–56.7]	80.8	[78.7–82.9]	59.6	[57.0–62.2]	20.0	[17.9–22.1]	2.0	[1.3–2.7]
Graduate/professional degree	84.8	[82.6–87.1]	77.1	[74.7–79.6]	53.6	[50.8–56.4]	85.2	[83.2–87.1]	65.2	[62.6–67.8]	19.6	[17.3–22.0]	1.8	[0.9–2.8]
Family income in 2001														
\$35,000 or lower	84.1	[82.4–85.9]	62.4	[60.2–64.6]	52.9	[50.6–55.2]	64.8	[62.4–67.2]	55.4	[53.1–57.6]	23.8	[21.8–25.9]	3.5	[2.6–4.3]
\$35,001–75,000	85.1	[83.6–86.6]	70.1	[68.3–71.9]	49.8	[47.9–51.7]	74.0	[72.1–75.8]	58.1	[56.0–60.2]	18.5	[16.8–20.1]	2.9	[2.2–3.6]
More than \$75,000	85.1	[83.3–86.9]	77.4	[75.3–79.5]	55.3	[53.0–57.6]	83.0	[81.2–84.8]	62.7	[60.5–65.0]	18.0	[16.3–19.8]	2.2	[1.4–2.9]
Family composition														
Mother and father	85.2	[83.8–86.5]	72.5	[71.1–73.9]	53.3	[51.6–55.0]	76.9	[75.5–78.3]	60.6	[58.9–62.3]	18.7	[17.4–20.0]	2.3	[1.8–2.9]
Mother or father and guardian	83.4	[80.7–86.0]	65.3	[62.2–68.4]	48.6	[45.4–51.8]	70.5	[67.5–73.6]	55.4	[52.1–58.7]	21.9	[19.1–24.7]	3.9	[2.5–5.3]
Single parent (mother or father)	84.9	[82.9–86.9]	68.4	[65.9–70.9]	53.5	[50.8–56.2]	70.4	[67.5–73.3]	55.9	[53.2–58.6]	22.3	[20.0–24.7]	3.1	[2.1–4.2]
Other	83.6	[78.4–88.8]	55.9	[49.1–62.7]	43.5	[36.4–50.7]	59.4	[52.5–66.3]	54.3	[47.3–61.4]	18.0	[12.8–23.2]	5.4	[1.8–9.1]

See notes at end of table.

National Center for Education Statistics

Table 3. Among high school seniors who planned to continue their education after high school, percentage who went to various sources for information on college entrance requirements, by selected student, family, and high school characteristics: 2004—Continued

Selected student, family, and high school characteristics	School counselor, teacher, or coach		Parent, sibling, relative		Friend		College websites, publications, search guides		College representatives		School, public, or college library		None of these sources	
	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI
Highest mathematics course taken														
Pre-algebra or below	77.0	[71.9–82.1]	61.5	[55.6–67.4]	45.8	[39.5–52.0]	39.2	[32.7–45.7]	38.1	[32.0–44.1]	20.2	[15.5–25.0]	8.8	[5.0–12.7]
Algebra I/geometry	79.5	[76.7–82.4]	61.1	[58.3–64.0]	46.0	[42.7–49.3]	50.3	[47.0–53.6]	43.8	[40.6–47.0]	16.0	[13.7–18.2]	7.3	[5.7–8.9]
Algebra II	83.3	[81.3–85.2]	68.7	[66.5–71.0]	51.2	[48.6–53.8]	70.8	[68.4–73.2]	54.9	[52.4–57.4]	20.8	[18.5–23.0]	2.8	[1.9–3.7]
Trigonometry/analytic geometry/statistics	89.2	[87.4–91.0]	72.3	[69.8–74.8]	54.0	[51.3–56.8]	78.6	[76.2–81.1]	62.8	[59.7–66.0]	20.4	[17.9–22.9]	1.3	[0.6–2.0]
Pre-calculus/calculus	86.9	[85.4–88.5]	75.5	[73.8–77.3]	56.0	[53.8–58.2]	89.1	[87.6–90.6]	68.8	[66.8–70.8]	20.4	[18.7–22.2]	0.9	[0.4–1.4]
Highest science course taken														
Low-level science	72.4	[63.4–81.3]	52.2	[43.2–61.2]	36.3	[29.0–43.6]	35.0	[24.8–45.3]	36.5	[26.5–46.4]	11.8	[6.3–17.3]	13.5	[6.4–20.7]
Secondary physical science/ basic biology	79.6	[74.0–85.3]	59.0	[51.3–66.7]	45.2	[37.8–52.6]	50.3	[43.1–57.4]	37.1	[29.3–44.9]	16.1	[10.7–21.4]	8.8	[5.0–12.7]
General biology	81.1	[78.8–83.5]	64.5	[62.0–66.9]	47.7	[44.9–50.5]	57.7	[55.1–60.4]	49.8	[47.0–52.6]	19.1	[17.1–21.1]	4.8	[3.6–5.9]
Chemistry I or physics I	85.7	[83.9–87.4]	71.3	[69.3–73.3]	53.4	[51.1–55.6]	77.1	[75.1–79.1]	59.4	[57.1–61.7]	20.3	[18.4–22.2]	1.8	[1.1–2.5]
Chemistry I and physics I	88.8	[86.9–90.7]	77.6	[75.2–80.0]	55.8	[52.7–59.0]	84.1	[81.7–86.6]	66.1	[63.3–68.9]	21.5	[19.1–23.9]	1.2	[0.5–2.0]
Chemistry II, physics II, or advanced biology	85.8	[83.8–87.8]	72.1	[69.6–74.5]	55.7	[52.9–58.4]	86.6	[84.4–88.8]	67.3	[64.5–70.1]	19.4	[16.9–21.8]	1.8	[1.0–2.6]
High-level academic coursework														
Did not complete	82.9	[81.5–84.2]	67.7	[66.2–69.2]	50.3	[48.6–52.0]	66.8	[65.1–68.4]	53.6	[52.0–55.1]	19.1	[17.9–20.4]	3.8	[3.2–4.4]
Completed	88.7	[87.3–90.1]	75.5	[73.7–77.3]	56.7	[54.5–58.9]	89.1	[87.7–90.5]	69.6	[67.5–71.7]	21.1	[19.2–22.9]	0.9	[0.4–1.4]
Mathematics achievement test in senior year														
Lowest quarter	82.3	[80.2–84.4]	63.3	[60.8–65.9]	48.4	[45.7–51.2]	50.9	[48.1–53.6]	45.3	[42.5–48.1]	19.2	[17.2–21.3]	5.1	[3.9–6.2]
Middle two quarters	85.7	[84.3–87.0]	70.8	[69.2–72.4]	52.8	[51.1–54.6]	74.6	[73.0–76.2]	58.8	[57.1–60.6]	21.1	[19.5–22.7]	2.7	[2.1–3.3]
Highest quarter	85.2	[83.3–87.0]	73.9	[71.7–76.1]	54.4	[52.1–56.6]	90.1	[88.6–91.6]	68.3	[66.1–70.5]	18.2	[16.4–19.9]	1.4	[0.8–2.0]
High school GPA														
2.0 or lower	79.8	[76.8–82.7]	59.4	[55.4–63.5]	44.8	[40.9–48.6]	52.6	[48.6–56.6]	41.9	[37.6–46.1]	21.0	[17.7–24.3]	6.3	[4.6–8.0]
2.1–3.0	83.9	[82.3–85.4]	68.5	[66.6–70.4]	51.5	[49.4–53.6]	65.8	[63.9–67.7]	53.9	[51.9–55.9]	20.6	[19.0–22.2]	4.0	[3.2–4.8]
Higher than 3.0	86.7	[85.3–88.1]	74.2	[72.6–75.8]	54.8	[52.9–56.7]	86.1	[84.7–87.6]	66.8	[65.0–68.6]	18.7	[17.2–20.3]	1.0	[0.5–1.5]

See notes at end of table.

