

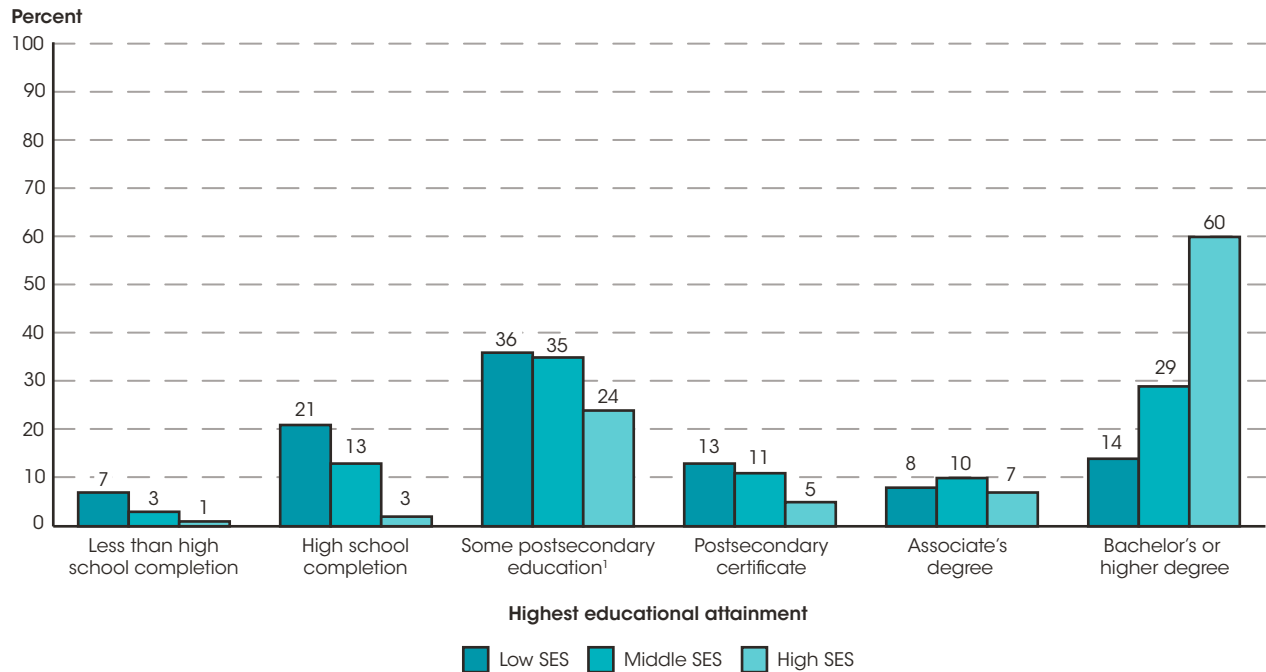
Postsecondary Attainment: Differences by Socioeconomic Status

A smaller percentage of students of low socioeconomic status (SES) than students of middle SES attained a bachelor's or higher degree within 8 years of high school completion (14 vs. 29 percent), and percentages for both groups were smaller than the percentage of high-SES students who attained this level of education (60 percent).

Postsecondary education is increasingly seen as an important step for obtaining beneficial long-term occupational and economic outcomes. Lower levels of educational attainment are linked to higher unemployment rates and lower earnings.¹ Although an increasing number of students have enrolled in postsecondary institutions over the last several decades, there are still differences in the characteristics of students who complete various levels of postsecondary education. In particular, students from families with a low socioeconomic status (SES) are less likely than those from families with a higher SES to obtain higher levels of postsecondary education.² This spotlight examines differences in students' educational attainment by SES, as well as how other variables may differentially relate to students' educational attainment by SES group (low, middle, and high).

The Education Longitudinal Study of 2002 (ELS:2002) followed a nationally representative cohort of students and surveyed them at certain points during their secondary and postsecondary education. The first wave of data included mathematics and reading assessments and was collected in 2002, when the students were in 10th grade. The students' parents were also surveyed in this wave, and students' SES was constructed from their parents' occupation, highest level of education, and income. A first follow-up wave was collected 2 years later, in 2004, when the majority of the students were in 12th grade. Both the 2002 and 2004 survey waves included self-reported questions about the educational expectations students had and the sources of information they consulted regarding college. Two additional follow-up survey waves were collected, one in 2006 and one in 2012. The 2006 wave assessed the students' current college enrollment status, and the 2012 wave asked students to report on their highest level of educational attainment.

