

# The CollegeKeys Compact<sup>TM</sup>

Getting Into College: Postsecondary  
Academic Undermatch

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# Introduction

Only 57 percent of four-year institution enrollees obtain a bachelor's degree after six years and only 28 percent of two-year institution enrollees achieve a credential after three years.<sup>1</sup> Moreover, even if students manage to graduate, the average time-to-

**Academic match** is based on how college selectivity compares to a student's measured academic ability. The extent to which institutions meet other student needs, including financial and social requirements, are additional determinants of a broader measure of "fit" between students and postsecondary choices. A student may be academically undermatched to a college that is a good fit for other reasons.

degree has increased over the past several decades, thus expanding the financial burden to students, families and taxpayers (Bound et al. 2010). In light of these challenges, researchers have begun to investigate student-college "academic undermatch" as a potential source of low and stagnant college completion rates. Academic undermatch occurs when a student's academic credentials permit them access to a college or university that is more selective than the postsecondary

alternative they actually choose. For example, an academically strong student who enrolls in a nonselective college or no college at all would be labeled "undermatched."

This research quantifies the extent of student-college academic undermatch among the 1992 and 2004 cohorts of graduating high school seniors and documents changes in the extent of academic undermatch over time. The concept of academic undermatch has

recently come to the foreground because initial research shows that undermatching is pervasive, especially among low-income students, minorities and first-generation college-goers (Bowen et al. 2009; Roderick et al. 2008).

In addition, Light and Strayer (2000) find that students of all academic ability levels have a higher probability of completing a degree if the selectivity level of the college they attend matches their measured academic skill level. To date, we have no national picture on the extent of academic undermatch or how such statistics have changed over time.

College completion rates rise with **institutional selectivity**, so students who are academically matched to their postsecondary institution may be substantially more likely to finish a college credential or degree than if they are academically undermatched.

Researchers care about student-college academic match because its relationship with college completion may impact a variety of other important factors. We know that individuals with higher levels of education are observed to have higher wages, lower unemployment rates, better health insurance and pensions, greater satisfaction with their jobs, and healthier lifestyles (Baum et al. 2010), and students who attend relatively selective colleges are more likely to graduate (Horn and Carroll 2006; Bowen et al. 2009) and to succeed in the labor market (Hoxby 1998; Brewer et al. 1999; Long 2008).

Yet, research shows that students from lower-socioeconomic status (SES) families are more likely to undermatch because they are less likely to apply and enroll in selective colleges or any college at all (Manski and Wise 1983; Pallais and Turner 2006; Hill and Winston 2010). The evidence presented in this policy brief confirms that undermatching is particularly prevalent for lower-SES students. By disaggregating data on college application, admission and enrollment behavior for both lower- and higher-SES students over time, we shed much needed light on the mechanism behind academic undermatch, thereby informing future research and policy on this topic.

## Data

This study uses data from two nationally representative samples of students: the National Education Longitudinal Study (NELS) of 1988 and the Education Longitudinal Study (ELS) of 2002.<sup>2</sup> Both data sets contain information on students' high school careers and their transitions into college. The sample of 6,490 students in NELS consists of high school seniors in 1992. The sample of 9,130 students in ELS consists of high school seniors in 2004.<sup>3</sup> For students in each cohort, we observe high school GPA, SAT® score, participation in Advanced Placement® or International Baccalaureate courses, and whether their family SES is above the median SES.

Both data sets also contain information on each college to which students apply, whether they are offered admission, and where they ultimately enroll.<sup>4</sup> We categorize each of the colleges into one of five academic selectivity categories: *very selective*, *selective*, *somewhat selective*, *nonselective* and *two-year college*.<sup>5</sup> These categories are a refinement of the Barron's Admissions Competitiveness Index, which relies on SAT/ACT scores of admitted students, the admission rate, and the GPA and class rank required for admission.

### Defining Academic Undermatch

There are multiple ways to define and measure academic undermatch, and empirical results can be quite sensitive to these choices. We employ a methodology similar to Bowen et al. (2009) and Roderick et al. (2008) and take a conservative approach that makes it more likely we underestimate the full extent of academic undermatch rather than overestimate it.<sup>6</sup> We determine the highest postsecondary selectivity category to which a student has access, given his or her academic credentials, and compare that category to where we observe the student ultimately enrolling.<sup>7</sup> If students enroll in a college selectivity category that is below the selectivity category to which they had access, they are defined as undermatched. This definition includes students who are qualified to go to *nonselective* four-year colleges but who choose to enroll in a two-year college.<sup>8</sup> Our definition of undermatch also includes all students who did not enroll in any postsecondary institution because we assume that everyone has the option to enroll in a two-year college. Finally, we also define “substantial academic undermatch” as undermatching that spans two or more college selectivity categories (e.g., a student who has access to a *selective* college but enrolls in a *nonselective* college).

