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# ***Exploring the SAT<sup>®</sup> to Support Student Enrollment and Success***

**A Field Guide for  
Higher Education Professionals**

**October 2019**

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## Executive Summary

In 2017, the first cohort of students who took the new SAT® entered college, providing higher education institutions an opportunity to assess the effectiveness of the new assessment. *Exploring the SAT* identifies important questions regarding the utility of the SAT that, in turn, frame a series of investigations that institutions may wish to conduct internally or in partnership with College Board.

Designed to initiate campus conversations, this guide can be used by a broad array of higher education leaders from admissions, enrollment, institutional research, academic advising, and student affairs, as well as presidents, policymakers, and boards of trustees. Colleges and university staff and leaders can leverage best practices and policies in admission, placement, retention, and completion.

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## Introduction

“Getting ready, getting in, and getting through”—describes the trajectory of successful college students. It also characterizes the ways in which postsecondary institutions primarily serve students. The SAT<sup>®</sup> from College Board is an essential tool that can help higher education institutions advance student academic success at each point in a student’s undergraduate career.

In 2014, College Board announced plans to redesign the SAT so that it would be more sensitive to the accomplishments that students achieve through effort and practice in high school (see College Board, 2017a). The class of 2017 was the first full cohort of students who took the new SAT and, upon entering college, provided higher education leaders with an opportunity to assess the utility and effectiveness of the new test relative to their admission, enrollment, and retention policies and practices.

In addition to providing college and university leaders with an important opportunity to evaluate the new SAT, the release of the redesigned assessment offered them a chance to examine the entire array of academic metrics used to identify students who are preparing for postsecondary education. To this end, *Exploring the SAT* provides a series of case studies illustrating how institutions can leverage the SAT effectively. Each case study discussion is followed by several research and policy questions that institutions may pursue internally or in partnership with College Board.

## Asking the Right Questions

Predicting college-going behavior has never been more challenging. Admissions and enrollment professionals are expected not only to identify and admit academically prepared students but to ensure that those students who enroll also complete a degree. And, they must accomplish this in an environment of heightened scrutiny on admissions policies and growing competition among colleges.

Asking the right questions is key for developing effective enrollment and completion strategies. It is equally important for enrollment leaders to understand the utility of data available to accomplish this important but exacting work. Strategies in the absence of data may result in missed enrollment targets, admitting students who may not be prepared for academic success, or lost opportunities to identify and serve students needing academic assistance after they enroll. To address these goals, institutional leaders need access to reliable and valid data that can do multiple jobs: identify prospective students, gauge their academic knowledge, identify their academic strengths and weaknesses, help them identify potential majors, and advance their degree progress.

Performance on the SAT remains an important marker of students' postsecondary goals and academic preparation. It also serves as powerful sign of their enrollment and degree intentions. Used strategically, and in combination with other information about applicants, institutional leaders may leverage SAT information to gain insight not only to admit students to their campuses but also to ensure that they thrive academically and complete their degrees.

## Engaging the Collegiate Community

The SAT provides insights for a variety of higher education professionals responsible for making decisions that drive a range of institutional strategies and outcomes. Although every postsecondary role has a unique perspective and may generate different questions, all are focused on developing strategies that help students thrive in college:

- **Admissions Professionals** will find that the SAT remains an essential tool to assess the readiness of students for college using a nationally normed instrument. When used in combination with other predictors, the SAT provides vital insight for professionals' assessment of student collegiate success.
- **Enrollment Management Leaders** can use the SAT to assess the long-term enrollment profile of their institution beyond the immediate admissions cycle (College Board, 2017b). In addition, the SAT Suite of Assessments—an integrated series of evaluations designed to build a robust pipeline of well-prepared, college-bound students—can provide insight to these leaders about K–12 school practices that broaden traditional pathways to college for students who might not otherwise have access to higher education (College Board, 2018a).
- **Institutional Researchers** will be interested in understanding the effectiveness of the SAT in models that predict application, admission, and enrollment outcomes. Regular evaluations of those models will ensure that the institution is reaching its goals for enrollment and planning for the students it wishes to admit.
- **Academic Advisers and Student Affairs Officers** are key advocates in helping admitted students complete their educational goals. High School GPA (HSGPA), SAT scores, and other information can be used to identify students who may need some extra help along the way and can help student affairs officers target advising resources to students who need the most assistance.
- **Presidents, Provosts, and Policymakers** use the SAT and other key data points to assess the effectiveness of their institutions in advancing their students toward graduation and to manage the long-term sustainability of their institutions. Greater calls for institutional accountability place a premium on transparency and objective measures, such as the SAT, to benchmark performance and drive institutional change.