National Center for Education Statistics

Table 3. Among high school seniors who planned to continue their education after high school, percentage who went to various sources for information on college entrance requirements, by selected student, family, and high school characteristics: 2004—Continued

Selected student, family, and high school characteristics	School counselor, teacher, or coach		Parent, sibling, relative		Friend		College websites, publications, search guides		College representatives		School, public, or college library		None of these sources	
	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI
Parent's 2002 educational expectations for students														
High school or less	81.3	[74.7–87.9]	59.7	[51.1–68.3]	46.9	[37.4–56.3]	46.3	[38.2–54.4]	45.9	[37.8–54.0]	15.2	[9.7–20.7]	7.6	[2.6–12.6]
Some college	78.7	[74.7–82.7]	61.2	[56.7–65.7]	45.8	[41.1–50.5]	51.5	[47.2–55.8]	44.3	[39.8–48.8]	18.0	[14.4–21.7]	7.3	[4.6–9.9]
College graduation	83.9	[82.4–85.3]	68.9	[67.2–70.6]	50.9	[49.0–52.8]	71.5	[69.7–73.4]	56.7	[54.8–58.6]	17.7	[16.2–19.3]	3.0	[2.4–3.7]
Graduate/professional degree	86.8	[85.4–88.2]	73.3	[71.5–75.1]	55.2	[53.3–57.0]	81.5	[80.1–82.9]	63.6	[61.9–65.4]	22.4	[20.7–24.1]	1.7	[1.1–2.3]
Type of institution planned to attend														
4-year institution	87.5	[86.4–88.6]	73.9	[72.6–75.2]	55.8	[54.2–57.4]	82.8	[81.6–84.0]	65.4	[63.9–66.9]	21.3	[19.9–22.6]	1.2	[0.8–1.6]
2-year community college	81.2	[79.0–83.4]	64.4	[61.9–66.8]	46.3	[43.6–49.0]	57.3	[54.5–60.0]	43.9	[41.2–46.6]	17.2	[15.3–19.1]	4.8	[3.6–6.0]
Vocational, technical, or trade school	72.8	[68.5–77.1]	55.0	[50.1–59.9]	39.5	[34.9–44.0]	47.8	[43.5–52.1]	43.0	[38.5–47.6]	15.1	[12.1–18.2]	10.6	[7.7–13.5]
Sector of high school last attended														
Public	84.3	[83.1–85.4]	69.2	[68.0–70.5]	51.8	[50.3–53.3]	73.1	[71.7–74.5]	57.7	[56.3–59.1]	19.9	[18.7–21.1]	3.0	[2.6–3.5]
Catholic	91.6	[89.5–93.7]	82.1	[79.7–84.5]	59.6	[56.9–62.2]	85.1	[82.4–87.8]	68.8	[65.4–72.3]	20.0	[17.4–22.5]	0.4	[0.1–0.7]
Other private	88.3	[84.2–92.3]	74.5	[71.6–77.4]	55.7	[51.0–60.3]	82.3	[77.8–86.8]	68.8	[63.1–74.6]	18.5	[15.2–21.8]	0.8	[0.1–1.5]
Urbanicity of high school last attended														
Urban	85.8	[84.1–87.4]	71.1	[68.8–73.3]	54.9	[52.2–57.6]	74.8	[72.1–77.6]	60.3	[57.8–62.8]	21.9	[19.8–24.0]	2.3	[1.6–3.0]
Suburban	84.4	[82.9–86.0]	71.0	[69.5–72.6]	52.2	[50.4–54.0]	74.2	[72.5–75.8]	57.7	[56.0–59.4]	19.5	[18.0–20.9]	3.2	[2.5–3.9]
Rural	84.5	[82.0–87.1]	66.5	[63.8–69.1]	49.4	[46.3–52.6]	73.0	[70.2–75.9]	59.3	[55.9–62.7]	18.1	[15.4–20.8]	2.5	[1.7–3.3]

¹ Black includes African American, Hispanic includes Latino, Asian includes Native Hawaiian or other Pacific Islander, and American Indian includes Alaska Native. All race categories exclude individuals of Hispanic or Latino origin.

NOTE: See the Technical Notes for the definition of 95% CI (confidence interval). This table shows, for example, that 84.8 percent of high school seniors who planned to continue their education after high school went to a school counselor, teacher, or coach to get information on college entrance requirements. Estimates in this table are based on all high school seniors in spring 2004 who planned to continue their education after high school. For information on postsecondary plans of the 2003–04 high school senior class, see *Postsecondary Expectations and Plans for the High School Senior Class of 2003–04* (NCES 2010-170).

SOURCE: U.S. Department of Education, National Center for Education Statistics, Education Longitudinal Study of 2002 (ELS:2002), “Base-year, 2002” and “First Follow-up, 2004.”

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Table 4. Among high school seniors who planned to continue their education after high school, percentage who applied to one or more postsecondary institutions while in high school, by selected student, family, and high school characteristics: 2004

Selected student, family, and high school characteristics	Students who applied to							
	At least one institution		One institution only		Two to four institutions		Five or more institutions	
	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI
Total	74.2	[73.0–75.4]	22.1	[21.1–23.1]	38.7	[37.6–39.9]	13.4	[12.3–14.5]
Sex								
Male	69.7	[68.0–71.4]	21.4	[20.0–22.7]	37.2	[35.6–38.8]	11.2	[10.0–12.4]
Female	78.4	[76.9–79.9]	22.7	[21.4–24.1]	40.2	[38.6–41.7]	15.5	[14.0–17.0]
Race/ethnicity ¹								
White	76.4	[74.9–77.9]	25.0	[23.6–26.3]	39.3	[37.9–40.8]	12.1	[10.8–13.4]
Black	73.6	[70.9–76.4]	15.2	[13.2–17.2]	42.7	[40.1–45.2]	15.8	[13.2–18.3]
Hispanic	62.4	[59.0–65.8]	19.2	[16.9–21.6]	32.5	[29.2–35.9]	10.6	[8.8–12.4]
Asian	83.8	[80.4–87.1]	15.8	[13.0–18.5]	37.3	[33.2–41.5]	30.7	[25.8–35.5]
American Indian	60.4	[48.7–72.1]	13.0	[4.3–21.8]	34.4	[21.4–47.3]	13.1	[2.8–23.3]
Two or more races	76.8	[72.0–81.6]	19.4	[15.2–23.5]	41.1	[35.5–46.6]	16.4	[12.4–20.4]
First language learned to speak as a child								
Non-English	68.9	[65.5–72.3]	18.6	[16.3–20.9]	36.4	[33.2–39.6]	13.9	[11.6–16.3]
English	75.0	[73.8–76.3]	22.6	[21.5–23.7]	39.1	[37.9–40.3]	13.3	[12.1–14.5]
Highest level of parents' education								
High school or less	64.9	[62.7–67.2]	24.1	[22.2–26.0]	33.4	[31.3–35.5]	7.4	[6.3–8.5]
Some college	69.2	[67.2–71.1]	23.4	[21.8–25.1]	36.8	[34.8–38.7]	9.0	[7.8–10.2]
College graduation	80.0	[78.1–81.9]	20.1	[18.2–21.9]	43.2	[41.1–45.4]	16.7	[14.7–18.7]
Graduate/professional degree	87.5	[85.8–89.2]	19.6	[17.5–21.8]	43.1	[40.3–45.9]	24.8	[22.1–27.5]
Family income in 2001								
\$35,000 or lower	65.5	[63.3–67.6]	21.5	[19.7–23.2]	34.9	[32.9–37.0]	9.1	[7.9–10.3]
\$35,001–75,000	73.9	[72.4–75.5]	23.8	[22.3–25.3]	39.3	[37.6–40.9]	10.8	[9.7–12.0]
More than \$75,000	83.4	[81.6–85.2]	20.2	[18.6–21.8]	41.8	[39.5–44.0]	21.4	[19.2–23.6]
Family composition								
Mother and father	77.9	[76.4–79.3]	22.1	[20.8–23.4]	40.7	[39.3–42.2]	15.0	[13.6–16.5]
Mother or father and guardian	68.6	[65.8–71.4]	24.7	[22.4–27.0]	34.0	[31.2–36.7]	9.9	[8.3–11.6]
Single parent (mother or father)	69.1	[66.7–71.4]	20.1	[18.3–22.0]	37.4	[35.2–39.6]	11.5	[9.8–13.2]
Other	65.1	[60.0–70.1]	21.7	[16.8–26.7]	32.3	[27.3–37.3]	11.0	[7.9–14.2]
Highest mathematics course taken								
Pre-algebra or below	48.9	[43.5–54.2]	22.7	[18.9–26.5]	22.3	[17.9–26.8]	3.9	[1.8–5.9]
Algebra I/geometry	50.9	[48.4–53.5]	21.7	[19.7–23.7]	25.1	[23.0–27.3]	4.1	[3.1–5.0]
Algebra II	68.6	[66.3–70.9]	23.1	[21.2–25.0]	37.9	[35.5–40.3]	7.7	[6.3–9.0]
Trigonometry/analytic geometry/statistics	80.4	[77.8–83.0]	25.9	[23.4–28.3]	41.9	[39.2–44.6]	12.6	[10.2–15.0]
Pre-calculus/calculus	91.7	[90.5–92.9]	20.5	[18.8–22.1]	47.7	[45.6–49.9]	23.5	[21.4–25.5]

See notes at end of table.