# Analysis

How prevalent is academic undermatch and how has it changed over time? In the 1992 cohort, the broadest statistic on undermatch indicates that 48.9 percent undermatched in their postsecondary choice. Furthermore, 19.8 percent of 1992 high school graduates

In 1992, 48.9 percent of all students undermatched, while in 2004, 40.9 percent of all students **undermatched**. Substantial undermatch in both of these cohorts exceeds 15 percent of high school graduates.

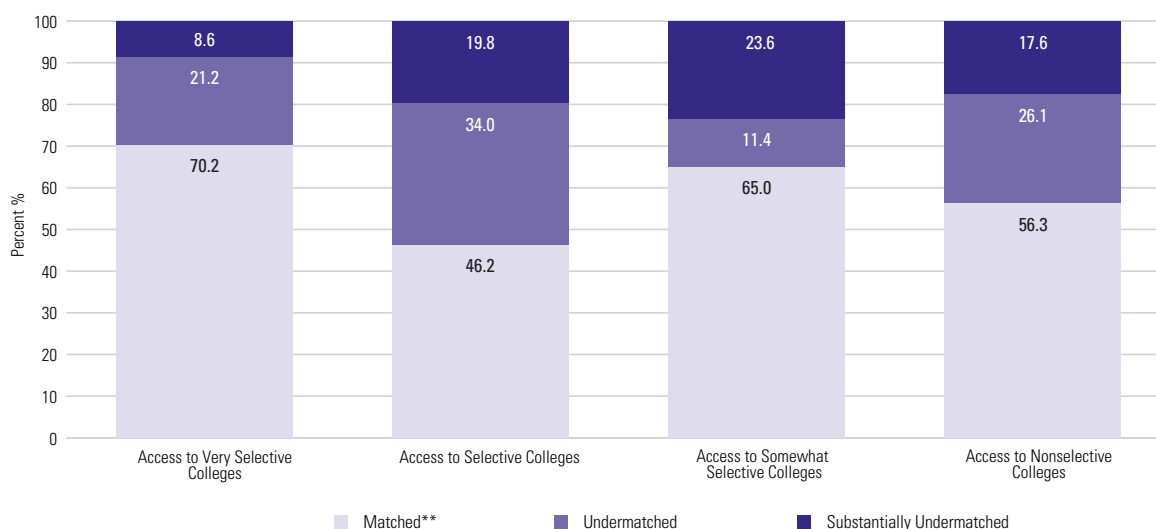
attended a college for which they were substantially undermatched, that is, it is at least two selectivity categories below a level to which they had access. In the 2004 cohort, the broadest statistic on undermatch indicates that 40.9 percent undermatched and 16.1 percent substantially undermatched in their postsecondary choice. These

broad statistics on undermatch mask substantive differences in the prevalence of undermatch by college selectivity category in both cohorts. Figures 1 and 2 summarize the extent of undermatch in the 1992 and 2004 cohorts, respectively, and we return to the broader statistics and changes over time in Figure 3.

## Undermatching in the 1992 Cohort

Figure 1 indicates that 70.2 percent of students who are estimated to have access to a *very selective* college or university enrolled in such an institution — they matched. Thus, in this highest institutional selectivity category, 29.8 percent of students undermatched (disaggregated in Figure 1 as 21.2 percent undermatch and 8.6 substantial undermatch).

**Figure 1: Academic Match, Undermatch and Substantial Undermatch by Four-Year\* College Selectivity Category, 1992 Cohort**



Notes: Figure created using the 1992 cohort of graduating seniors and uses sample weights. College selectivity levels are determined by SATs, GPA, and admission rates of applicants and enrollees. Student access to college selectivity levels is predicted by their academic credentials. See Appendix Table 1 for additional underlying statistics.

\* Students predicted not to be academically qualified for any four-year institution are assumed to have access to a two-year college. 56 percent of these students in the 1992 cohort choose not to enroll in a two-year institution and may also be considered undermatched.