# How Can the SAT Serve Your Institution and Your Students? Fifteen Questions for Higher Education Leaders and Professionals

The SAT can be used to advance campus conversations about best practices and policies in admission, enrollment, placement, and retention/completion. The following questions are categorized in two areas:

- Admissions and Selection
- Placement, Retention, and Completion

Following each issue are several research and policy questions designed to encourage a discussion about the ways in which the SAT and other metrics inform campus policies and practices.

## Admissions and Selection

### 1. “I want to take a chance on an applicant. How can the SAT help?”

Admissions officers are often faced with students who are attractive applicants but present discrepant academic records. For example, “Janet” has a low HSGPA but a challenging college prep course load and extraordinary community service program. She has also scored a 1340 on the SAT. Mattern, Shaw, and Kobrin (2011) found that students with lower HSGPAs, but higher SAT scores, have first-year college GPAs that are typical of students who were admitted with higher HSGPAs.<sup>1</sup> Thus, the additional insight of the SAT score means that the admissions officer need not doubt Janet’s likelihood to do college-level work—her SAT score offers that level of confidence. “Essentially all differential prediction research conducted on the SAT and HSGPA with first-year [college] GPA supports the fact that using students’ HSGPAs in conjunction with their SAT scores results in the smallest amount of error in the prediction of first-year GPA across all students” (Shaw, 2015, p. 6).

1. Students with discrepant academic records are not uncommon. Research indicates that 25% to 30% of high school students present discrepant achievement records. These students are more likely to be female students or student from underrepresented and low-income backgrounds (see Kobrin, Camara, and Milewski, 2002; Mattern, Shaw, and Kobrin, 2011).

## Research and Policy Questions

- What proportion of applicants to your institution present discrepant academic records, such as low HSGPAs and high standardized test scores? What proportion present high HSGPAs but low SAT scores?
- Do students who present discrepant academic records perform differently in first-year courses at your institution compared to students with more consistent academic records?

### **2. “I want to reinforce to prospective applicants and their families that completing a rigorous and challenging set of high school courses is more important than taking a less challenging course load to inflate HSGPA. How can the SAT help?”**

Nearly all admissions officers have been asked by anxious prospective applicants whether their chances for admissions are better if they earn a high GPA or tackle more rigorous high school courses and risk earning a lower GPA. Most admissions officers will advise students to complete challenging courses in high school, understanding that the student’s high school curriculum is a pivotal predictor of student collegiate success (Wyatt, Wiley, Camara, & Proestler, 2011). However, these same admissions officers understand that such students—by taking their advice—may present only a modest HSGPA when they apply to their institution. In these cases, a student’s SAT score adds important context that can inform admissions decisions.

## Research and Policy Questions

- Do students who earn lower GPAs in more rigorous courses perform differently in first-year courses at your institution compared to those who earn high GPAs in less rigorous courses?
- How does your institution gauge the level of rigor across high schools?
- How does your admissions policy handle an applicant who may not meet your HSGPA threshold, yet they display other attributes that signal college success, such as a high SAT score?

### **3. “I want my admissions process to be as transparent and accountable as possible. How can the SAT help?”**

Increased scrutiny of college and university admissions processes place greater demands on enrollment leaders to show how their decisions are based on mission-driven goals that reflect rational, relevant, and objective measures of an applicant’s readiness for college success. Balancing a variety of metrics using professional judgment is key to this process,

but increasingly public officials and families need assurance that admissions decisions—difficult though they may be—are linked to commonly understood, observable, and objective measures. Objective assessments such as the SAT, along with other measures, such as high school GPA and performance in college-preparatory courses, especially when used in context and in combination with one another, will continue to serve admissions officers well as they work to assure policymakers and families that their application review process is linked closely with commonly understood and recognized indicators of academic achievement.

### Research and Policy Questions

- To what extent is your current admissions process reliant on objective measures of academic achievement?
- Have you conducted studies to determine the reliability and predictive validity of all factors used to assess students for admission?
- If you were asked today to explain how you go about selecting students for admissions in front of a legislative committee, would you be prepared?