Figure 1. Percentage distribution of highest level of educational attainment of spring 2002 high school sophomores in 2012, by socioeconomic status (SES)



¹ Includes education at any type of postsecondary institution, but with no earned postsecondary credential.

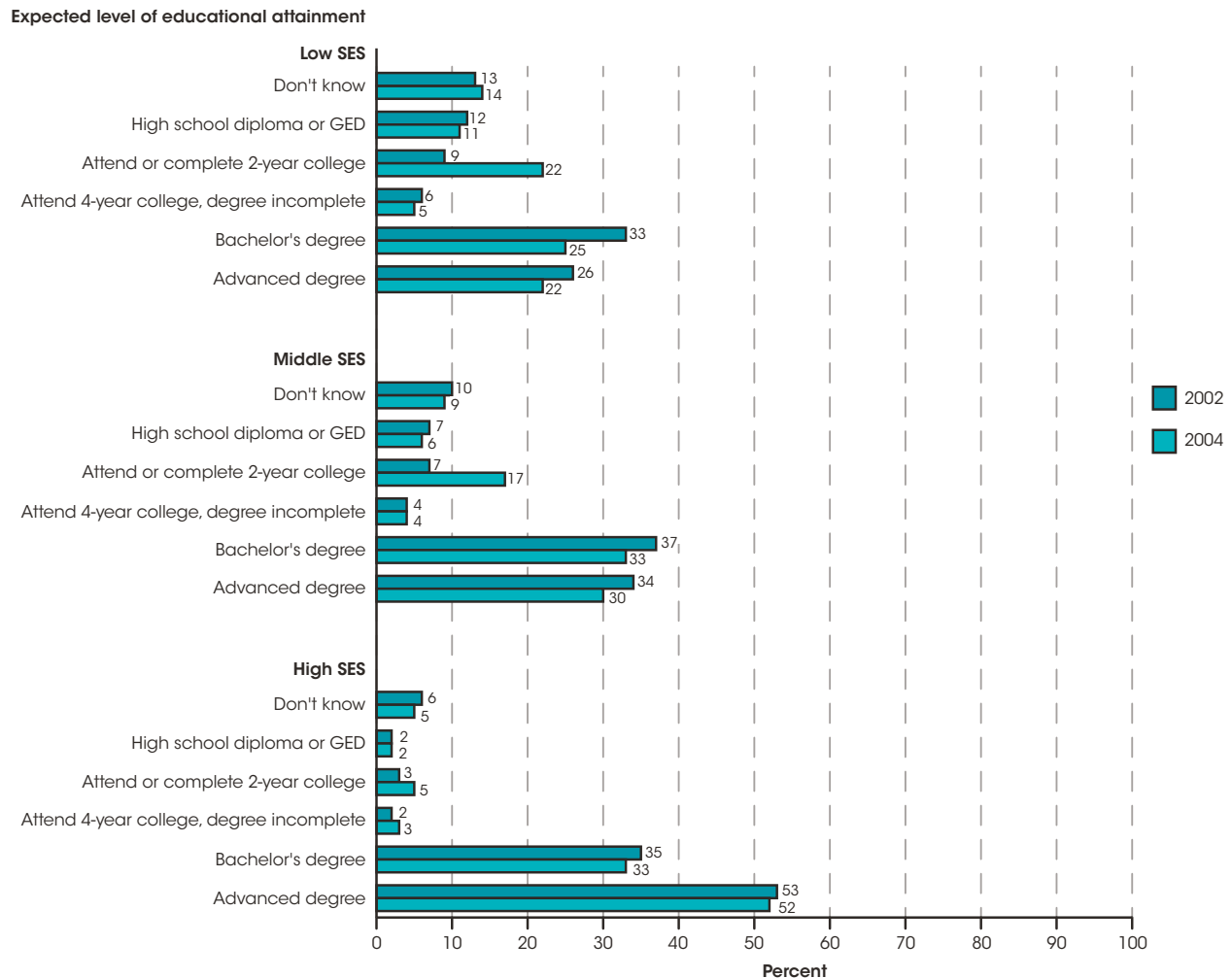
NOTE: Students' SES is based on their parents' education and occupations as well as the family income in 2002 and is measured by a composite score on these variables. The "low" SES group is the lowest quartile; the "middle" SES group is the middle two quartiles; and the "high" SES group is the upper quartile. Highest level of educational attainment was self-reported by participants. High school completion includes GEDs. 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 and Third Follow-up. See *Digest of Education Statistics 2014*, table 104.91.