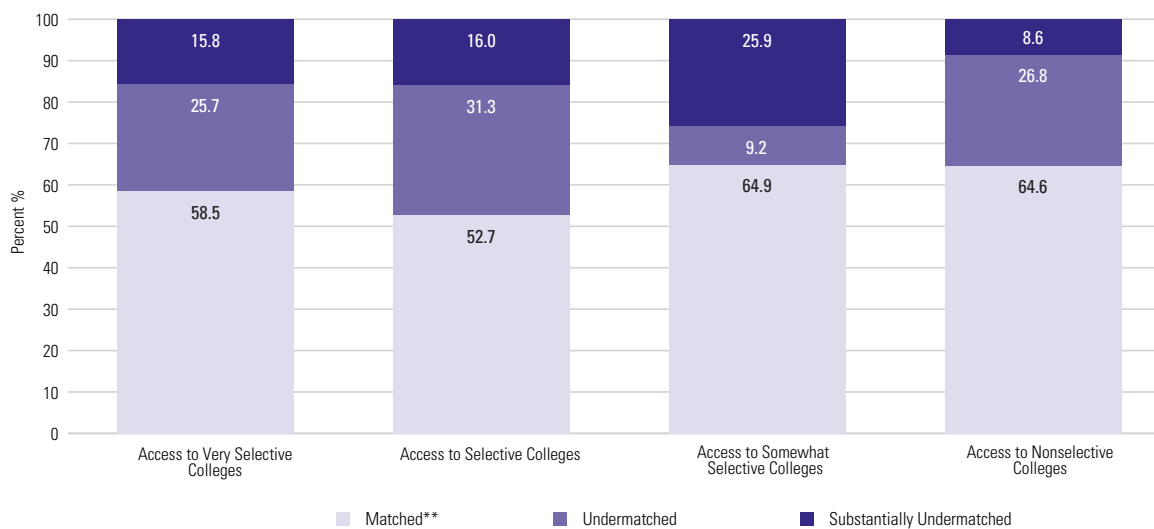
\*\* Students may be predicted to overmatch, which means that they enroll in a postsecondary institution of a higher selectivity category than we would have predicted is accessible given their academic credentials. Overmatch is primarily due to estimation error or nonacademic admission criteria such as affirmative action or legacy admissions.

More than half of those students who have access to *selective* colleges undermatched, and 19.8 percent of them are substantially undermatched. Thus, although it is common to hear undermatch discussed as a problem that lies predominantly at the very top of the college selectivity distribution, Figure 1 indicates that the amount of undermatch jumps substantially in the 1992 cohort as we move to the second college selectivity category. Although we observe an improvement in student–college academic match among those students with access to *somewhat selective* institutions, total undermatch again jumps to approximately 44 percent of all students who have access to *nonselective* four-year colleges and universities. If one also assumes that all students who are not academically qualified for a four-year institution do have access to a two-year college, 56 percent of such students in the 1992 cohort did not enroll anywhere and may also be considered undermatched (not depicted in Figure 1). Table 1 in the Appendix further disaggregates student-college match in 1992 by college selectivity category.

### Undermatching in the 2004 Cohort

Figure 2 indicates that 58.5 percent of students who we estimate to have access to a *very selective* college or university enrolled in such an institution — they matched. Thus, in this highest institutional selectivity category, 41.5 percent of students undermatched or substantially undermatched.

**Figure 2: Academic Match, Undermatch and Substantial Undermatch by Four-Year\* College Selectivity Category, 2004 Cohort**



Notes: Figure created using the 2004 cohort of graduating seniors and uses sample weights. College selectivity levels are determined by SATs, GPA, and admission rates of applicants and enrollees. Student access to college selectivity levels is predicted by their academic credentials. See Appendix Table 2 for additional underlying statistics.

\* Students predicted not to be academically qualified for any four-year institution are assumed to have access to a two-year college. 41.2 percent of these students in the 2004 cohort choose not to enroll in a two-year institution and may also be considered undermatched.

\*\* Students may be predicted to overmatch, which means that they enroll in a postsecondary institution of a higher selectivity category than we would have predicted is accessible given their academic credentials. Overmatch is primarily due to estimation error or nonacademic admission criteria such as affirmative action or legacy admissions.

Less than half of those students who have access to *selective* colleges undermatched, and 16 percent of them are substantially undermatched. Figure 2 indicates that the amount of undermatch among students with access to *very selective* institutions also exists to a large extent for the other college selectivity categories. In fact, substantial undermatch

grows from 15.8 percent to 25.9 percent of students in the 2004 cohort as we move across the college selectivity categories, until there is a large reduction in substantial undermatch — to 8.6 percent — among students with access to *nonselective* colleges. If one also assumes that all students who are not academically qualified for a four-year institution do have access to a two-year college, 41.2 percent of these students in the 2004 cohort did not enroll anywhere and may also be considered undermatched (not depicted in Figure 2). Table 2 in the Appendix further disaggregates student–college match in 2004 by college selectivity category.

