
How Did Pandemic Disruptions Impact Applications, Enrollment, and Outcomes at Selective Institutions?

New Findings and Implications for
Long-Term Policy and Practice

Introduction

The pandemic upended the college-going process: Students—particularly those who graduated from high school in 2021 and 2022—experienced learning disruptions, grading policy changes, lack of access to extracurricular activities, and barriers to taking college admission tests due to test center closures. As a result, institutions modified multiple elements of their admissions requirements, including a near-universal shift to a test-optional approach for applicants.

These changes meant that institutions were forced to make admissions decisions with different, and often less, information than they've historically relied upon. Institutions immediately started asking what impact this disruption would have on **who applied, who enrolled, whether these students succeeded, and how these results would impact admissions policies over the long term.**

To answer these questions and inform future policy decisions, a group of more than 50 selective public and private higher education institutions and three national higher education organizations joined forces with College Board to form the Admissions Research Consortium (ARC). They've been guided by a Core Advisory Committee (with leadership from the Association for Institutional Research [AIR], American Association of Collegiate Registrars and Admissions Officers [AACRAO], National Student Clearinghouse [NSC], and senior admission and enrollment practitioners) and a Research Advisory Committee composed of academic and institutional researchers. Over the last two years, the consortium has used data from participating institutions to create a collective understanding of the impact of these pandemic disruptions for students who started college in the fall of 2021 and 2022 at selective institutions. (Findings that can be generalized across the four-year higher education sector are noted below.) Three full research briefs have been released to date, and work continues to examine longer-term outcomes and retention.

Key Research Findings

- Applications to consortium institutions increased substantially in both fall 2021 and fall 2022, compared to pre-pandemic cohorts. Institutions responded by admitting and enrolling more students for the fall 2021 cohort, but not in fall 2022 when admission offers and enrollments decreased modestly.
- The near-universal shift to test-optional admissions policies didn't meaningfully change previous trends in the racial/ethnic composition of incoming classes at consortium institutions in either fall 2021 or fall 2022. Moreover, the socioeconomic composition of enrolled students has been unchanged over the past 5 years at consortium institutions.
- About half of applicants in recent cohorts disclosed their test score in the admissions process. Score disclosure choices were consistent for students across different demographic attributes in the fall 2021 and fall 2022 cohorts. Students with higher test scores—relative to the college to which they were applying—usually disclosed scores and students with lower relative scores usually withheld scores, regardless of demographics.
- Among fall 2021 first-year enrollees with the same high school grades, students with higher SAT scores—regardless of their decision to disclose or withhold their test scores—had higher average first-year grades, credit accumulation, and retention rates. First-year outcomes were lower for score withholders and lowest for students with no SAT score. Test scores continue to be valid predictors of first-year outcomes in college.
- Continued understanding of student outcomes in college must be assessed given the unique and varied disruptions the pandemic continues to bear on high school students transitioning to college.

After two years of study, we're releasing key findings and implications for use by enrollment practitioners, campus leaders, secondary school leaders and counselors, and policymakers.

These findings are organized in the following manner:

01. _____

How did applications, admission offers and enrollments change?

02. _____

What are initial insights on college student outcomes?

03. _____

How do these findings inform future practices, requirements, and policy decisions?

1. How did applications, admission offers, and enrollments change?

Applications to consortium institutions increased substantially in both fall 2021 and fall 2022. These findings are corroborated by other research reporting increases in the number of applications submitted by students.¹ Most consortium institutions increased offers of admission and saw modest increases in enrollment in fall 2021. Despite continued increases in applications in fall 2022, consortium institutions decreased offers of admission and enrollment slightly declined relative to fall 2021.

Racial/Ethnic Diversity

The number of applicants, admits, and enrolled students from underrepresented racial/ethnic backgrounds increased at consortium institutions in fall 2021. These increases, however, did not result in changes to the **proportional representation** of enrolling students by race/ethnicity, except at more selective private institutions, where the proportion of underrepresented students enrolling in fall 2021 increased modestly by 2.3 percentage points. This result—which remained flat for underrepresented student representation across institution type except for more selective privates—is consistent with analyses of IPEDS enrollment data on all colleges and universities in fall 2021. In fall 2022, more selective privates didn't experience additional gains in proportional representation of underrepresented students by race/ethnicity, although selective publics saw a 1.5 percentage point increase after being flat the year prior.