The percentage of 2002 10th graders who had attained different levels of education by 2012 varied by SES. A larger percentage of low-SES students (7 percent) than of middle-SES students (3 percent) had not completed high school by 2012, and both percentages were larger than the percentage of high-SES students (1 percent) who had not completed high school. Similarly, by 2012, a larger percentage of low-SES students (21 percent) than of middle-SES students (13 percent) had completed high school as their highest level of education, and both percentages were larger than the percentage of high-SES students (3 percent) who did so. The percentage of students who attained some postsecondary education by 2012 was not measurably different for low- and

middle-SES students (36 and 35 percent, respectively), but both percentages were larger than the percentage of high-SES students who had some postsecondary education (24 percent). This same pattern was evident for the percentage of students whose highest level of education was a postsecondary certificate. A larger percentage of middle-SES students (10 percent) than of low-SES and high-SES students (8 and 7 percent, respectively) completed an associate's degree by 2012. A smaller percentage of low-SES than middle-SES students attained a bachelor's or higher degree by 2012 (14 vs. 29 percent), and the percentages for both groups were smaller than the percentage of high-SES students whose highest level of education was a bachelor's or higher degree (60 percent).

Figure 2. Percentage of students' expected levels of educational attainment of spring 2002 high school sophomores, by socioeconomic status (SES): 2002 and 2004



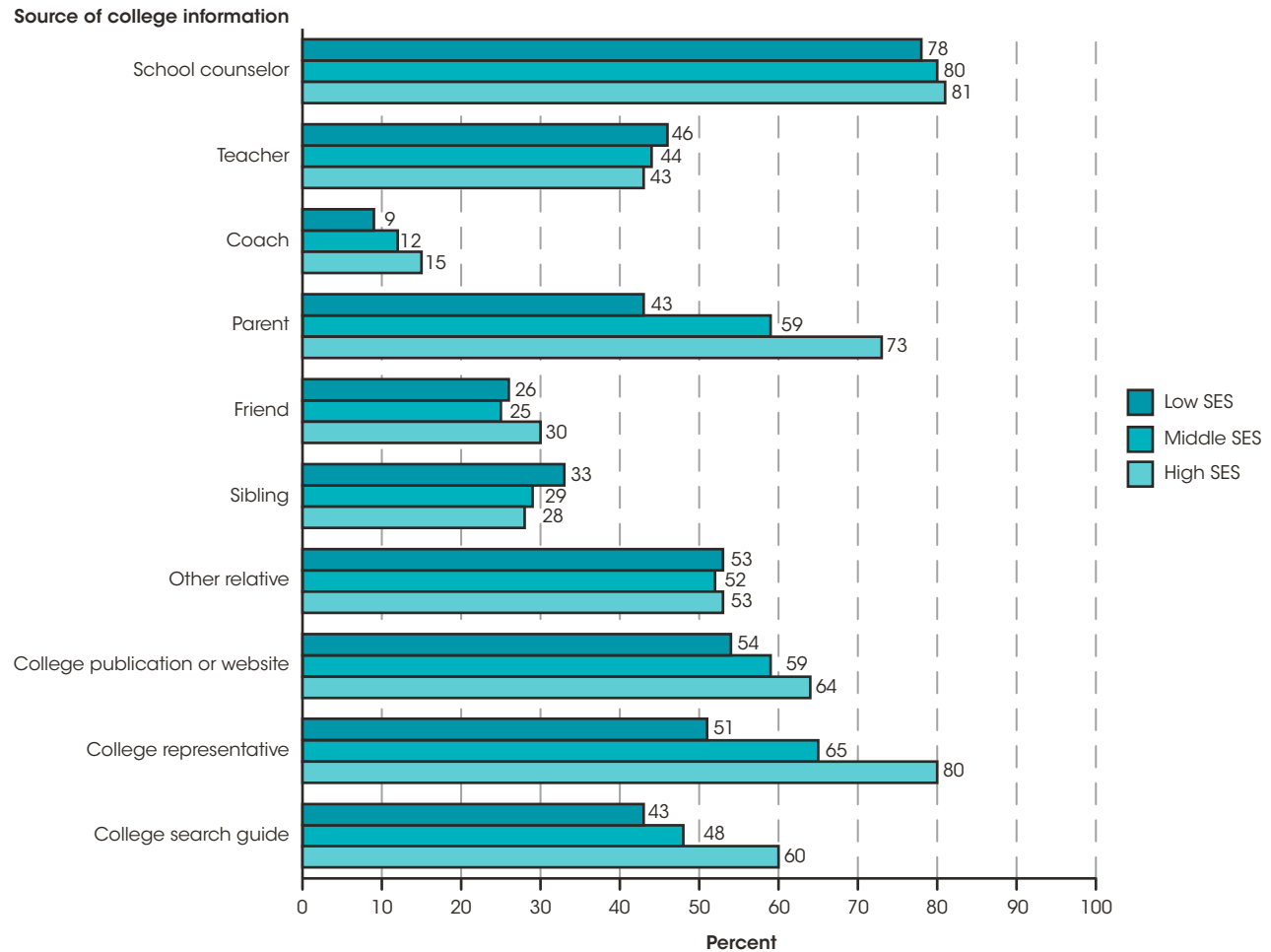
NOTE: Students' SES is based on their parents' education and occupations as well as the family income in 2002 and is measured by a composite score on these variables. The "low" SES group is the lowest quartile; the "middle" SES group is the middle two quartiles; and the "high" SES group is the upper quartile. Expected levels of educational attainment were measured by students' response to the question, "As things stand now, how far in school do you think you will get?" 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 and First Follow-up. See *Digest of Education Statistics 2014*, table 104.92.