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Table 4. Among high school seniors who planned to continue their education after high school, percentage who applied to one or more postsecondary institutions while in high school, by selected student, family, and high school characteristics: 2004—Continued

Selected student, family, and high school characteristics	Students who applied to							
	At least one institution		One institution only		Two to four institutions		Five or more institutions	
	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI
Highest science course taken								
Low-level science	45.5	[39.0–51.9]	22.8	[17.2–28.5]	20.6	[15.9–25.4]	2.0	[0.5–3.5]
Secondary physical science/basic biology	52.8	[46.1–59.5]	20.0	[15.2–24.8]	30.6	[24.1–37.1]	2.2	[0.5–3.9]
General biology	58.2	[55.5–60.9]	24.4	[22.0–26.8]	29.3	[27.1–31.5]	4.6	[3.6–5.5]
Chemistry I or physics I	75.8	[73.8–77.7]	23.5	[21.9–25.1]	40.3	[38.2–42.4]	12.0	[10.4–13.5]
Chemistry I and physics I	86.4	[83.8–88.9]	20.5	[18.4–22.6]	45.0	[42.3–47.7]	20.9	[17.9–23.8]
Chemistry II, physics II, or advanced biology	89.1	[87.1–91.2]	20.0	[17.7–22.2]	46.9	[44.1–49.8]	22.2	[19.6–24.8]
High-level academic coursework								
Did not complete	66.3	[64.7–67.8]	22.7	[21.5–24.0]	34.7	[33.4–36.1]	8.8	[7.9–9.8]
Completed	92.1	[90.9–93.3]	21.8	[20.0–23.5]	47.8	[45.5–50.1]	22.5	[20.2–24.9]
Mathematics achievement test in senior year								
Lowest quarter	57.9	[55.6–60.2]	20.4	[18.7–22.1]	31.6	[29.5–33.7]	5.8	[4.6–7.1]
Middle two quarters	72.6	[71.1–74.2]	23.2	[21.8–24.6]	38.1	[36.6–39.7]	11.3	[10.2–12.4]
Highest quarter	90.9	[89.5–92.4]	21.3	[19.5–23.1]	45.8	[43.6–48.0]	23.8	[21.5–26.1]
High school GPA								
2.0 or lower	50.5	[47.0–54.0]	19.4	[16.9–22.0]	26.5	[23.6–29.4]	4.6	[3.3–5.9]
2.1–3.0	66.1	[64.2–68.0]	21.7	[20.2–23.2]	35.2	[33.5–36.9]	9.2	[8.0–10.4]
Higher than 3.0	88.2	[86.9–89.5]	24.1	[22.5–25.6]	45.4	[43.5–47.2]	18.8	[17.0–20.6]
Parent's 2002 educational expectations for students								
High school or less	51.8	[44.6–59.1]	23.9	[17.4–30.5]	23.7	[17.9–29.6]	4.2	[1.6–6.7]
Some college	51.8	[47.7–56.0]	25.9	[22.3–29.4]	21.3	[18.3–24.3]	4.6	[2.9–6.3]
College graduation	72.4	[70.7–74.1]	23.5	[22.0–24.9]	38.5	[36.9–40.2]	10.4	[9.2–11.6]
Graduate/professional degree	81.5	[80.0–83.0]	20.1	[18.8–21.5]	42.6	[41.0–44.3]	18.8	[17.1–20.4]
Type of institution planned to attend								
4-year institution	85.6	[84.5–86.6]	20.1	[18.9–21.2]	46.8	[45.3–48.3]	18.6	[17.2–20.1]
2-year community college	53.7	[51.1–56.3]	27.2	[24.9–29.5]	23.5	[21.4–25.5]	3.0	[2.3–3.8]
Vocational, technical, or trade school	44.3	[40.6–48.0]	23.5	[20.4–26.5]	18.7	[15.8–21.5]	2.2	[1.0–3.4]

See notes at end of table.

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Table 4. Among high school seniors who planned to continue their education after high school, percentage who applied to one or more postsecondary institutions while in high school, by selected student, family, and high school characteristics: 2004—Continued

Selected student, family, and high school characteristics	Students who applied to							
	At least one institution		One institution only		Two to four institutions		Five or more institutions	
	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI
Sector of high school last attended								
Public	72.7	[71.4–74.0]	22.3	[21.2–23.3]	38.6	[37.4–39.8]	11.8	[10.7–13.0]
Catholic	92.2	[90.3–94.1]	18.1	[15.7–20.6]	42.1	[38.8–45.5]	31.9	[26.8–37.1]
Other private	86.8	[82.2–91.3]	21.2	[17.5–24.9]	37.7	[33.3–42.1]	27.9	[22.2–33.5]
Urbanicity of high school last attended								
Urban	74.4	[72.3–76.5]	19.5	[17.8–21.2]	38.4	[36.7–40.1]	16.5	[14.7–18.3]
Suburban	74.2	[72.4–75.9]	22.0	[20.7–23.4]	38.4	[36.8–40.1]	13.7	[11.9–15.4]
Rural	73.8	[71.0–76.7]	26.5	[23.8–29.1]	40.1	[37.4–42.8]	7.3	[5.0–9.6]

¹ Black includes African American, Hispanic includes Latino, Asian includes Native Hawaiian or other Pacific Islander, and American Indian includes Alaska Native. All race categories exclude individuals of Hispanic or Latino origin.

NOTE: See the Technical Notes for the definition of 95% CI (confidence interval). This table shows, for example, that 74.2 percent of high school seniors who planned to continue their education after high school applied to at least one postsecondary institution while in high school. Estimates in this table are based on all high school seniors in spring 2004 who planned to continue their education after high school.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Education Longitudinal Study of 2002 (ELS:2002), "Base-year, 2002" and "First Follow-up, 2004."

National Center for Education Statistics

Table 5. Percentage of 2004 high school seniors who had applied to a postsecondary institution by 2006, and of these students, percentage who applied at specified times, by selected student, family, and high school characteristics: 2006

Selected student, family, and high school characteristics	Students who had applied to a postsecondary institution by 2006		Students who had applied to a postsecondary institution					
	Pct.	95% CI	During high school		After high school		Both times	
			Pct.	95% CI	Pct.	95% CI	Pct.	95% CI
Total	83.3	[82.2–84.3]	71.0	[69.7–72.3]	15.8	[14.8–16.8]	13.2	[12.4–14.0]
Sex								
Male	79.5	[78.2–80.9]	68.6	[66.8–70.5]	18.1	[16.6–19.6]	13.2	[12.0–14.5]
Female	86.8	[85.6–88.1]	73.1	[71.4–74.8]	13.7	[12.5–15.0]	13.2	[12.1–14.3]
Race/ethnicity ¹								
White	84.6	[83.4–85.8]	76.4	[74.9–77.8]	12.8	[11.6–13.9]	10.9	[9.9–11.8]
Black	81.2	[78.7–83.6]	60.0	[56.6–63.3]	18.4	[16.0–20.8]	21.6	[18.8–24.4]
Hispanic	77.5	[74.6–80.5]	54.8	[51.3–58.4]	27.2	[24.2–30.1]	18.0	[15.6–20.4]
Asian	91.0	[89.2–92.8]	80.8	[77.9–83.6]	10.1	[7.7–12.4]	9.1	[7.3–11.0]
American Indian	75.2	[61.8–88.6]	54.2	[41.3–67.0]	26.8	[12.1–41.4]	19.1	[10.7–27.5]
Two or more races	83.7	[79.6–87.9]	70.2	[64.3–76.1]	19.5	[14.4–24.6]	10.3	[7.0–13.6]
First language learned to speak as a child								
Non-English	81.2	[78.4–83.9]	64.3	[60.9–67.8]	20.5	[17.7–23.3]	15.1	[12.8–17.4]
English	83.6	[82.5–84.7]	72.0	[70.6–73.4]	15.1	[14.0–16.1]	12.9	[12.0–13.8]
Highest level of parents' education								
High school or less	71.6	[69.5–73.7]	61.2	[58.7–63.8]	23.8	[21.6–26.1]	14.9	[13.3–16.6]
Some college	83.3	[81.8–84.9]	64.8	[62.6–66.9]	19.1	[17.5–20.7]	16.1	[14.7–17.6]
College graduation	88.6	[87.0–90.3]	76.9	[74.7–79.1]	11.1	[9.4–12.7]	12.1	[10.5–13.6]
Graduate/professional degree	92.9	[91.4–94.4]	85.2	[83.2–87.3]	7.1	[5.6–8.5]	7.7	[6.2–9.2]
Family income in 2001								
\$35,000 or lower	75.9	[74.0–77.7]	60.6	[58.4–62.9]	22.6	[20.8–24.4]	16.8	[15.1–18.5]
\$35,001–75,000	82.6	[81.1–84.1]	70.7	[69.1–72.4]	16.1	[14.6–17.5]	13.2	[12.1–14.4]
More than \$75,000	92.3	[91.2–93.4]	80.7	[78.8–82.7]	9.3	[7.9–10.8]	10.0	[8.6–11.3]
Family composition								
Mother and father	86.5	[85.4–87.6]	75.4	[73.9–76.9]	12.6	[11.4–13.8]	12.0	[11.0–13.0]
Mother or father and guardian	76.5	[74.0–79.0]	65.0	[61.9–68.0]	21.0	[18.2–23.9]	14.0	[11.9–16.0]
Single parent (mother or father)	80.6	[78.4–82.8]	63.5	[60.9–66.1]	21.1	[18.8–23.3]	15.4	[13.3–17.5]
Other	73.6	[68.3–78.8]	58.6	[52.1–65.1]	21.5	[15.9–27.2]	19.9	[14.8–24.9]
Highest mathematics course taken								
Pre-algebra or below	51.5	[46.6–56.4]	38.6	[31.3–46.0]	43.6	[36.6–50.7]	17.7	[13.1–22.3]
Algebra I/geometry	67.8	[65.2–70.3]	46.2	[43.3–49.2]	36.4	[33.3–39.5]	17.4	[15.2–19.6]
Algebra II	84.9	[83.1–86.7]	65.3	[62.8–67.8]	19.1	[17.0–21.2]	15.6	[13.9–17.4]
Trigonometry/analytic geometry/statistics	88.7	[86.6–90.7]	74.1	[71.3–77.0]	11.3	[9.3–13.3]	14.6	[12.3–16.8]
Pre-calculus/calculus	96.2	[95.4–97.0]	89.0	[87.6–90.4]	3.8	[3.0–4.6]	7.2	[6.1–8.3]