Socioeconomic Diversity

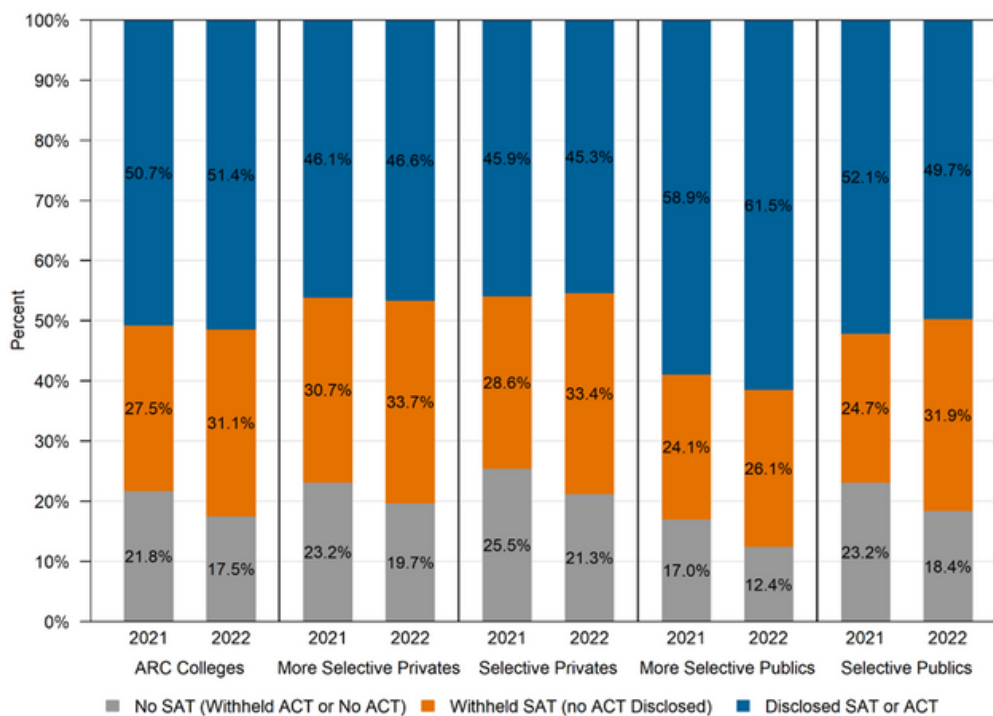
Consortium institutions experienced one-year increases in the *number* of enrolled students from lower socioeconomic backgrounds in fall 2021, followed by one-year declines in 2022. The proportional *representation* of enrolling students from lower socioeconomic backgrounds at consortium institutions hasn't changed in five years.

1. Kim, B., Freeman, M., Kajikawa, T., Karimi, H., and Magouirk, P. 2022. First-year applications per applicant: Patterns of high-volume application activity at Common App. Common Application Research Brief. Retrieved from <https://www.commonapp.org/about/reports-and-insights>.

Score Submission

In response to widespread test-optional policies, applicants in the fall 2021 and fall 2022 admissions cycles were faced with a new decision about whether or not to submit their test scores. About 50% of all applicants to consortium institutions disclosed a test score for consideration in their application. About 30% had an SAT score but withheld it on their application, and 20% didn't have a test score or withheld an ACT score (Figure 1 below).

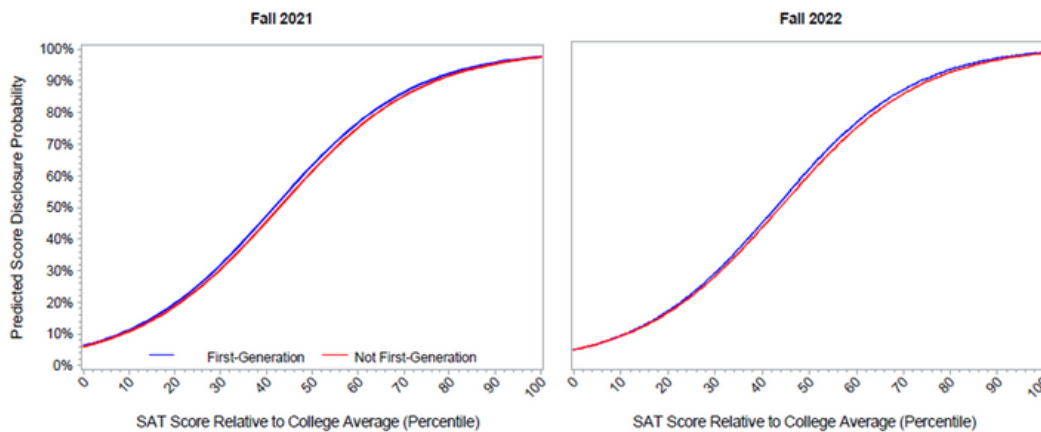
Figure 1: Score Disclosure, Withholding, and Absence Among Fall 2021 and Fall 2022 Applicants, ARC Institutions, and Segments



Source: College Board, [Updated Evidence on Changes in College Applications, Admissions, and Enrollment](#), Figure 12.