Students' educational expectations have been shown to be related to their eventual educational attainment.³ Expectations for educational attainment were measured in both 2002 and 2004, when students were in 10th and 12th grade, respectively. In all SES groups, the percentage of students who expected to earn a 2-year degree was higher in 2004 than in 2002. The percentage of students expecting to earn a bachelor's degree was smaller in 2004 than in 2002 for those students from low-SES (25 vs. 33 percent) and middle-SES (33 vs. 37 percent) families, and the same pattern emerged for expectations to earn an advanced degree.

In addition to changes over time within SES groups, there were differences between SES groups in students' educational expectations. These patterns were similar for both years, so only the 2004 expectations are discussed here. In 2004, a larger percentage of low-SES students (11 percent) than of middle-SES students (6 percent)

expected their highest level of educational attainment to be a high school credential, and both percentages were larger than the percentage of high-SES students (2 percent) who expected to attain this level of education. Similarly, a larger percentage of low-SES students (22 percent) than of middle-SES students (17 percent) expected they would attend or complete a 2-year college as their highest level of educational attainment, and both percentages were larger than the percentage of high-SES students (5 percent) who expected to do so. Conversely, in 2004, a smaller percentage of low-SES students (25 percent) than of middle- and high-SES students (both 33 percent) expected to earn a bachelor's degree. Also, a smaller percentage of low-SES students (22 percent) than of middle-SES students (30 percent) expected to earn an advanced degree, and these percentages were both smaller than the percentage of high-SES students who expected to earn an advanced degree (52 percent).

Figure 3. Percentage of spring 2002 high school sophomores who expected to attend a postsecondary institution seeking information about college from various sources in 2004, by socioeconomic status (SES)