See notes at end of table.

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Table 5. Percentage of 2004 high school seniors who had applied to a postsecondary institution by 2006, and of these students, percentage who applied at specified times, by selected student, family, and high school characteristics: 2006—Continued

Selected student, family, and high school characteristics	Students who had applied to a postsecondary institution by 2006		Students who had applied to a postsecondary institution					
	Pct.	95% CI	During high school		After high school		Both times	
			Pct.	95% CI	Pct.	95% CI	Pct.	95% CI
Highest science course taken								
Low-level science	50.3	[43.7–56.8]	40.7	[31.9–49.6]	40.7	[32.4–49.0]	18.5	[12.0–25.1]
Secondary physical science/basic biology	67.8	[61.5–74.1]	47.1	[39.9–54.4]	36.3	[29.4–43.2]	16.5	[10.8–22.3]
General biology	72.3	[70.1–74.6]	55.5	[52.5–58.5]	28.3	[25.6–31.0]	16.3	[14.3–18.2]
Chemistry I or physics I	87.4	[86.0–88.8]	70.3	[68.1–72.5]	15.0	[13.2–16.7]	14.8	[13.2–16.3]
Chemistry I and physics I	94.9	[93.6–96.1]	83.2	[80.8–85.6]	6.7	[5.3–8.0]	10.1	[8.4–11.8]
Chemistry II, physics II, or advanced biology	93.1	[91.5–94.7]	87.1	[85.1–89.2]	6.4	[4.7–8.0]	6.5	[5.3–7.8]
High-level academic coursework								
Did not complete	78.9	[77.5–80.2]	63.2	[61.5–65.0]	21.4	[20.0–22.8]	15.3	[14.2–16.5]
Completed	95.8	[95.1–96.6]	88.7	[87.4–90.1]	4.1	[3.1–5.0]	7.2	[6.1–8.3]
Mathematics achievement test in senior year								
Lowest quarter	67.1	[64.7–69.5]	48.9	[46.1–51.6]	31.0	[28.4–33.6]	20.1	[18.0–22.2]
Middle two quarters	84.9	[83.7–86.1]	69.5	[67.8–71.2]	16.1	[14.7–17.5]	14.4	[13.3–15.5]
Highest quarter	95.5	[94.6–96.4]	87.8	[86.3–89.4]	5.5	[4.3–6.6]	6.7	[5.6–7.9]
High school GPA								
2.0 or lower	62.3	[59.3–65.4]	40.1	[35.8–44.3]	40.0	[35.7–44.2]	20.0	[16.7–23.3]
2.1–3.0	80.2	[78.7–81.7]	61.7	[59.6–63.7]	21.7	[20.0–23.3]	16.7	[15.3–18.1]
Higher than 3.0	93.9	[93.0–94.8]	86.4	[85.0–87.8]	5.8	[4.9–6.6]	7.9	[6.8–8.9]
Student's educational expectations								
High school or less	32.3	[27.5–37.1]	32.9	[24.5–41.4]	54.0	[45.3–62.7]	13.1	[7.6–18.5]
Some college	69.4	[67.0–71.8]	48.9	[45.7–52.1]	34.9	[31.9–37.9]	16.3	[14.0–18.5]
College graduation	90.5	[89.2–91.7]	72.3	[70.3–74.2]	13.2	[11.7–14.7]	14.6	[13.1–16.0]
Graduate/professional degree	94.4	[93.5–95.3]	83.7	[82.3–85.2]	6.3	[5.4–7.2]	10.0	[8.9–11.1]
Do not know	64.1	[60.3–67.9]	44.8	[40.3–49.3]	36.7	[32.3–41.2]	18.5	[14.9–22.0]
Parent's 2002 educational expectations for students								
High school or less	61.6	[55.1–68.1]	46.8	[38.2–55.3]	38.8	[30.6–47.0]	14.4	[8.9–20.0]
Some college	61.6	[58.0–65.1]	54.1	[49.4–58.9]	29.6	[25.3–33.9]	16.3	[12.8–19.8]
College graduation	83.1	[81.8–84.4]	69.2	[67.3–71.0]	17.1	[15.7–18.6]	13.7	[12.5–14.9]
Graduate/professional degree	89.8	[88.5–91.0]	76.6	[74.9–78.2]	11.1	[10.0–12.2]	12.3	[11.2–13.5]
Type of institution planned to attend								
4-year institution	92.9	[92.1–93.6]	81.4	[80.1–82.7]	7.5	[6.6–8.3]	11.1	[10.2–12.0]
2-year community college	77.4	[75.2–79.7]	48.9	[46.1–51.7]	32.4	[29.8–35.0]	18.7	[16.7–20.7]
Vocational, technical, or trade school	66.8	[62.9–70.7]	46.7	[42.4–51.1]	35.5	[31.2–39.9]	17.7	[14.0–21.4]

See notes at end of table.

National Center for Education Statistics

Table 5. Percentage of 2004 high school seniors who had applied to a postsecondary institution by 2006, and of these students, percentage who applied at specified times, by selected student, family, and high school characteristics: 2006—Continued

Selected student, family, and high school characteristics	Students who had applied to a postsecondary institution by 2006		Students who had applied to a postsecondary institution					
	Pct.	95% CI	During high school		After high school		Both times	
			Pct.	95% CI	Pct.	95% CI	Pct.	95% CI
Sector of high school last attended								
Public	82.2	[81.1–83.3]	69.7	[68.2–71.1]	16.7	[15.7–17.8]	13.6	[12.7–14.5]
Catholic	96.0	[94.8–97.1]	87.5	[85.3–89.6]	5.7	[4.2–7.2]	6.9	[5.5–8.2]
Other private	94.0	[92.1–96.0]	79.5	[74.9–84.0]	7.4	[4.7–10.0]	13.2	[9.8–16.5]
Urbanicity of high school last attended								
Urban	82.8	[80.9–84.8]	69.0	[66.6–71.4]	16.7	[14.9–18.4]	14.3	[12.7–15.9]
Suburban	84.2	[82.8–85.5]	72.6	[70.9–74.4]	15.3	[13.9–16.7]	12.1	[11.0–13.2]
Rural	81.8	[79.5–84.0]	70.2	[67.0–73.4]	15.5	[13.3–17.6]	14.3	[12.3–16.3]

¹ Black includes African American, Hispanic includes Latino, Asian includes Native Hawaiian or other Pacific Islander, and American Indian includes Alaska Native. All race categories exclude individuals of Hispanic or Latino origin.

NOTE: See the Technical Notes for the definition of 95% CI (confidence interval). This table shows, for example, that 83.3 percent of 2004 high school seniors had applied to a postsecondary institution by 2006. Estimates in this table are based on all high school seniors in spring 2004.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Education Longitudinal Study of 2002 (ELS:2002), "Base-year, 2002," "First Follow-up, 2004," and "Secondary Follow-up, 2006."