#### 4. “I do not want to overlook an applicant who might be able to succeed at my institution. How can the SAT help?”

Applying multiple measures of achievement is the most reliable and valid method for selecting a well-prepared, diverse, and high-achieving class. Relying on a single metric—whether it is HSGPA or a standardized test score—provides *less* precision in predicting first-year college grades. This is especially true for students who possess very discrepant HSGPA and SAT scores. Mattern, Shaw, and Kobrin (2011) analyzed the academic records of 196,364 students from 110 four-year institutions. They conclude that accuracy in predicting college success is compromised when only one metric is used for admission, especially when students present discrepant scores: “Using the HSGPA alone disadvantages students who perform significantly better on the SAT compared with HSGPA—that is, students who exhibit this performance pattern would be disproportionately denied admissions but would have succeeded and outperformed some students with higher HSGPAs who were admitted” (p. 655). Admissions officers reviewing applicants with comparatively higher SAT scores in relation to the HSGPA can be confident that the

students will do well academically in college; this would be harder to predict evaluating *only* their HSGPA (see also Mattern, Shaw, & Kobrin, 2011).<sup>2</sup>

### Research and Policy Questions

- How does your campus ensure that students are admitted based on more than a single criterion?
- In what ways does your campus identify students who, based on their GPA or test scores, might not be evaluated as immediately competitive for admission?

### 5. “I see a great deal of variation in grading standards across high schools. How can the SAT help?”

Assessing the rigor of a high school curriculum can be challenging, especially given the wide range of schools that prepare students for college. Differences in grading standards and processes also create variation across states and regions that are difficult to identify and accommodate in the admissions review process (Hurwitz & Lee, 2017; Marcus, 2017). For example, the recently released College Board SAT National Validity Study indicated that among the 223,000 students who participated, over two-thirds reported HSGPAs of A- or higher (Westrick, Marini, Young, Ng, Shmueli, & Shaw, 2019, p. 13). With so many capable students, admissions professionals need additional objective information with which to make informed selection decisions.

Research shows that the SAT measures the skills needed to be successful in college. Although the SAT was not designed to cover content from every high school course, the test does provide insight into a student’s knowledge and skills in several key areas, including writing and language, reading, and mathematics. In addition, admissions and enrollment leaders use the two College Board SAT benchmarks (Evidence-Based Reading and Writing, and Math) as baseline indicators of student likelihood for success in college (College Board, 2018b).

### Research and Policy Questions

- Do you use the SAT with or without other predictor variables to assess student readiness for college-level courses?

2. This finding holds for ACT<sup>®</sup> scores as well. Sanchez and Mattern (2018) report that students whose ACT Composite Score and HSGPA were consistent “tend to have the highest probabilities of persistence as well as the lowest probabilities of not re-enrolling for their sophomore year” (p. 132). However, students presenting discrepant achievement “may require additional supports to mitigate negative postsecondary outcomes...” (p. 133).

- How does your institution identify students in need of academic assistance and how do you identify what academic supports these students need? What academic interventions does your institution offer to students who are placed in developmental courses?
- To what extent does HSGPA underpredict or overpredict academic performance at your institution? Does the addition of an SAT score modulate that relationship?

## **6. “I need an example of student writing that is authentic and reflects at least one type of writing assignment that students will face at my institution. How can the SAT help?”**

The SAT Essay measures three dimensions: reading, analysis, and writing. In broad terms, responses are evaluated for demonstrated comprehension of source text, quality of analysis of that source text, and quality of writing. The SAT Essay isn't designed to elicit students' subjective opinions but rather to assess whether they are able to comprehend an appropriately challenging source text and craft-effective written analyses of that text. This is the same type of writing that is the focus of many introductory college writing courses. In addition, the SAT Essay is an objective sample of students' writing. Since it is taken at the end of an SAT administration, compositions can't be influenced by others.

In the first large-scale study of the SAT Essay's validity, data reveal that each evaluated component—reading, analysis, and writing—provides useful information about students' capabilities in pivotal skill areas critical for college success (Marini, Westrick, Young, Shmueli, Shaw, & Ng, *in preparation*). The study examined the performance of students who took the SAT and SAT Essay in 2017, linking it with several measures of success in the first-year of college, including first-year GPA (FYGPA), college GPA in English and writing courses and grades in a first semester college writing course. On all of these measures, students with higher scores on the SAT Essay demonstrated higher levels of achievement in college.