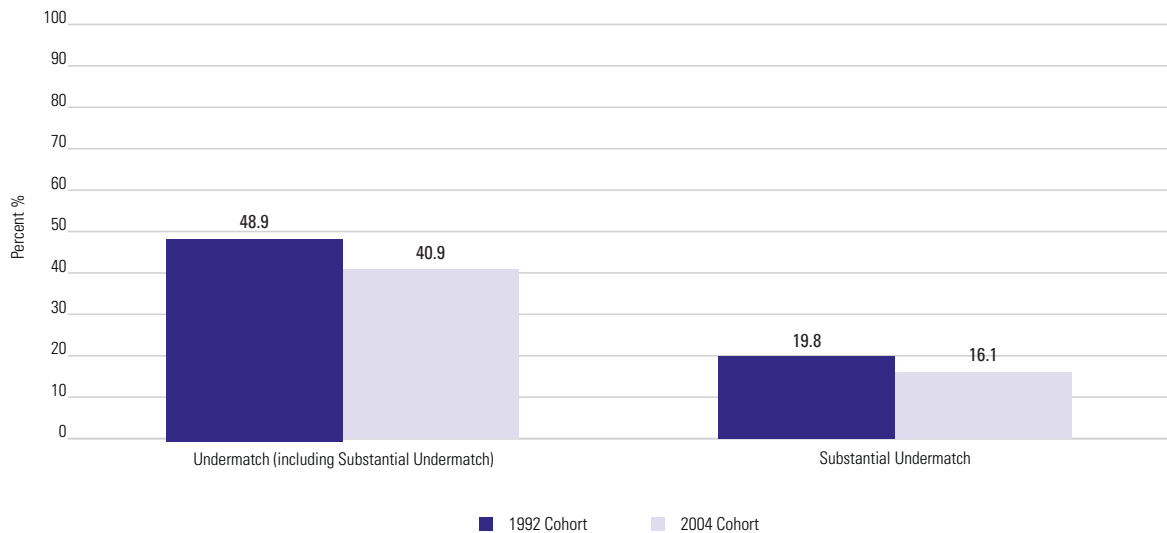
Between 1992 and 2004, overall student–college undermatch declined from 48.9 to 40.9 percent of all students. This difference of 8 percentage points represents a 16.4 percent improvement.

### Cross-Cohort Changes in Undermatching

Figure 3 shows the differences between the two cohorts for the broadest undermatch statistics. Over the 12-year period between the cohorts, student–college undermatch declined from

48.9 to 40.9 percent. This difference of 8 percentage points represents a 16.4 percent improvement in match. Similarly, substantial undermatch declined from 19.8 percent between cohorts, an improvement of 3.7 percentage points (18.7 percent).

**Figure 3: Cross-Cohort Change in Percent Academically Undermatched**



Notes: Figure created using the 1992 and 2004 cohorts of graduating seniors and uses sample weights. College selectivity levels are determined by SATs, GPA, and admission rates of applicants and enrollees. Student access to college selectivity levels is predicted by their academic credentials.

The decline in undermatch and substantial undermatch over time evident in Figure 3 masks where those improvements were generated. Students who have access to *nonselective* colleges and two-year colleges are the largest contributors to the aggregate decline in undermatch over time. Taken together, the right-most bars in Figures 1 and 2 indicate an 8.3 percentage point decrease in academic undermatch and substantial undermatch among students with access to *nonselective* colleges. Additionally, there is a decline over time of 14.8 percentage points in the proportion of students who choose

no postsecondary institution over a two-year college. (See notes below the figures for these statistics.) In 1992, more students chose not to enroll in college despite being academically qualified for two-year and *nonselective* four-year colleges than we see in 2004.

Much of the improvement in undermatch over time stems from students who are more likely to enroll in two-year colleges or *nonselective* four-year colleges than no college at all in 2004 relative to 1992.