National Center for Education Statistics

Table 6. Among 2004 high school seniors who had applied to a postsecondary institution by 2006, percentage distribution of level of institution applied to and the highest selectivity of 4-year institution applied to, by selected student, family, and high school characteristics: 2006

Selected student, family, and high school characteristics	4-year institution										Less-than-2-year institution	
	Total		Highly selective		Moderately selective		Least selective		2-year institution		Pct.	95% CI
	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI		
Total	75.2	[73.8–76.6]	35.9	[34.2–37.7]	29.0	[27.6–30.5]	10.2	[9.3–11.2]	23.2	[21.9–24.6]	1.6	[1.3–1.9]
Sex												
Male	74.6	[72.8–76.5]	36.2	[34.1–38.2]	27.8	[25.9–29.7]	10.7	[9.4–12.1]	24.1	[22.3–25.8]	1.3	[0.8–1.7]
Female	75.7	[74.0–77.3]	35.8	[33.6–38.0]	30.1	[28.4–31.8]	9.8	[8.6–11.0]	22.5	[20.9–24.1]	1.8	[1.4–2.3]
Race/ethnicity ¹												
White	76.8	[75.2–78.4]	39.7	[37.5–41.8]	29.3	[27.6–31.1]	7.8	[6.8–8.8]	21.8	[20.3–23.4]	1.3	[1.0–1.7]
Black	79.9	[77.1–82.6]	27.6	[24.6–30.6]	33.9	[30.6–37.2]	18.3	[15.7–21.0]	18.5	[15.8–21.2]	1.6	[0.9–2.4]
Hispanic	61.1	[57.1–65.2]	20.3	[17.6–23.0]	25.0	[22.2–27.9]	15.8	[12.6–18.9]	35.5	[31.6–39.4]	3.3	[2.2–4.4]
Asian	82.8	[79.9–85.7]	55.2	[50.7–59.7]	22.6	[19.0–26.2]	5.0	[2.9–7.1]	16.7	[13.8–19.6]	0.5	[0.0–1.0]
American Indian	64.8	[51.5–78.1]	25.4	[10.9–39.8]	33.1	[20.8–45.5]	6.3	[0.0–14.5]	32.8	[19.2–46.4]	2.4	[0.0–5.8]
Two or more races	76.2	[71.0–81.4]	36.9	[30.7–43.0]	29.2	[23.5–35.0]	10.1	[6.0–14.2]	23.6	[18.4–28.7]	0.3	[0.0–0.5]
First language learned to speak as a child												
Non-English	66.7	[62.9–70.4]	29.4	[25.9–32.8]	24.4	[21.5–27.2]	13.0	[10.2–15.7]	31.4	[27.7–35.0]	1.9	[1.1–2.8]
English	76.5	[75.1–77.9]	36.9	[35.1–38.8]	29.7	[28.2–31.3]	9.8	[8.8–10.8]	22.0	[20.6–23.4]	1.5	[1.2–1.8]
Highest level of parents' education												
High school or less	62.9	[60.1–65.7]	20.1	[17.9–22.4]	28.1	[25.8–30.5]	14.6	[12.6–16.7]	33.9	[31.2–36.6]	3.2	[2.3–4.2]
Some college	69.1	[67.0–71.2]	26.5	[24.6–28.5]	31.3	[29.3–33.3]	11.3	[9.8–12.8]	29.2	[27.2–31.2]	1.7	[1.2–2.3]
College graduation	84.1	[82.2–86.0]	44.5	[41.7–47.4]	31.1	[28.6–33.7]	8.5	[6.9–10.0]	15.2	[13.3–17.1]	0.7	[0.3–1.0]
Graduate/professional degree	88.1	[86.1–90.1]	58.9	[55.7–62.1]	23.5	[20.8–26.1]	5.8	[4.3–7.2]	11.2	[9.3–13.2]	0.6	[0.2–1.1]
Family income in 2001												
\$35,000 or lower	65.9	[63.4–68.4]	21.3	[19.2–23.4]	30.2	[28.0–32.4]	14.4	[12.5–16.3]	31.6	[29.2–34.1]	2.5	[1.8–3.1]
\$35,001–75,000	74.3	[72.5–76.0]	32.5	[30.4–34.5]	30.8	[28.9–32.8]	11.0	[9.6–12.4]	24.1	[22.4–25.8]	1.6	[1.2–2.1]
More than \$75,000	84.7	[82.8–86.6]	53.6	[50.9–56.4]	25.6	[23.3–27.9]	5.4	[4.5–6.4]	14.6	[12.7–16.4]	0.7	[0.3–1.2]

See notes at end of table.

National Center for Education Statistics

Table 6. Among 2004 high school seniors who had applied to a postsecondary institution by 2006, percentage distribution of level of institution applied to and the highest selectivity of 4-year institution applied to, by selected student, family, and high school characteristics: 2006—Continued

Selected student, family, and high school characteristics	4-year institution											
	Total		Highly selective		Moderately selective		Least selective		2-year institution		Less-than-2-year institution	
	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI
Family composition												
Mother and father	77.7	[76.0–79.3]	40.6	[38.5–42.7]	29.0	[27.4–30.6]	8.1	[7.1–9.1]	21.0	[19.4–22.6]	1.3	[1.0–1.7]
Mother or father and guardian	69.9	[66.9–72.9]	27.3	[24.1–30.5]	30.0	[26.7–33.2]	12.6	[10.1–15.2]	27.9	[25.0–30.8]	2.2	[1.3–3.1]
Single parent (mother or father)	73.6	[71.0–76.3]	30.2	[27.7–32.7]	28.9	[26.4–31.4]	14.5	[12.4–16.7]	24.4	[21.8–27.1]	1.9	[1.2–2.6]
Other	60.7	[54.4–67.1]	20.0	[14.5–25.5]	26.5	[20.8–32.2]	14.3	[9.6–18.9]	38.1	[31.8–44.3]	1.2	[0.0–2.8]
Highest mathematics course taken												
Pre-algebra or below	34.1	[27.8–40.4]	5.7	[2.5–8.9]	14.9	[10.1–19.7]	13.5	[9.2–17.9]	58.0	[51.2–64.9]	7.9	[4.1–11.6]
Algebra I/geometry	45.7	[42.2–49.2]	9.9	[8.1–11.7]	19.2	[16.5–22.0]	16.6	[14.1–19.1]	50.2	[46.6–53.7]	4.2	[2.9–5.4]
Algebra II	69.7	[67.1–72.2]	21.2	[18.8–23.5]	34.8	[32.4–37.3]	13.7	[11.5–15.9]	29.0	[26.4–31.6]	1.3	[0.8–1.8]
Trigonometry/analytic geometry/statistics	80.6	[77.8–83.5]	33.5	[30.0–37.1]	38.6	[35.1–42.1]	8.5	[6.7–10.3]	18.5	[15.7–21.2]	0.9	[0.4–1.4]
Pre-calculus/calculus	93.1	[91.9–94.3]	61.9	[59.5–64.4]	26.1	[24.0–28.2]	5.1	[4.1–6.1]	6.7	[5.5–8.0]	0.2	[0.0–0.4]
Highest science course taken												
Low-level science	34.1	[27.0–41.2]	8.8	[4.4–13.2]	11.8	[7.3–16.3]	13.5	[7.5–19.5]	57.8	[50.4–65.1]	8.1	[3.2–13.1]
Secondary physical science/basic biology	41.2	[33.5–48.9]	15.0	[9.2–20.9]	16.3	[10.8–21.8]	9.8	[5.6–14.0]	51.2	[43.5–58.9]	7.6	[3.0–12.2]
General biology	55.1	[52.0–58.2]	14.7	[12.6–16.7]	24.3	[21.5–27.1]	16.1	[13.8–18.4]	42.6	[39.6–45.7]	2.3	[1.5–3.1]
Chemistry I or physics I	77.3	[75.1–79.4]	30.0	[27.6–32.4]	36.2	[33.7–38.6]	11.1	[9.5–12.8]	21.4	[19.3–23.5]	1.4	[0.9–1.9]
Chemistry I and physics I	89.3	[86.9–91.7]	52.4	[48.4–56.4]	30.8	[27.3–34.3]	6.1	[4.4–7.8]	10.3	[7.9–12.7]	0.3	[0.0–0.7]
Chemistry II, physics II, or advanced biology	89.2	[86.9–91.5]	60.1	[56.6–63.6]	24.4	[21.6–27.2]	4.8	[3.5–6.1]	10.2	[8.0–12.5]	0.5	[0.1–0.9]
High-level academic coursework												
Did not complete	66.1	[64.1–68.0]	25.0	[23.1–26.8]	28.6	[26.9–30.3]	12.5	[11.2–13.8]	31.8	[29.9–33.7]	2.1	[1.7–2.6]
Completed	93.8	[92.6–94.9]	58.8	[56.2–61.4]	30.1	[27.7–32.5]	4.9	[3.8–6.0]	5.9	[4.8–7.1]	0.3	[0.1–0.5]

See notes at end of table.