The same study also indicated that the SAT Essay provided unique and additional information above HSGPA and SAT-ERW scores for all students but in particular, for students whose best language was another language (not English). In other words, the SAT Essay can greatly improve the ability of institutional leaders to predict the college performance of students whose best language is not English (Marini, et al. *in preparation*, pp. 26–27). As our colleges and universities become more diverse linguistically, the SAT Essay may become increasingly valuable to identify students who are otherwise capable of doing college work but may need additional academic support to enhance their English skills.

## Research and Policy Questions

- Does your institution require incoming students to demonstrate writing competency before enrolling at your institution? How is this competence demonstrated?
- If your institution uses standardized measures, such as the SAT, to demonstrate student language proficiency, does it conduct placement validity studies on a regular basis to understand how different SAT scores relate to different probabilities of course success at your institution?
- To what extent does your institution identify and support students whose first or best language is not English and who may need additional assistance to enhance their English language skills?

### **7. “Students who possess college-level writing skills are more likely to succeed at my institution compared to students who do not. Thus, I need reliable and valid measures of students’ writing abilities so that I can identify those students who may need additional assistance after they enroll. How can the SAT help?”**

In a recent national study, scores from the Evidence-Based Reading and Writing (ERW) section of the SAT when combined with SAT Essay scores were found to be especially helpful in identifying students who might need additional assistance to strengthen their writing skills in their first year of college (Marini, et al., *in preparation*). Data from this study indicate when the three elements of the SAT Essay—reading, analysis, and writing—are summed, a three-point difference was roughly equivalent to a 100-point difference on the SAT Evidence-Based Reading and Writing (SAT ERW) score when predicting a student’s probability of success in college writing-intensive courses. The authors noted that, “Including SAT Essay scores with SAT ERW scores increases an institution’s ability to identify applicants who may excel despite having low SAT ERW scores and applicants who may struggle despite having high SAT ERW scores” (p. 26). Colleges and university enrollment leaders interested in admitting students with a wide range of talents and capabilities, yet who appreciate the essential role that writing plays in college success, can use both the SAT ERW and SAT Essay scores to flag students who would benefit from extra writing-intensive tutorial work in the summer before college or after they enroll in college.

## Research and Policy Questions

- In what ways does your current admissions application assess students’ writing abilities?
- What measures are in place to ensure that the writing sample authentically represents an applicant’s writing skills, free of outside influence or coaching?

- Is the SAT Essay, in combination with scores from the SAT Evidence-Based Reading and Writing section, effective in predicting first-year course English composition course grades at your institution?

## 8. “I need more information for my holistic review process. How can the SAT help?”

Increasing numbers of colleges and universities are using holistic methods to review applications for admission. These processes vary among institutions, but most involve a comprehensive and rigorous review of a student’s application. As application loads increase, and applicants present increasingly stronger credentials, admissions and enrollment leaders often need to seek out objective information that helps distinguish applicants from one another.

The SAT has a variety of test-level scores and subscores that provide insights for readers building a case for a student’s admission. Some institutions use the test-level Reading, Writing and Language, and Math scores for admissions and placement decisions. Institutions also have access to a variety of subscores that indicate knowledge and expertise in specific domains, including command of evidence, words in context, and preparation for higher-level math (College Board, 2015).

The SAT also includes a number of cross-test scores and subscores, designed to provide higher education leaders with additional information about students’ knowledge and talents. For example, the SAT Analysis in Science cross-test score has been shown to correlate positively with average first-semester credit-bearing college course grades in science, including natural sciences, health sciences, and engineering. Similarly the SAT Analysis in History/Social Studies cross-test score has been shown to correlate positively with average first-semester credit-bearing college course grades in history and social sciences. These outcomes suggest that the SAT is sensitive to instruction in a variety of areas, including science and history/social sciences (Shaw, Marini, Beard, Shmueli, Young, & Ng, 2016).

### Research and Policy Questions

- To what extent does the SAT subscores, such as Analysis in Science and Analysis in History and Social Science, help you assess student readiness for majors in these disciplines?
- In what ways do you contextualize SAT scores, subscores, and other metrics for students from different high schools or regions?