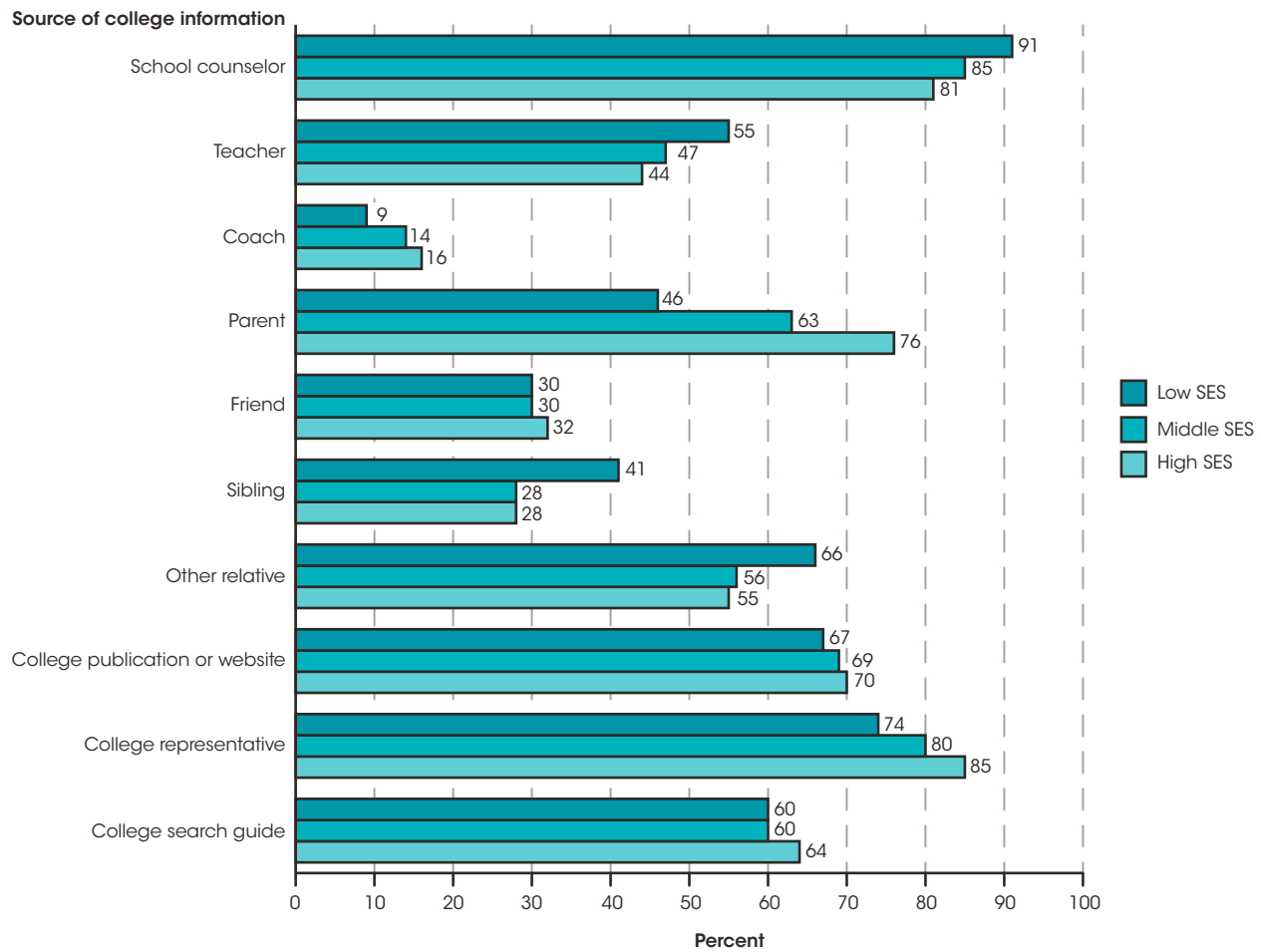


NOTE: Students' SES is based on their parents' education and occupations as well as the family income in 2002 and is measured by a composite score on these variables. The "low" SES group is the lowest quartile; the "middle" SES group is the middle two quartiles; and the "high" SES group is the upper quartile. Information seeking was measured by students' responses to the question, "Where have you gone for information about the entrance requirements of various colleges?" Only those students who indicated they planned to attend some postsecondary institution were asked this question. Students with expectations below postsecondary attendance were instructed to skip this question.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Education Longitudinal Study of 2002 (ELS:2002), Base Year and First Follow-up. See *Digest of Education Statistics 2014*, table 104.93.

Navigating the college application and enrollment process often involves seeking out assistance from others. In 2002 and 2004, students who expected to attend a postsecondary institution were asked what sources they had gone to for information about the entrance requirements of various colleges.⁴ Generally, a larger percentage of these students sought information in 2004 than in 2002 across SES groups. In 2004, across all students who intended to pursue postsecondary-level study, a smaller percentage of low-SES students went to their parents for information about college than middle-SES students did (43 vs. 59 percent), and these percentages were both smaller than the percentage of high-SES students who went to their parents for

information (73 percent). Similarly, a smaller percentage of low-SES than middle-SES students went to college representatives (51 vs. 65 percent), college publications and websites (54 vs. 59 percent), or college search guides (43 vs. 48 percent) for information. The percentages of low- and middle-SES students who sought information from these three sources were smaller than the percentage of high-SES students who sought information from these three sources (80, 64, and 60 percent, respectively). Conversely, a larger percentage of low-SES students (33 percent) than of middle-SES (29 percent) and high-SES (28 percent) students sought advice from a sibling.