National Center for Education Statistics

Table 6. Among 2004 high school seniors who had applied to a postsecondary institution by 2006, percentage distribution of level of institution applied to and the highest selectivity of 4-year institution applied to, by selected student, family, and high school characteristics: 2006—Continued

Selected student, family, and high school characteristics	4-year institution											
	Total		Highly selective		Moderately selective		Least selective		2-year institution		Less-than-2-year institution	
	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI
Mathematics achievement test in senior year												
Lowest quarter	53.3	[50.4–56.2]	10.8	[9.0–12.7]	24.0	[21.7–26.3]	18.4	[16.2–20.6]	42.4	[39.6–45.1]	4.3	[3.2–5.4]
Middle two quarters	73.9	[72.0–75.7]	29.0	[27.2–30.9]	33.9	[31.9–35.9]	10.9	[9.7–12.1]	24.8	[23.0–26.6]	1.4	[1.0–1.8]
Highest quarter	91.5	[90.0–92.9]	63.8	[61.2–66.4]	23.9	[21.8–26.0]	3.8	[2.8–4.7]	8.4	[7.0–9.8]	0.2	[0.0–0.3]
High school GPA												
2.0 or lower	48.2	[43.8–52.6]	11.7	[9.3–14.2]	18.1	[14.9–21.3]	18.4	[15.2–21.6]	48.4	[44.1–52.6]	3.4	[2.0–4.9]
2.1–3.0	65.6	[63.3–67.8]	22.6	[20.6–24.6]	30.4	[28.3–32.5]	12.6	[11.0–14.2]	32.2	[30.0–34.4]	2.3	[1.7–2.8]
Higher than 3.0	88.6	[87.1–90.0]	52.1	[49.4–54.7]	30.3	[28.2–32.4]	6.1	[5.1–7.2]	10.9	[9.5–12.3]	0.6	[0.3–0.9]
Student's educational expectations												
High school or less	37.9	[28.8–46.9]	4.1	[0.4–7.7]	13.2	[7.0–19.5]	20.6	[12.6–28.6]	51.9	[42.8–61.0]	10.2	[4.3–16.2]
Some college	36.3	[33.0–39.5]	5.7	[4.2–7.2]	15.2	[12.7–17.7]	15.3	[12.8–17.9]	58.2	[54.9–61.6]	5.5	[4.1–6.9]
College graduation	80.6	[78.7–82.5]	33.3	[31.0–35.6]	35.8	[33.6–38.0]	11.5	[10.0–13.0]	18.7	[16.9–20.5]	0.7	[0.4–1.0]
Graduate/professional degree	90.1	[88.8–91.3]	54.3	[52.0–56.6]	29.9	[28.0–31.8]	5.9	[4.9–6.9]	9.7	[8.5–10.9]	0.2	[0.0–0.4]
Do not know	49.7	[44.9–54.5]	13.8	[10.6–17.1]	20.6	[16.7–24.6]	15.2	[11.6–18.9]	46.5	[41.5–51.6]	3.8	[1.8–5.7]
Parent's 2002 educational expectations for students												
High school or less	49.2	[41.2–57.3]	11.1	[6.1–16.1]	17.8	[11.5–24.1]	20.4	[13.9–26.8]	44.7	[36.4–53.0]	6.1	[1.8–10.4]
Some college	42.5	[37.4–47.6]	9.2	[6.5–12.0]	19.9	[15.6–24.1]	13.4	[10.4–16.5]	52.7	[47.3–58.0]	4.8	[2.9–6.7]
College graduation	73.2	[71.4–74.9]	30.5	[28.4–32.6]	31.6	[29.8–33.5]	11.0	[9.7–12.3]	25.3	[23.6–26.9]	1.6	[1.2–2.0]
Graduate/professional degree	83.2	[81.6–84.8]	46.4	[44.0–48.8]	28.5	[26.6–30.3]	8.4	[7.2–9.5]	15.9	[14.3–17.4]	0.9	[0.6–1.3]
Type of institution planned to attend												
4-year institution	91.9	[91.0–92.7]	48.6	[46.6–50.7]	34.6	[32.9–36.3]	8.7	[7.7–9.7]	7.9	[7.0–8.7]	0.2	[0.1–0.4]
2-year community college	37.4	[34.7–40.0]	6.9	[5.5–8.3]	17.1	[14.9–19.2]	13.4	[11.4–15.4]	60.6	[57.9–63.3]	2.1	[1.4–2.7]
Vocational, technical, or trade school	34.0	[29.1–39.0]	5.3	[3.2–7.5]	13.8	[10.0–17.6]	15.0	[11.4–18.6]	55.7	[50.2–61.2]	10.3	[7.4–13.1]

See notes at end of table.

National Center for Education Statistics

Table 6. Among 2004 high school seniors who had applied to a postsecondary institution by 2006, percentage distribution of level of institution applied to and the highest selectivity of 4-year institution applied to, by selected student, family, and high school characteristics: 2006—Continued

Selected student, family, and high school characteristics	4-year institution										Less-than-2-year institution	
	Total		Highly selective		Moderately selective		Least selective		2-year institution		Pct.	95% CI
	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI	Pct.	95% CI		
Sector of high school last attended												
Public	73.7	[72.2–75.2]	33.7	[31.8–35.6]	29.2	[27.7–30.7]	10.7	[9.7–11.8]	24.7	[23.2–26.1]	1.7	[1.4–2.0]
Catholic	91.7	[89.7–93.7]	60.0	[54.5–65.5]	27.0	[23.1–30.9]	4.7	[3.1–6.2]	7.9	[5.9–9.9]	0.4	[0.1–0.7]
Other private	88.1	[82.7–93.4]	54.8	[45.7–63.8]	27.1	[21.0–33.3]	6.2	[3.9–8.5]	11.3	[5.9–16.8]	0.6	[0.0–1.1]
Urbanicity of high school last attended												
Urban	78.3	[75.7–80.9]	37.0	[33.8–40.2]	28.7	[26.2–31.2]	12.5	[10.6–14.5]	20.3	[17.7–22.8]	1.4	[1.0–1.9]
Suburban	74.9	[73.0–76.7]	37.2	[34.8–39.7]	28.6	[26.5–30.6]	9.1	[7.8–10.3]	23.4	[21.6–25.1]	1.8	[1.3–2.2]
Rural	70.7	[67.4–74.0]	30.8	[26.3–35.3]	30.7	[27.1–34.2]	9.2	[7.0–11.4]	28.0	[24.7–31.2]	1.3	[0.8–1.9]

¹ Black includes African American, Hispanic includes Latino, Asian includes Native Hawaiian or other Pacific Islander, and American Indian includes Alaska Native. All race categories exclude individuals of Hispanic or Latino origin.

NOTE: See the Technical Notes for the definition of 95% CI (confidence interval). This table shows, for example, that 75.2 percent of 2004 high school seniors who had applied to a postsecondary institution by 2006, had applied to a 4-year institution. Estimates in this table are based on all high school seniors in spring 2004 who had applied to a postsecondary institution by 2006. Institution selectivity is defined as the highest level of admissions selectivity (based on 2005 Carnegie classifications) of all postsecondary institutions to which the student applied. Four-year institution's selectivity is based on the percentage distribution of the college entrance examination scores of entering freshmen. The "least selective," "moderately selective," and "highly selective" categories correspond to 25th percentile ACT-equivalent scores of less than 18, 18–21, and more than 21, respectively. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Education Longitudinal Study of 2002 (ELS:2002), "Base-year, 2002," "First Follow-up, 2004," and "Secondary Follow-up, 2006."

Glossary

This glossary includes descriptions of the variables used in the Issue Tables, all of which can be found in the Education Longitudinal Study of 2002 (ELS:02) database. Variables can be downloaded from the ELS:02/06 CD, which includes the restricted-use base-year, first follow-up, high school transcript data, and the electronic codebook. Information on the procedure for obtaining this CD is available at <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2008346>. The index below shows the variables organized by category. The glossary items are listed in alphabetical order in the text by variable name (displayed in bold letters along the right-hand column).