## 9. “Most of my applicants are well qualified. How can the SAT help?”

The last decade has seen a rapid rise in the number of applications that students submit to colleges and universities (NACAC, 2018). Many if not most of these applications come from students who have worked hard to prepare themselves for college. With so many applications to review, making an admissions decision requires readers to review an array of objective data and contextual information about every student’s educational experiences. In these circumstances, the SAT can serve you in at least two ways. First, it provides a variety of objective information that can support a student’s admission and likelihood for success in college. Second, when that student’s SAT score is evaluated relative to the SAT scores achieved at the same high school, higher education admissions professionals have additional information about the educational context of the student’s achievements.

### Research and Policy Questions

- In what ways can the SAT boost confidence in an applicant’s HSGPA, especially from high schools with which you have no experience?
- What combinations of objective information are the most predictive in establishing baselines for admissions to your institution?

## 10. “I need to ensure that my admissions process is fair? How can the SAT help?”

Given the importance of a college degree and the increasingly competitive admissions context for some highly selective institutions, policymakers and families need reassurance that college admissions practices are fair. The SAT can help ensure a transparent admissions process when it is used in combination with other important measures of achievement and when used to understand the educational context within which students earned their achievements. A recent report from the *Annals of the American Academy* recommended using test scores along with high school grades when predicting college performance in order to achieve more accurate results than using grades alone (Zwick, 2019).

The report went on to conclude that “Test scores can provide a way to evaluate international students, home-schooled candidates, and those with a high school equivalency diploma; can help to distinguish among applicants with HSGPAs of 4.0 or above; and can sometimes service to identify talented students with weak academic records” (p. 144). Note: These other uses are explored in next section.

Moreover, both College Board and the National Association for College Admission Counseling (NACAC, 2008) recommend that colleges and universities conduct regular validity studies. As NACAC noted, this is to ensure that all “standardized assessments

predict college achievement alone and in conjunction with other credentials, for all students, for men and women, and for members of different racial and ethnic groups” (p. 8). One of the ways institutions can do this—confidentially and for free—is by using the College Board Admitted Class Evaluation Service™ (ACES™). Every year, many colleges and universities use ACES to examine how well their admissions requirements, such as high school GPA and SAT, successfully predict student academic success.

### Research and Policy Questions

- Are your admissions selection policies, processes, and the ways criteria are weighed available to applicants and others?
- Are data related to your institution’s admissions process available publicly?
- Is your institution’s use of HSGPA, standardized test scores, and other objective measures validated using commonly applied statistical validation procedures? Are the outcomes of those evaluations available publicly?

## Placement, Retention, and Completion

### 11. “I need a tool to place students effectively in first-year courses that will help them succeed. How can the SAT help?”

The first year of college is challenging, even for the most academically adept students, and consequently it is a time when institutions may experience the greatest rate of student attrition (National Center for Education Statistics, 2018). Understanding the value of proper course placement in fundamental first-year courses is key to student success. Institutions that are attuned to skills of their new students in pivotal areas such as writing, quantitative reasoning, and STEM-related disciplines are investing in the sustainability of their institutions. To this end, the SAT and its associated benchmarks help prospective students understand the knowledge and skills they will need to succeed in college (College Board, 2018b). These benchmarks also help college and university professionals determine the skill levels needed for new students to succeed in credit-bearing courses.

From an institutional perspective, College Board encourages colleges and universities to conduct regular placement validity studies to understand how different SAT scores relate to different probabilities of course success in the matching academic course at their institution. For example, for students achieving at least a 550 on the SAT Math section, what is the likelihood that they will earn at least a B in a first-semester college mathematics course? College and universities may use ACES to conduct validity studies on placement through a secure, confidential, and automated online research platform.

## Research and Policy Questions

- Beyond admission, how does your institution assess the readiness of students to succeed in pivotal first-year courses?
- What measures are used to assess readiness? What predictive validity do these measures offer?
- If you have a placement policy that incorporates a cut score, what evidence is available to ensure that students are accurately placed into courses in which they can succeed? How often is the cut score revisited to ensure that it remains appropriate?
- Are there other pivotal first-year courses, besides writing, quantitative reasoning, and STEM-related courses, for which knowledge of a student's skill level before enrollment would be beneficial?