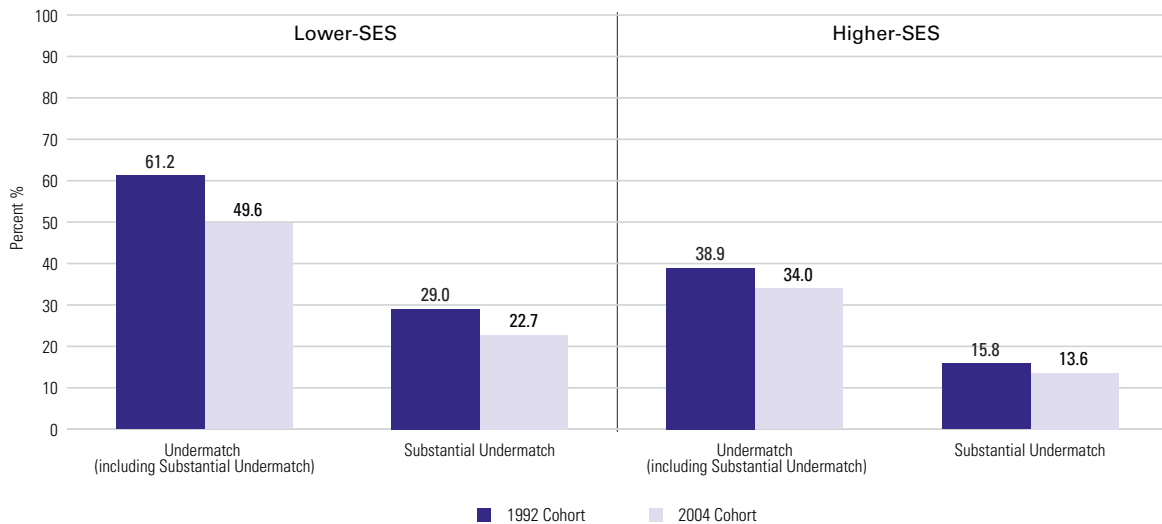
This may represent a change in student behavior and also increased expansion and outreach by colleges in the broad access sector of U.S. higher education.

Despite the improvements in student–college match observable in the broad access sector over time, Figures 1 and 2 also indicate that academic undermatch increases between 1992 and 2004 for students with access to *very selective* colleges. These data sets do not enable us to causally determine why undermatch changes differentially by college selectivity over time; however, this is a potentially important facet of student–college undermatch that warrants additional research.

### Undermatching by Socioeconomics Status

This section discusses how results differ by students below the median SES (lower-SES) and by students above the median SES (higher-SES). Figure 4 disaggregates the information in Figure 3 to demonstrate how academic undermatch varies by SES and over time (cohort).

**Figure 4: Cross-Cohort Change in Percent Academically Undermatched by SES**



Notes: Figure created using the 1992 and 2004 cohorts of graduating seniors and uses sample weights. College selectivity levels are determined by SATs, GPA, and admission rates of applicants and enrollees. Student access to college selectivity levels is predicted by their academic credentials.

It is evident from Figure 4 that lower-SES students are more likely to undermatch — and substantially undermatch — than their higher-SES peers. In the 1992 cohort, 61.2 percent of lower-SES students undermatched, compared to 38.9 percent of higher-SES students. In the 2004 cohort, 49.6 percent of lower-SES students undermatched,



Between 1992 and 2004, lower-SES students' undermatch rates improved from 61.2 percent to 49.6 percent, an 11.6 percentage point (19 percent) improvement. Higher-SES students' undermatch rates also improved from 38.9 percent to 34.0 percent, a 4.9 percentage point (12.5 percent) improvement.

compared to 34 percent of higher-SES students. These same patterns hold for substantial undermatch.

It is also clear from Figure 4 that there are improvements over time in academic undermatching by both lower-SES and higher-SES students. The undermatch rates of lower-SES students improve from 61.2 percent to 49.6

percent, an improvement of 11.6 percentage points (19 percent). The undermatch rates of higher-SES students improve from 38.9 percent to 34.0 percent, an improvement of 4.9 percentage points (12.5 percent). The larger improvement among lower-SES students means that SES gaps in student-college undermatch closed substantially over this time period. A similar pattern exists for substantial undermatch.

### **Is Undermatching Due to Application, Admission or Enrollment?**

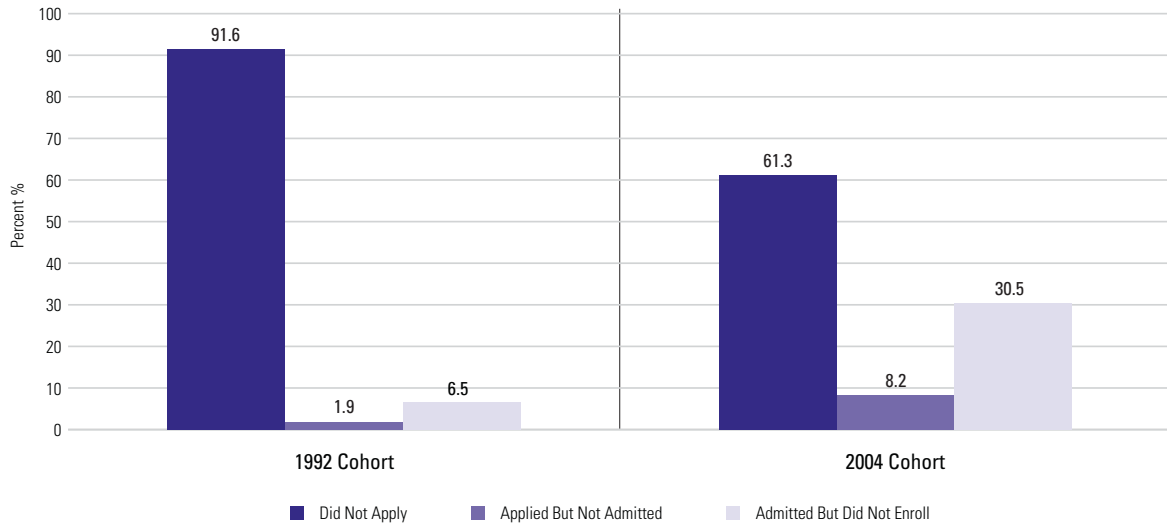
Next we disaggregate academic undermatch into three stages to examine where undermatch occurs in the college-going process. First, academic undermatch may occur because students do not apply to institutions that match their academic credentials. Second, students may not be admitted by the colleges to which they apply, even if we predict those institutions to be academically accessible. Third, students may be admitted by a matched college, but choose not to enroll. By performing this decomposition, we gain important insight into the mechanisms that contribute to student-college academic undermatch in order to guide the attention of researchers and policymakers to the appropriate part of the college-going pipeline.