Glossary Index

Steps Taken Toward Postsecondary Enrollment

Took or planned to take the College Board Preliminary Scholastic Assessment Test (PSAT)....	F1S21A
Took or planned to take the College Board Scholastic Assessment Test (SAT) or American College Test (ACT).....	F1S21C
Student did the following to prepare for college entrance examinations:	
Took or planned to take a special course at high school	F1S22A
Took or planned to take a course offered by a commercial test preparation service.....	F1S22B
Received or planned to receive private one-to-one tutoring.....	F1S22C
Studied or planned to study from test preparation books	F1S22D
Used or planned to use a test preparation video tape.....	F1S22E
Used or planned to use a test preparation computer program.....	F1S22F
Student went to the following sources for information about college entrance requirements:	
School staff.....	SOURCE1
Parent, sibling, or other relative	SOURCE2
College websites, publications, or search guides,	SOURCE 3
School, public, college, or university library	SOURCE 4
Friends	F1S48G
College representatives.....	F1S48H
None of the above	F1S48N
Number of postsecondary institutions applied to	F1S50
Ever applied to postsecondary institution as of 2006.....	F2EVRAPP
When student applied to postsecondary institution	F2B02
Highest selectivity of postsecondary institution applied to	F2PSAPSL

Student Characteristics

Sex	F2SEX
Race/ethnicity	F1RACE
First language learned to speak as a child	F1STLANG

Family Background

Highest level of parent's education	F1PARED
Family income in 2001	BYINCOME
Family composition.....	F1FCOMP

Academic Coursetaking and Performance in High School

Highest mathematics course taken.....	F1RMAPIP
Highest science course taken.....	F1RSCPIP
High-level academic coursework.....	F1RACADC
High school GPA.....	F1RGP
Mathematics achievement test scores in senior year.....	F1TXMQU

Postsecondary Expectations and Plans

Highest level of education student expected to attain.....	F1STEXP
Highest level of education parent expected student to attain	BYPARASP
Postsecondary plans and type of institution planned to attend after high school.....	F1PSEPLN

High School Last Attended

Sector.....	F1RSLCTR
Urbanicity.....	F1RSLURB

Family income in 2001**BYINCOME**

This variable indicates the total family income parents earned from all sources in 2001. It was recoded into three levels of family income: \$35,000 or lower, \$35,001–75,000, and more than \$75,000.

Highest level of education parent expected student to attain**BYPARASP**

This variable indicates the highest level of education the parent expected his or her child to attain after high school. Parents were asked about their expectations for their child's education when their child was in the sophomore year in 2002. If missing, the variable was imputed. This variable was recoded into four categories: high school or less, some college, college graduation, and graduate/professional degree.

Family composition**F1FCOMP**

This variable indicates the student's family composition and was constructed using the reports of parents in 2002 and supplemented by the reports of the first follow-up student participants (freshening sample) in 2004. It was recoded into four categories: mother and father, mother or father and guardian, single parent (mother or father), and other.

Highest level of parent's education**F1PARED**

This variable indicates the highest level of education reported by either parent in 2002. If missing, parent's education reported by students in the first follow-up survey was used. This variable was recoded into four categories: high school or less, some college, college graduation, and graduate/professional degree.

Postsecondary plans and type of institution planned to attend after high school**F1PSEPLN**

This variable indicates whether students planned to continue their education after high school and what type of postsecondary institution they planned to attend. This question was asked when students were in the senior year in 2004. The variable contains five categories: do not plan to continue; do not know if I would continue; plan to attend a 4-year institution; plan to attend a 2-year community college; and plan to attend a vocational, technical, or trade school.

High-level academic coursework**F1RACADC**

This transcript-based dichotomous variable indicates whether a student completed high-level academic coursework in high school. High-level academic coursework consists of 4 years of English; 3 years of mathematics (including at least 1 year of a course higher than algebra II); 3 years of science (including at least 1 year of a course higher than biology); 3 years of social studies (including at least 1 year of U.S. or world history); and 2 years of a single non-English language. Course classifications are based upon the 1998 revision of the Secondary School Taxonomy.

Race/ethnicity**F1RACE**

This variable indicates the student's race/ethnicity and is recoded to contain the following categories: White, Black (including African American), Hispanic (including Latino), Asian (including Native Hawaiian or other Pacific Islander), American Indian (including Alaska Native), and two or more races. All race categories exclude individuals of Hispanic or Latino origin.

High school GPA**F1RGP**

This transcript-based variable indicates a student's overall grade point average (GPA) based on all courses taken from 9th through 12th grade. It was recoded into the following categories: 2.0 or lower, 2.1–3.0, and higher than 3.0.

Highest mathematics course taken **F1RMAPIP**

This transcript-based variable indicates the highest mathematics course taken by a student during high school. It was recoded into the following categories: pre-algebra or below, algebra I/geometry, algebra II, trigonometry/analytic geometry/statistics, and pre-calculus/calculus.

Highest science course taken **F1RSCPIP**

This transcript-based variable indicates the highest science course taken by students during high school. It was recoded into the following categories: low-level science, secondary physical science/basic biology, general biology, chemistry I/physics I, chemistry I and physics I, chemistry II/physics II/advanced biology.

Sector **F1RSLCTR**

This transcript-based variable indicates the sector of high school that a student last attended in 2004 and contains three categories: public, Catholic, and other private school.

Urbanicity **F1RSLURB**

This transcript-based variable indicates the urbanicity of the high school that a student last attended in 2004 and contains three categories: urban (school is in a large or mid-size central city); suburban (school is in a large or small town or is on the urban fringe of a large or mid-size city); and rural (school is in a rural area). NCES used the Common Core of Data (CCD) locale codes for public schools.

Student took or planned to take the College Board Preliminary Scholastic Assessment Test (PSAT) **F1S21A**

This variable indicates whether a student took or planned to take the College Board Preliminary Scholastic Assessment Test (PSAT). The original categories of “I have not thought about it,” “I do not plan to take it,” “I have already taken it,” and “I plan to take it” were recoded into the following two categories: I took or plan to take it, and I do not plan to take it or have not thought about it.

Student took or planned to take the College Board Scholastic Assessment Test (SAT) or American College Test (ACT) **F1S21C**

This variable indicates whether a student took or planned to take the College Board Scholastic Assessment Test (SAT) or American College Test (ACT). The original categories of “I have not thought about it,” “I do not plan to take it,” “I have already taken it,” and “I plan to take it” were recoded into the following two categories: I took or plan to take it, and I do not plan to take it or have not thought about it.

Student took or planned to take a special course at high school to prepare for a college entrance examination **F1S22A**

This dichotomous variable indicates whether a student took or planned to take a special course at high school to prepare for a college entrance examination.

Student took or planned to take a course offered by a commercial test preparation service to prepare for a college entrance examination **F1S22B**

This dichotomous variable indicates whether a student took or planned to take a course offered by a commercial test preparation service to prepare for a college entrance examination.

Student received or planned to receive private one-to-one tutoring to prepare for a college entrance examination **F1S22C**

This dichotomous variable indicates whether a student received or planned to receive private one-to-one tutoring to prepare for a college entrance examination.

Student studied or planned to study from test preparation books to prepare for a college entrance examination F1S22D

This dichotomous variable indicates whether a student studied or planned to study from test preparation books to prepare for a college entrance examination.

Student used or planned to use a test preparation video tape to prepare for a college entrance examination F1S22E

This dichotomous variable indicates whether a student used or planned to use a test preparation video tape to prepare for a college entrance examination.

Student used or planned to use a test preparation computer program to prepare for a college entrance examination F1S22F

This dichotomous variable indicates whether a student used or planned to use a test preparation computer program to prepare for a college entrance examination.

Student went to friends for information about college entrance requirements F1S48G

This dichotomous variable indicates whether a student went to friends to seek information about college entrance requirements.

Student went to college representatives for information about college entrance requirements F1S48H

This dichotomous variable indicates whether a student went to college representatives to seek information about college entrance requirements.

Student went to none of the above for information about college entrance requirements F1S48N

This dichotomous variable indicates whether a student went to none of the following sources to seek information about college entrance requirements: guidance counselor, teacher, coach, parent, sibling, other relative, friend, college representatives, college publications, website, search guides, school library, public library, and college or university library.

Number of postsecondary institutions applied to F1S50

This variable indicates the number of postsecondary institutions a student has applied to during high school, and contains the following four categories: none, one school, two to four schools, and five or more schools. The last four categories were combined to form a category of “Applied to at least one school.”

Highest level of education student expected to attain F1STEXP

This variable indicates how far a student expected to get in school. It was recoded into five categories: do not know; high school or less; some college (including “attending/completing a 1- or 2-year program in a community college/vocational school” and “attending college but not completing a 4- or 5-year degree”); bachelor’s degree; and graduate or advanced degree.

First language learned to speak as a child F1STLANG

This dichotomous variable indicates whether the first language a student learned to speak as a child was English or non-English.

Mathematics achievement test scores in senior year F1TXMQU

This variable indicates mathematics achievement test scores and contains four categories: lowest quartile, second quartile, third quartile, and highest quartile.

When student applied to postsecondary institution F2B02

This variable indicates when a student applied to college and contains three categories: while still in high school, sometime after high school, and both. This variable is applied only to students who reported that they had applied to a postsecondary institution.