### **12. “I want to admit a class that will excel at my institution, with the greatest chance of earning a degree. How can the SAT help?”**

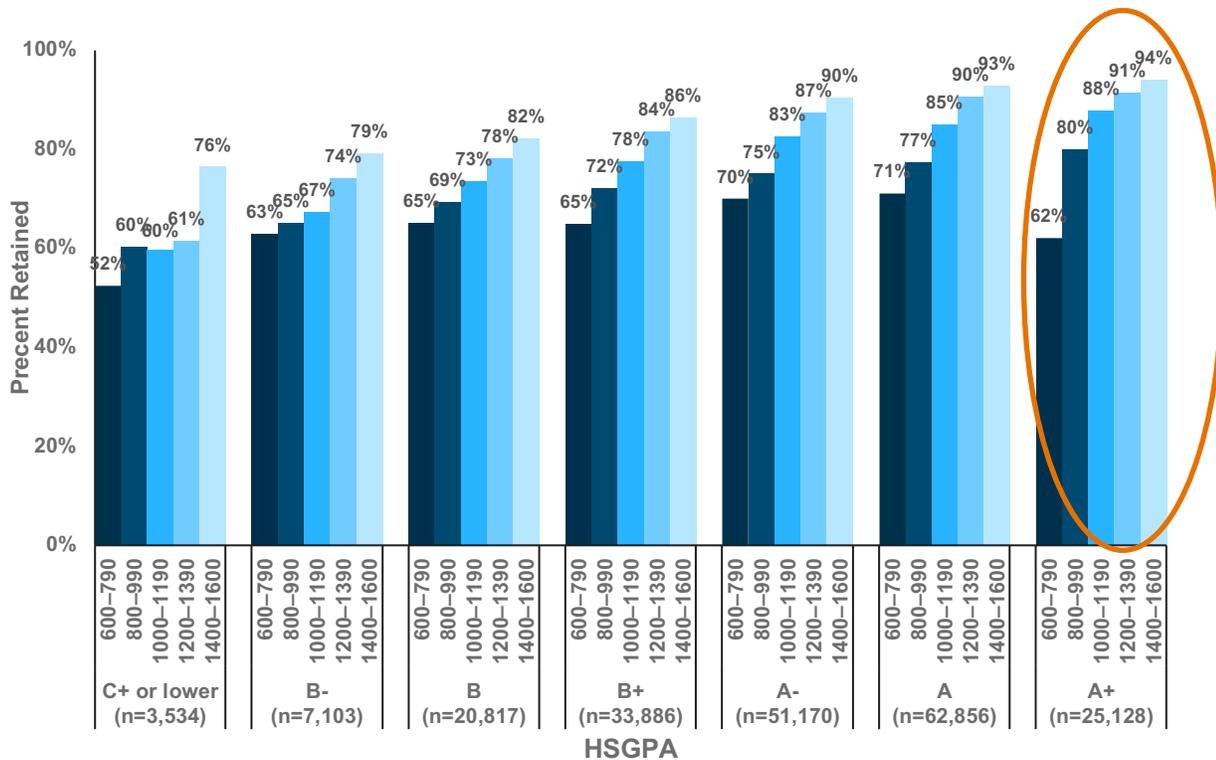
It is well known that the SAT is a good predictor of first-year college performance. Less understood, however, is the insight that the SAT brings to our understanding of student retention and degree completion.

Combined with other predictors of first-year academic performance, such as HSGPA, the SAT gives admissions and enrollment professionals a window into an applicant's likelihood for long-term success in college. Mattern, Patterson, and Wyatt (2013) conclude that “students with higher SAT scores are more likely to graduate, and graduate in a timely manner (i.e., four years), even after controlling for HSGPA, institutional control, and institutional selectivity” (p. 19). These researchers go on to note that “it is true that, overall, students with high SAT scores had a high likelihood of graduating, but it varied greatly when the results were disaggregated by HSGPA. Of students with the highest possible SAT scores, there was roughly a 60-point difference in graduation rates depending on HSGPA” (pp. 19–20).

Results from the most recent College Board SAT National Validity Study show that even among students who earned exceptionally strong grades in high school, retention rates vary substantially (Westrick, Marini, Young, Ng, Shmueli, & Shaw, 2019). Figure 1 (see following page) depicts second-year retention rates when using HSGPA and SAT scores jointly. The figure shows a positive relationship between SAT scores and retention across all HSGPA categories, especially for students within who earned A's and B's in high school In this

sample, students' retention in college varied by as much as 30 percentage points despite earning A+ grades in high school (see circled bars).