Figure 5 displays the three-stage decomposition for the 1992 and 2004 cohorts. It is readily apparent that most students undermatch because they do not apply to a college that matches their academic credentials. Although this holds true for both cohorts, it is also evident that improvements in matched application behavior have been made over time. While 91.6 percent of students failed to apply to an academically matched college in 1992, only 61.3 percent of students failed to apply to a matched college in 2004. The disaggregation in Figure 5 also reveals that undermatch related to students not choosing to enroll in a matched college was more prevalent in 2004, compared to 1992. Thus, while Figure 5 suggests that more students are applying to colleges that match their qualifications over time, about one-third of the 2004 sample remains undermatched because they did not choose to enroll in colleges to which they were academically well matched.<sup>9</sup>

***Most students undermatch because they do not apply to a matched college***, but this source of student-college undermatching has improved over time. In 1992, 91.6 percent of students undermatched in the application stage; this percentage falls to 61.3 in the 2004 cohort.



**Figure 5: Academic Undermatching in the College-Going Process by Cohort**



Notes: Figure created using the 1992 and 2004 cohorts of graduating seniors and uses sample weights. College selectivity levels are determined by SATs, GPA, and admission rates of applicants and enrollees. Student access to college selectivity levels is predicted by their academic credentials.

\* The 1992 cohort provides the institutional identities of up to three college applications while the 2004 cohort provides their full set of college applications. We conduct sensitivity tests and rule out the explanation that the cross-cohort differences observed here are driven by these differences in the surveys.

In results not shown, there is very little variation by SES in the 1992 cohort in how students undermatch. However, in the 2004 cohort, 66.4 percent of lower-SES students who undermatched did not apply to a matched college, compared to 55.5 percent of higher-SES students who undermatched in the application stage. In other words, 2004 yields substantial improvement in getting all students to apply to a matched college relative to 1992, but there is greater improvement for higher-SES students than for their lower-SES peers.

## Implications and Recommendations

This study documents the extent of student–college academic undermatch by college selectivity and student socioeconomic status, discusses how undermatch has changed over time, and explores at what stage in the college-going process — application, admission, enrollment — undermatch occurs. It is encouraging that we observe a reduction in the overall amount of academic undermatch between the 1992 and 2004 cohorts, most of which is attributable to increased enrollment in two-year colleges rather than no college at all. However, important questions about the causes of the changes over time and differences in academic undermatch by SES, as well as the potential strategies to address the undermatch issue going forward, are left unanswered. Moreover, no evidence exists on how undermatched students fare with regard to

longer-term outcomes, such as college retention, performance, and graduation rates, or employment outcomes. These unknowns are at the heart of why social science researchers care about undermatch and why further research is warranted.

### **Recommendation One**

In this brief, we provide evidence from two nationally representative data sets that academic undermatch is widespread and evident throughout the college selectivity (and, therefore, student academic ability) distribution. Despite the magnitude of this evidence, there is surprisingly little research on the implications of academic undermatch for collegiate outcomes. We recommend further quantitative research on student–college academic undermatch, with a particular focus on generating causal evidence on the causes of academic undermatch for different types of students as well as the effectiveness of potential solutions.<sup>10</sup> There are likely many potential solutions, which could occur at different stages of the college-going process. Determining the most effective solutions will be challenging, but this is necessary to properly inform more targeted policies to address the academic undermatch issue going forward.