Figure 4. Of spring 2002 high school sophomores with postsecondary plans who earned a bachelor's degree or higher by 2012, percentage who sought college information from various sources in 2004, by socioeconomic status (SES)



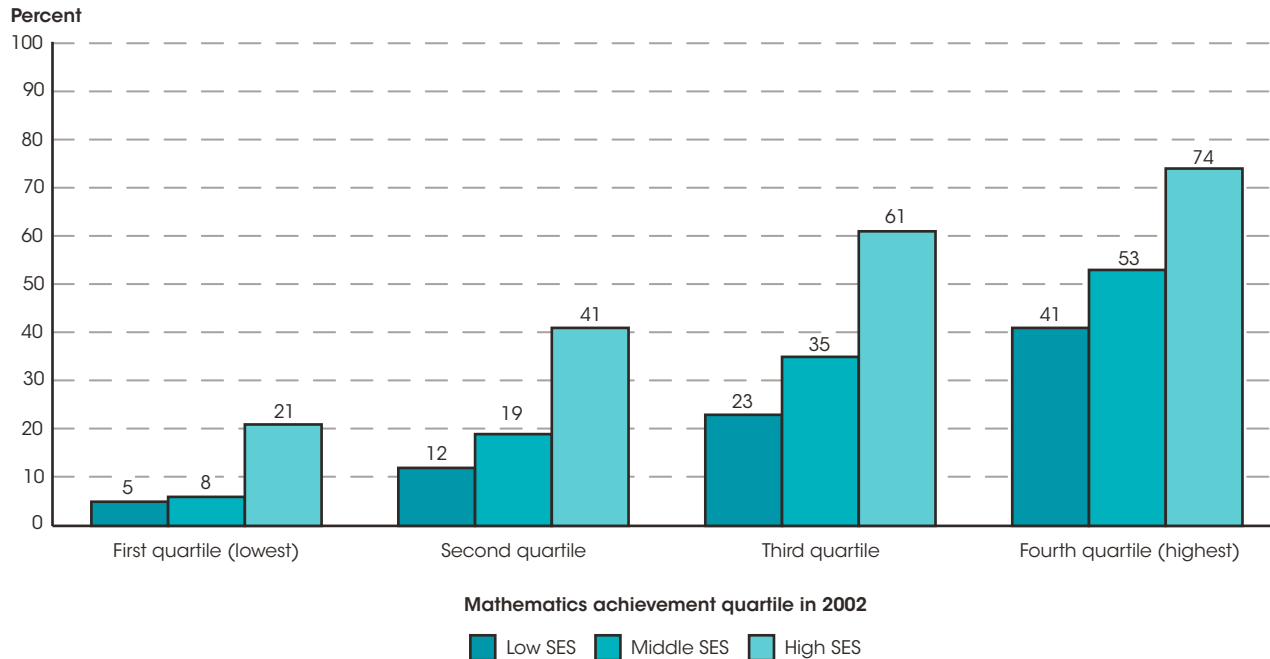
NOTE: Students' SES is based on their parents' education and occupations as well as the family income in 2002 and is measured by a composite score on these variables. The "low" SES group is the lowest quartile; the "middle" SES group is the middle two quartiles; and the "high" SES group is the upper quartile. Information seeking was measured by students' responses to the question "Where have you gone for information about the entrance requirements of various colleges?"

SOURCE: U.S. Department of Education, National Center for Education Statistics, Education Longitudinal Study of 2002 (ELS:2002), Base Year, First Follow-up, and Third Follow-up. See *Digest of Education Statistics 2014*, table 104.93.