**Figure 1: Mean Second-Year Retention Rate by HSGPA and SAT Total Score Bands**



### Research and Policy Questions

- To what extent do SAT scores and HSGPA help us predict retention and graduation rates for students who typically enroll at your institution?
- Does your institution calculate any kind of index that sheds light on your admitted students' likelihood for academic success? If so, does the calculation use SAT scores, HSGPA, and/or other objective measures?
- If your institution calculates a "success index," are the results linked to your institution's advising resources? For example, are students who are at risk for departure, based on your index, identified and provided with academic resources to support retention and completion?

### **13. “I need a better way to assess student interest in majors or disciplines. How can the SAT help?”**

Students who are satisfied with their selection of a major—and who persist in that major—realize a variety of positive educational outcomes, including retention and timely graduation (Tinto, 1993, quoted in Shaw & Barbuti, 2010, p.19). In STEM fields, where there is a significant national push to increase the number of women and students from underrepresented groups in these fields, early interest may be key to their adoption of STEM majors in college (Hilton & Lee, 1988; Maltese, 2008; Bonous-Hammarth, 2000—all quoted from Shaw & Barbuti, 2010, p. 21). Students who act on these early interests, such as completing a related AP<sup>®</sup> course, express higher science self-efficacy beliefs, leading to greater persistence in college (Shaw & Barbuti, 2010). In contrast, data showing that students who persist as undeclared majors in college are less like to eventually graduate compared to students who have more concrete educational goals (Shaw, Kobrin, Patterson, & Mattern, 2012).

Data supplied at the point of admission can aid students as they explore majors that interest them. The SAT has two cross-test scores, Analysis in Science and Analysis in History and Social Studies, that provide colleges and universities with the ability to align student performance and interest in areas beyond critical reading and mathematics. The scores are correlated with student performance in similar college-level courses. For example, the Analysis in Science score has a strong relationship with first-semester, college credit-bearing course grades in natural sciences, health sciences, and engineering. Similarly, the Analysis in History and Social Studies score is correlated with first semester, college credit-bearing courses in world and U.S. history, anthropology, economics, government, geography, and psychology (Shaw, Marini, Beard, Shmueli, Young, & Ng, 2016).

#### **Research and Policy Questions**

- How do you assess readiness for students who have expressed an interest in pursuing a specific major or discipline at your institution?
- To what extent will the SAT cross-scores be helpful in identifying applicants who may be especially qualified for or interested in specific kinds of disciplines on your campuses?

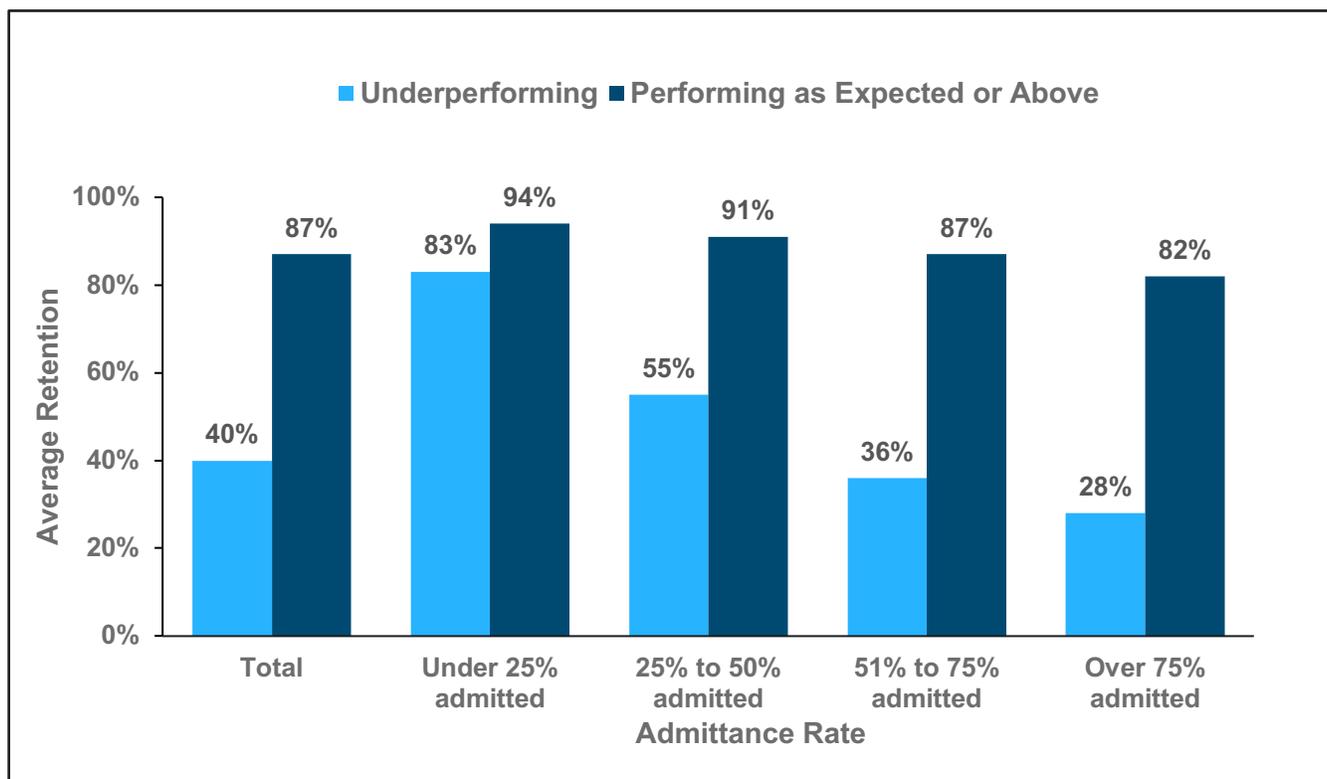
### **14. “I need a straightforward strategy to identify students who may struggle academically and ultimately leave my institution after the first year. How can the SAT help?”**