Ever applied to postsecondary institution as of 2006 F2EVRAPP

This dichotomous variable indicates whether a student had ever applied to a postsecondary institution as of 2006.

Highest selectivity of postsecondary institution applied to F2PSAPSL

This variable indicates the highest level of admissions selectivity (based on 2005 Carnegie classifications) of all postsecondary institutions to which a student applied. Four-year institution's selectivity is based on the percentage distribution of the college entrance examination scores of entering freshmen. The "least selective," "moderately selective," and "highly selective" categories correspond to 25th percentile ACT-equivalent scores of less than 18, 18-21, and greater than 21, respectively.

Sex F2SEX

This dichotomous variable indicates a student's sex: male or female.

Student went to school staff for information about college entrance requirements SOURCE1

This dichotomous variable indicates whether a student went to school staff to seek information about college entrance requirements. It was constructed by combining the following three variables indicating whether a student has gone to a school counselor (F1S48A), teacher (F1S48B), or coach (F1S48C) for information about college entrance requirements. The variable was coded as "yes" if a student had gone to any of these people.

Student went to a parent, sibling, or other relative for information about college entrance requirements SOURCE2

This dichotomous variable indicates whether a student went to a parent, sibling, or other relative to seek information about college entrance requirements. It was constructed by combining the following three variables indicating whether a student has gone to a parent (F1S48D), brother or sister (F1S48E), or other relative (F1S48F) for information about college entrance requirements. The variable was coded as "yes" if a student had gone to any of these people.

Student went to college websites, publications, or search guides for information about college entrance requirements SOURCE3

This dichotomous variable indicates whether a student went to college websites, publications, or search guides to seek information about college entrance requirements. It was constructed by combining the following two variables indicating whether a student has gone to a college's publication or webpage (F1S48I) or college search guides, publications, or websites (F1S48J) for information about college entrance requirements. The variable was coded as "yes" if a student had gone to any of these sources.

Student went to a school, public, college, or university library for information about college entrance requirements SOURCE4

This dichotomous variable indicates whether a student went to a school, public, college, or university library to seek information about college entrance requirements. It was constructed by combining the following two variables indicating whether a student has gone to a school library (F1S48K), public library (F1S48L), or college or university library (F1S48M) for information about college entrance requirements. The variable was coded as "yes" if a student had gone to any of these sources.

Technical Notes

Confidence Intervals

Definition

The confidence interval (CI) is one way of expressing the uncertainty of a sample estimate of a statistic due to sampling variation. Confidence intervals (with a lower and upper bound) for a sample estimate can be constructed such that if we drew repeated samples from the same population many times, we would expect a certain percentage of the estimates from these samples to fall within the interval. For example, a 95% confidence interval is constructed and expressed as:

$$C(\bar{X}_i - 1.96S_i < \bar{X} < \bar{X}_i + 1.96S_i) = 95\% \quad (1)$$

where \bar{X}_i is the estimated mean of the specific (i^{th}) sample being used, \bar{X} is any of the estimated means from possible replicated samples, S_i is the sample estimate of the standard error of the mean constructed from the sample being used, and 1.96 is a t or z (normal) distribution constant for the 95% probability.

Note that in equation (1), 95% refers to the confidence, not the probability.

Special Bounding Conditions in Constructing Confidence Intervals

CIs are bound at the minimum and maximum possible values for percentages and at the minimum possible value for amounts. This means that the CIs are bound at zero at the lower bound for both percentages and amounts, and at 100 at the upper bound for percentages. This bounding may result in asymmetrical intervals. Bounding will be apparent for low estimates (i.e., near zero) or high estimates (i.e., near 100 percent or near the maximum possible amount).

CIs and Hypothesis Testing (or Overlapping CIs and Statistical Significance)

Can two CIs constructed for estimates of the same statistic from two different populations be used to determine if the two estimates are statistically significantly

different (say, in place of doing a hypothesis test)? The answer is: sometimes but not always.

In the case of two *non-overlapping CIs*, the difference between the estimates is necessarily statistically significant. If 95% CIs are being used, then the estimates are significantly different with $p \leq 0.05$. This is equivalent to doing a t -test (or z -test if comparing proportions) with $\alpha = 0.05$ and rejecting the null hypothesis of equality.

However, in the case of two *overlapping CIs*, the estimates can be either significant or not significant. An assumption that overlapping CIs necessarily indicate non-significance is false. In this case a hypothesis test must be done, and under some conditions the test can find that the *estimates are indeed significantly different despite their overlapping CIs*.

Here is an *explanation* of why this happens. For two 95% CIs constructed as in equation (1), the algebraic relationships constrain the CIs so that they can only overlap when:

$$(\bar{X}_1 - \bar{X}_2) \leq 1.96(S_1 + S_2). \quad (2)$$

Similarly, the CIs cannot overlap when:

$$(\bar{X}_1 - \bar{X}_2) > 1.96(S_1 + S_2). \quad (3)$$

The formula for a t -test of the difference between two means is:

$$t = \frac{(\bar{X}_1 - \bar{X}_2)}{1.96\sqrt{(S_1^2 + S_2^2)}}. \quad (4)$$

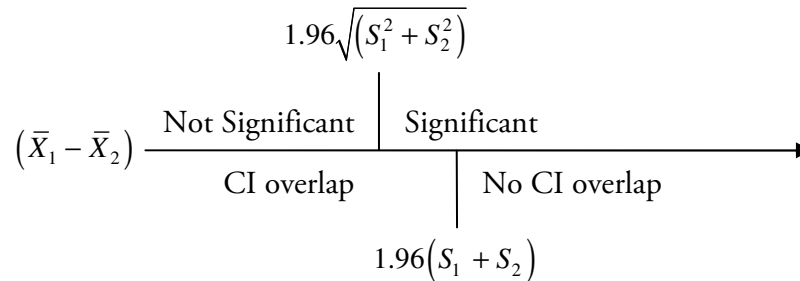
The means are significantly different when:

$$(\bar{X}_1 - \bar{X}_2) > 1.96\sqrt{(S_1^2 + S_2^2)}. \quad (5)$$

This is because, algebraically, the square root of the sum of squares of two numbers is always less than the sum of those two numbers:

$$\sqrt{S_1^2 + S_2^2} < S_1 + S_2, \quad (6)$$

and as the difference in means $(\bar{X}_1 - \bar{X}_2)$ increases, it becomes significantly different before the two confidence intervals cease to overlap. Refer to the following figure.



The figure demonstrates that there is an interval of values of $(\bar{X}_1 - \bar{X}_2)$ where the difference is significant and the CIs overlap. Thus,

- while non-overlapping CIs do indicate a significant difference,
- overlapping CIs *do not* indicate non-significance.¹

Data Analysis

The Education Longitudinal Study of 2002 (ELS:02) sample design involved stratification, the disproportionate sampling of certain strata, and multistage probability sampling. The resulting statistics are more variable than they would have been if they had been based on data from a simple random sample of the same size. As a result, simple random sample techniques for estimating sampling errors cannot be applied to these data. Several methods such as Taylor Series approximations, Balanced Repeated Replication, and Jackknife Repeated Replication can be used to estimate correct standard errors. This set of Issue Tables used a SAS macro to call SUDAAN (an advanced statistical program that takes into account the complex sampling design) and applied the Taylor Series approximation method to generate appropriate standard errors for the complex sampling designs used by ELS:02.

¹ For more detailed discussions of nonoverlapping CIs, see Cornell University, Cornell Statistical Consulting Unit (2008, October), Overlapping Confidence Intervals and Statistical Significance, *StatNews*, 73 (retrieved October 29, 2009, from <http://www.cscu.cornell.edu/news/archive.php>) or Wolfe, R., and Hanley, J. (2002), If We're So Different, Why Do We Keep Overlapping? When 1 Plus 1 Doesn't Make 2, *Canadian Medical Journal*, 166(1): 65–66.

Dataset Methodology

For an overview of the ELS:02 survey methodology, see the *Education Longitudinal Study of 2002 (ELS:02) Base-Year to Second Follow-up Public Use Data File Document* (NCES 2008-347), available at <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2008347>.

Quality of Estimates: Unit Response Rates and Bias Analysis

NCES Statistical Standard 4-4-1 states that “Any survey stage of data collection with a unit or item response rate less than 85 percent must be evaluated for the potential magnitude of nonresponse bias before the data or any analysis using the data may be released” (U.S. Department of Education 2003). From the selected sample, weighted item response rates were calculated for all variables used in this set of Issue Tables by dividing the weighted number of valid responses by the weighted population for which the item was applicable. All items included in this set of Issue Tables have a response rate of more than 85 percent.