Among students who planned postsecondary-level study and who earned a bachelor's or higher degree by 2012, there were also differences in students' information-seeking patterns in 2004 by SES. Similar to the information-seeking for all students who expected to attend a postsecondary institution, a smaller percentage of low-SES students who obtained a bachelor's degree by 2012 had gone to their parents for information about college than their middle-SES peers did (46 vs. 63 percent). The percentage of low-SES and middle-SES students who obtained a bachelor's degree by 2012 and who went to their parents for information were both

smaller than the percentage of high-SES students who did so (76 percent). However, for students who earned a bachelor's degree, a larger percentage of low-SES students (91 percent) than of middle-SES students (85 percent) went to their school counselors for information, and both percentages were larger than the percentage of high-SES students (81 percent) who sought information from their school counselor. Similarly, a larger percentage of low-SES students who earned a bachelor's degree than of middle- and high-SES students who earned a bachelor's went to their teacher, their sibling, or another relative for information about college.

Figure 5. Percentage of spring 2002 high school sophomores who earned a bachelor's degree or higher by 2012, by socioeconomic status (SES) and mathematics achievement quartile in 2002

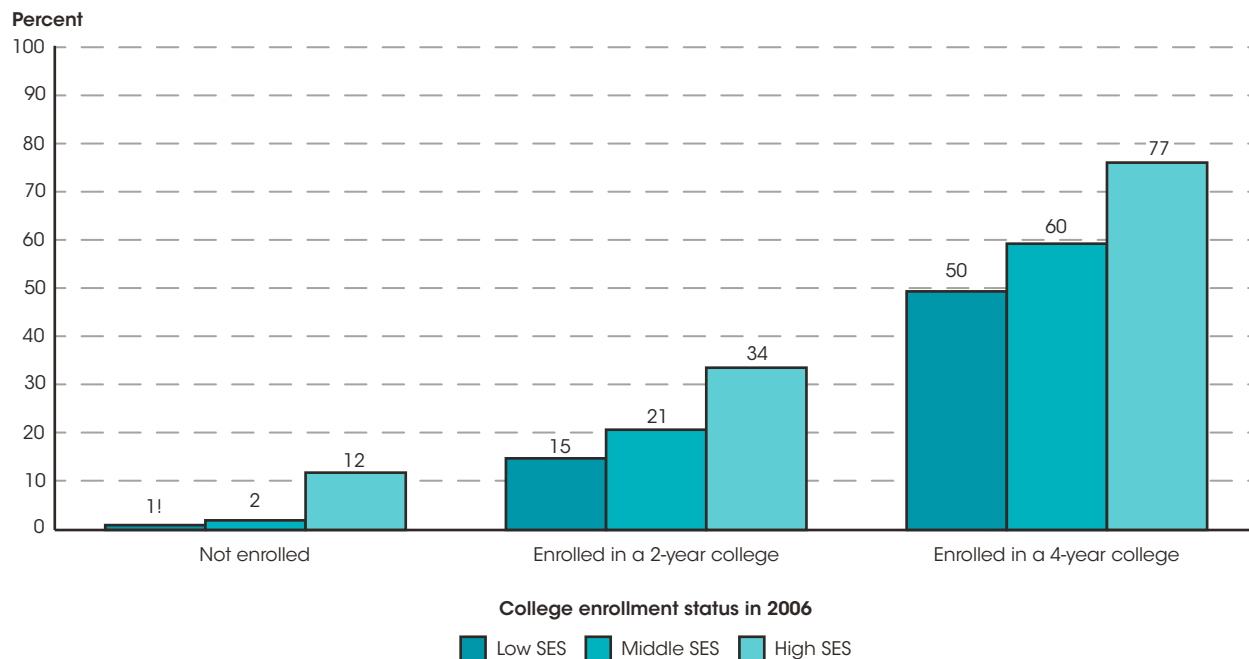


NOTE: Students' SES is based on their parents' education and occupations as well as the family income in 2002 and is measured by a composite score on these variables. The "low" SES group is the lowest quartile; the "middle" SES group is the middle two quartiles; and the "high" SES group is the upper quartile. Mathematics achievement quartiles reflect students' scores on assessments conducted in 2002. SOURCE: U.S. Department of Education, National Center for Education Statistics, Education Longitudinal Study of 2002 (ELS:2002), Base Year and Third Follow-up. See *Digest of Education Statistics 2014*, table 104.91.