### **Recommendation Two**

Insight on why students undermatch may not be observable in quantitative data. We recommend more qualitative research to understand how students make choices about colleges; the combined influences of geography, affordability and admission selectivity; and what information is provided/needed by students, parents and counselors to better inform these decisions. We also recommend additional qualitative evidence from colleges and universities about how they perceive their role in locating, recruiting and enrolling properly matched students.

### **Recommendation Three**

The results in this brief clearly indicate that academic undermatch is most evident at the application stage of the college-going process. We recommend support for policies and programs that assist students who are likely to undermatch in the college application process. Lower-SES students were more likely to undermatch than their higher-SES peers in 2004, and the overwhelming reason they undermatched was that they never even applied to relatively more selective colleges. The provision of mentoring and guidance is essential to getting students to apply to a portfolio of colleges that is the most appropriate given their academic credentials.

### **Recommendation Four**

We now have evidence from two nationally representative cohorts that academic undermatch has declined over time. In order to make further headway, we must disentangle the various mechanisms that may be at work. Undermatch may have decreased for a variety of reasons associated with changes between 1992 and 2004 (e.g., the expansion of two-year colleges, improved college information and search via the Internet, streamlined college application procedures via online and common application forms, and specific programs that involve information and outreach about college opportunity and affordability). Further improvement in the extent of undermatch necessitates a better understanding of the relative importance of these factors.

## Endnotes

1. The four-year rate is based on the 2002 cohort and the two-year rate is based on the 2005 cohort (Snyder and Dillow, 2011).
2. Both data sets are provided by the U.S. Department of Education's National Center for Education Statistics. We use the restricted-use versions of NELS and ELS so, for privacy purposes, all sample sizes are rounded to the nearest ten.
3. Our analysis uses "traditional" students who did not drop out of high school and did not graduate early or enroll in college early. We also exclude students who are missing critical information on either their background characteristics or the colleges to which they apply.
4. In NELS, we only observe up to three college applications, but only 7.6 percent of four-year college applicants report applying to five or more institutions. Three is the mean number of applications in ELS.
5. We drop all students who enroll in a Barron's "special college" because they are usually art or music colleges where academics are more challenging to measure.
6. When faced with choices about how to categorize institutions or individual student decisions observed in the data, we are careful to make assumptions that would underestimate the amount of undermatching (e.g., if bias must be introduced, we choose to bias the results *against* finding undermatching rather than the opposite). This approach means that our estimates are likely to be conservative and the true amount of undermatching is greater than what is reported here rather than less.
7. In the data, we observe where a student enrolls within 18 months of high school graduation. However, in order to determine the college selectivity to which a student has access, we use data on students' measured academic ability, college application decisions and admission offers. Formally, we estimate a probit model by regressing whether a student is admitted to a particular college selectivity level on the students' GPA, SAT or ACT scores, and whether they participate in AP® or IB courses. Students are assumed to have access to college selectivity if they have a predicted 90 percent chance of being accepted.
8. A two-year institution may be a better overall *fit* for a student with fewer financial resources or with geographic limitations, for example, but these concepts of *fit* do not preclude defining this student to be academically undermatched at the two-year institution.
9. In results not shown, we disaggregate the information in Figure 5 by SES. Undermatch that is related to students being admitted but choosing not to enroll in a matched college is actually more prominent among lower-SES students in 1992; 7.3 percent of lower-SES students do not enroll in a matched college compared to 5.5 percent of higher-SES students during the same year. The opposite is true in the 2004 cohort; a greater proportion of higher-SES students failed to enroll in a matched college despite being admitted to one than was true for their lower-SES peers. (34.4 percent of higher-SES students did not enroll in a matched college in 2004 compared to 27.1 percent of lower-SES students during the same year.)
10. Caroline Hoxby and Sarah Turner have a large-scale project underway to assess strategies to effectively reduce undermatch among the highest academic ability students.

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## Appendix

The information in Figures 1 and 2 can be further disaggregated into data matrices with undermatch statistics from the 1992 and 2004 cohorts, respectively. In each matrix, the rows represent the highest college selectivity category to which we predict a student has access. The columns of each matrix represent the college selectivity category in which we observe a student enrolling. The matrix cells with the lightest shading indicate the proportion of students who match in each selectivity category. Cells with darker shading quantify the extent of academic undermatch with substantial academic undermatch represented by the darkest cell shading. Cells below the diagonal in Tables 1 and 2 (see below) indicate the fraction of students who enroll in a college to which we would predict they are unlikely to have access; this is often referred to as “overmatch” and it is beyond the scope of this brief. Overmatch is possible because our estimates are based on a “typical” student’s application set. Atypical students may be more likely to overmatch. Likewise, estimation error may result in overmatch as could race-based or legacy admission.