Retaining students who are otherwise performing well in college is a critical element of a fully effective student-success strategy. Although admissions requirements are designed to maximize success in the first year for all students, we know that students bring both

strengths and weaknesses to the college classroom that will influence their likelihood to earn a degree. Data collected at the point of admission, including HSGPA and standardized test scores, can be used to predict whether an incoming student is likely to underperform or to overperform in college relative to their achievements in high school (see, for example, DesJardins & Jie, 2002). Shaw and Mattern (2013) show that students who significantly *underperform* or *overperform* in their first year on campus—compared to their predicted performance based on SAT scores and HSGPA—are at greater risk of leaving in their second, third, or fourth year of college compared to students who performed as expected. Although the reasons for a student’s departure are numerous and complex, this calculation is simple and requires only readily available data—SAT scores, HSGPA, and first-year college GPA. Institutions that utilize the free College Board Admitted Class Evaluation Service™ (ACES™) automatically receive this information for all students included in the institution’s data file.

The most recent College Board SAT National Validity Study revealed that 87% of students who performed as expected or better in college returned for the second year, while only 40% of students who underperformed returned for the second year (see Figure 2 below). Moreover, the likelihood of underperforming students returning for the second year dramatically decreases as institutional admissions selectivity decreases (Westrick, Marini, Young, Ng, Shmueli, & Shaw, 2019).

**Figure 2: Retention Rates of Students Underperforming and Performing as Expected or Better, Total Sample and by Institutional Admittance Rate**



Arriving at a predicted FYGPA for students using both HSGPA and SAT scores and using such data to monitor in comparison to a student's actual college performance is a simple and powerful way to find and serve students who may be at risk for leaving the institution. Of course, not all students classified as underperforming, and therefore at greater risk for departure, have a low FYGPA. In the National Validity Study sample, 24% of the students classified as underperforming had a FYGPA of 2.00 or higher, a FYGPA that many consider an acceptable minimum for avoiding academic probation. By taking account of their predicted performance (based on SAT scores and HSGPA), admissions and enrollment leaders have information to proactively flag students at risk for dropping out and provide appropriate academic support.

### Research and Policy Questions

- Does your institution have a protocol for identifying students who are at risk for departure?
- Does this protocol employ objective measures of academic achievement?

**15. “I need to ensure that my international applicants are ready for the courses they will face at my institution, especially since I may not know the academic rigor of the high school they attended. How can the SAT help?”**

Domestic colleges and universities increasingly wish to recruit students from around the world. Their aim is to create campuses that represent the rich cultural and academic student diversity of the U.S. and around the globe. Admissions and enrollment leaders can use an SAT score as a common metric that signals students’ likelihood for college success and is used both domestically and internationally. Leaders can also be confident that the scores they see from international students attending unfamiliar high schools are comparable with the scores they see from high schools they are familiar with and visit often.

**Research and Policy Questions**

- To what extent are HSGPAs supplied by international applicants helpful in predicting student academic success at your institution? The SAT?
- Are first-year retention and graduation rates different for your domestic and international students?

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