Academic skills are also necessary for college completion, and performance on the standardized assessments, administered during the first wave of data collection in 2002, are one way to examine students' aptitudes. In general, a smaller percentage of low-SES students performed in the highest quartile of mathematics achievement (10 percent) while in high school compared to middle-SES students (23 percent), and both percentages were smaller than the percentage of high-SES students (48 percent) who scored in the highest quartile. However, even when performance on standardized assessments was similar, smaller percentages of high-performing low- and middle-SES students than of high-performing high-SES students had completed a bachelor's degree within 10 years. For example, a smaller percentage of low-SES than middle-SES students who scored in the highest quartile in mathematics achievement had successfully completed a bachelor's degree 10 years

later (41 vs. 53 percent), and both percentages were smaller than the percentage of high-SES students who did so (74 percent). Additionally, a smaller percentage of low-SES than middle-SES students who scored in the third quartile in mathematics went on to complete a bachelor's degree by 2012 (23 vs. 35 percent), and these two percentages were both smaller than the percentage of high-SES students who did so (61 percent). Only 5 percent of low-SES students who scored in the lowest quartile on the mathematics assessment in 2002 went on to complete a bachelor's degree by 2012. This percentage was smaller than the percentage of middle-SES students who scored in the lowest quartile and completed a bachelor's degree (8 percent), and both percentages were smaller than the percentage of high-SES students who did so (21 percent). Similar patterns were observed for students' reading achievement.

Figure 6. Percentage of spring 2002 high school sophomores who earned a bachelor's degree or higher by 2012, by socioeconomic status (SES) and 2006 college enrollment status



! Interpret data with caution. The coefficient of variation (CV) for this estimate is between 30 and 50 percent.

NOTE: Students' SES is based on their parents' education and occupations as well as the family income in 2002 and is measured by a composite score on these variables. The "low" SES group is the lowest quartile; the "middle" SES group is the middle two quartiles; and the "high" SES group is the upper quartile. Enrollment in 2006 was based on postsecondary transcript data.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Education Longitudinal Study of 2002 (ELS:2002), Base Year, Second Follow-up, and Third Follow-up. See *Digest of Education Statistics 2014*, table 104.92.

In regard to students' eventual degree attainment, it is also important to consider in what type of postsecondary institution students are enrolled and how soon after high school they enrolled in college. While smaller percentages of low- and middle-SES students than high-SES students completed a bachelor's or higher degree by 2012 overall, this pattern was even more pronounced for students who were not enrolled in a 4-year college in 2006, which was 2 years after high school completion for most students. For example, the percentages of low- and middle-SES students not enrolled in any postsecondary institution in 2006 who went on to complete a bachelor's or higher degree by 2012 (2 percent or less) were smaller than the percentage

of high-SES students (12 percent) who were not enrolled in 2006 and went on to complete a bachelor's or higher degree by 2012. In addition, a smaller percentage of low-SES than middle-SES students who were enrolled in a 2-year college in 2006 went on to complete a bachelor's degree by 2012 (15 vs. 21 percent), and both percentages were smaller than the percentage of high-SES students who did so (34 percent). Even for those students who were enrolled in a 4-year college in 2006, a smaller percentage of low-SES than middle-SES students went on to complete a bachelor's or higher degree by 2012 (50 vs. 60 percent), and both percentages were smaller than the percentage of high-SES students who did so (77 percent).

Endnotes:

¹ See Annual Earning of Young Adults (http://nces.ed.gov/programs/coe/indicator_cba.asp) and Employment Rates and Unemployment Rates by Educational Attainment (http://nces.ed.gov/programs/coe/indicator_cbc.asp)

² Long, B.T. (2007). The Contributions of Economics to the Study of College Access and Success. *Teachers College Record*, 109(10): 2367–2443.

³ Mello, Z.R. (2008). Gender Variation in Developmental Trajectories of Educational and Occupational Expectations and Attainment From Adolescence to Adulthood. *Developmental Psychology*, 44(4): 1069–1080.

⁴ Only those students who indicated they planned to attend some postsecondary institution were asked this question. Students with expectations below postsecondary attendance were instructed to skip this question.

Reference tables: *Digest of Education Statistics 2014*, tables 104.91, 104.92, and 104.93

Related indicators: Educational Attainment (indicator 1), Annual Earnings of Young Adults (indicator 3), Characteristics of Postsecondary Students (indicator 32)

Glossary: Educational attainment