The first row of Table 1 documents academic undermatch for only those students in 1992 who are predicted to have access to *very selective* colleges. As the first cell indicates, 70.2 percent of those students enroll in (match to) a *very selective* college. Of the 29.8 percent of these students who are undermatched, most of the undermatch occurs at *selective* colleges (21.2 percent); however, 8.7 percent of these students have substantial undermatch (4.5 percent at *somewhat selective* colleges, 1.6 percent at *nonselective* colleges and 2.6 percent who do not enroll in a postsecondary institution). The other rows of Table 1 are interpreted in the same manner.

Appendix Table 1: Extent of Academic Undermatching — College Access versus College Choice 1992 Cohort of Graduating High School Seniors										
Access to:		Enrolled in:							Percent Undermatch	Percent Substantial Undermatch
		Very Selective	Selective	Somewhat Selective	Nonselective	Two-Year	No College			
Very Selective		70.2	21.2	4.5	1.6	0.0	2.6	29.8	8.7	
Selective		21.7	24.5	34.0	10.0	6.5	3.3	53.8	19.8	
Somewhat Selective		7.2	21.7	36.2	11.4	16.9	6.7	35.0	23.6	
Nonselective		4.2	10.0	29.3	12.8	26.1	17.6	43.7	17.6	
Two-Year		0.6	2.1	6.7	4.8	29.8	56.0	56.0	—	
Total (by enrolled)		7.6	11.3	20.8	8.2	22.2	29.9	48.9	19.8*	

Match
  Undermatch
  Substantial Undermatch

Notes: Table created using the 1992 cohort of graduating seniors and uses sample weights. College selectivity levels are determined by SATs, GPA, and admission rates of applicants and enrollees. Student access to college selectivity levels is predicted by their academic credentials.

\* This statistic excludes students with access to two-year colleges since, by definition, they cannot have a substantial undermatch.

The first row of the matrix in Table 2 indicates that 58.5 percent of students who are predicted to have access to *very selective* colleges match, while 41.5 percent of these most high-achieving students in 2004 undermatched. The bulk of these students undermatched at either *selective* colleges (25.7 percent) or *somewhat selective* colleges (13.1 percent), but a small percentage undermatched at *nonselective* (1.4 percent) and two-year (1.0 percent) colleges or by not enrolling at all (0.3 percent). The other rows of Table 2 are interpreted in the same manner.

Appendix Table 2: Extent of Academic Undermatching — College Access versus College Choice 2004 Cohort of Graduating High School Seniors										
Access to:		Enrolled in:							Percent Undermatch	Percent Substantial Undermatch
		Very Selective	Selective	Somewhat Selective	Nonselective	Two-Year	No College			
	Very Selective	58.5	25.7	13.1	1.4	1.0	0.3	41.5	15.8	
	Selective	20.8	31.9	31.3	4.5	8.6	2.9	47.3	16.0	
	Somewhat Selective	6.0	21.5	37.4	9.2	21.0	4.9	35.1	25.9	
	Nonselective	2.5	8.4	40.7	13.0	26.8	8.6	35.4	8.6	
	Two-Year	1.1	2.6	9.5	6.2	39.4	41.2	41.2	—	
	Total (by enrolled)	8.8	13.1	21.5	6.8	27.2	22.7	40.9	16.1*	

Match  
  Undermatch  
  Substantial Undermatch

Notes: Table created using the 2004 cohort of graduating seniors and uses sample weights. College selectivity levels are determined by SATs, GPA, and admission rates of applicants and enrollees. Student access to college selectivity levels is predicted by their academic credentials.

\*This statistic excludes students with access to two-year colleges since, by definition, they cannot have a substantial undermatch.





## About the College Board

The College Board is a mission-driven not-for-profit organization that connects students to college success and opportunity. Founded in 1900, the College Board was created to expand access to higher education. Today, the membership association is made up of over 6,000 of the world's leading educational institutions and is dedicated to promoting excellence and equity in education. Each year, the College Board helps more than seven million students prepare for a successful transition to college through programs and services in college readiness and college success — including the SAT<sup>®</sup> and the Advanced Placement Program<sup>®</sup>. The organization also serves the education community through research and advocacy on behalf of students, educators and schools.

For further information, visit [www.collegeboard.org](http://www.collegeboard.org).

## The College Board Advocacy & Policy Center

The College Board Advocacy & Policy Center was established to help transform education in America. Guided by the College Board's principles of excellence and equity in education, we work to ensure that students from all backgrounds have the opportunity to succeed in college and beyond. We make critical connections between policy, research and real-world practice to develop innovative solutions to the most pressing challenges in education today.

[advocacy.collegeboard.org](http://advocacy.collegeboard.org)

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