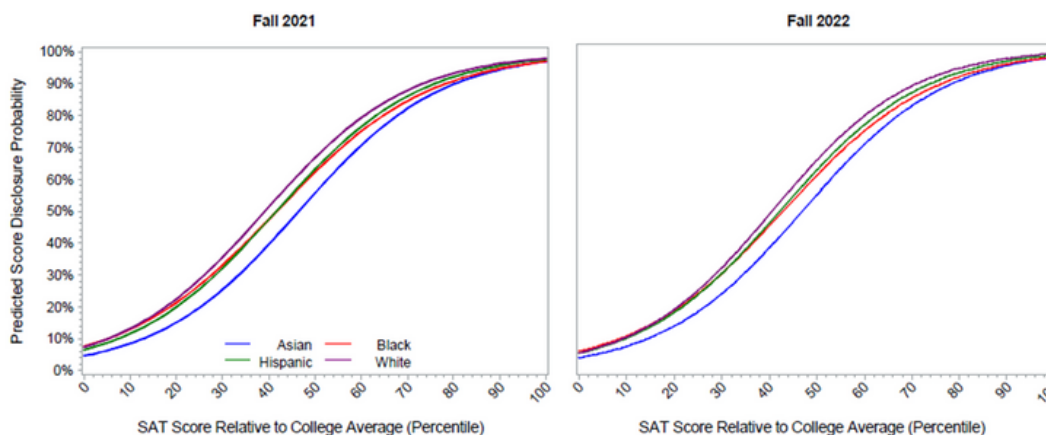
Students made rational choices when it came to disclosing scores—principally driven by the score itself. Students with higher test scores relative to the institution they were applying to chose to disclose their scores, and students with lower relative scores chose to withhold. This held true across demographic groups and first-generation status (Figures 2 and 3 below show the similar score disclosing patterns for parent education level and race/ethnicity.) It is also true that students with higher test scores, who tend to disclose those higher test scores, had stronger high school grades.

Figure 2: Probability of Test Score Disclosure Among ARC Applicants for Fall 2021 and Fall 2022, by First-Generation Status



Source: College Board, [Updated Evidence on Changes in College Applications, Admissions, and Enrollment](#), Figure 16.

Figure 3: Probability of Test Score Disclosure Among ARC Applicants for Fall 2021 and Fall 2022, by Race/Ethnicity



Source: College Board, [Updated Evidence on Changes in College Applications, Admissions, and Enrollment](#), Figure 17.

Campus test policy language also influenced student behavior. Institutions that explicitly expressed a desire to see test scores in the application saw significantly higher test score disclosure rates.

2. What are initial insights on college student outcomes?

College admissions professionals have always sought to attract and enroll students who will succeed on their campus. For years, admissions policies and practices were carefully calibrated to meet this goal. Because the pandemic impacted student learning and preparation at the same time that it adjusted the way institutions make admissions decisions, there's been an intense focus on whether these new cohorts of students will perform similarly to their pre-pandemic peers. Specifically, this research examined first-year grades, first-year credit accumulation, and first-to-second-year retention rates.

How did the 2021 cohort compare to prior years?

Average first-year GPAs (FYGPA) rose in the 2019-20 and 2020-21 academic years when pandemic-related disruptions caused many colleges to adjust grading policies and practices. Average FYGPAs fell in 2021-22 and are more aligned to 2018-19 performance averages. Average credits earned in the two most recent academic years (2021-22 and 2020-21) were lower than during academic years when credit loads were largely unaffected by the pandemic (2018-19 and 2019-20). About two-thirds of consortium institutions experienced an increase in the proportion of first-year students earning credits below the typical (modal) number of credits in 2021-22, compared to 2018-19. First-to-second-year retention rates at consortium institutions were mostly unchanged between the 2018-19 and 2021-22 first-year cohorts, ranging between 91.5% and 92.1%.

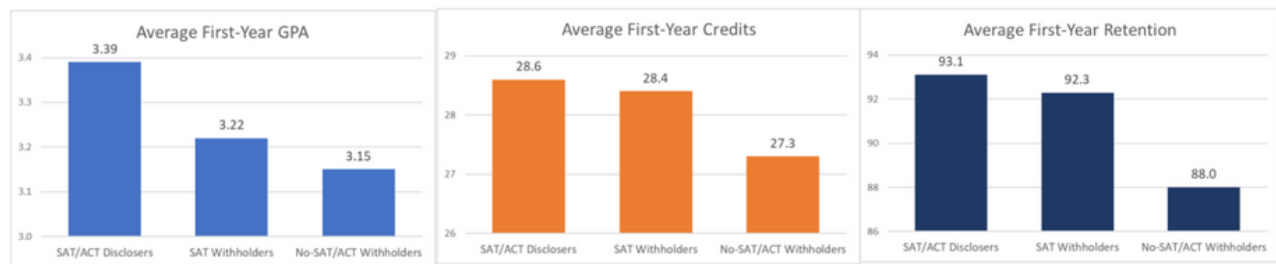
How well did test scores predict first-year outcomes?

Initial evidence validates prior research: As expected, the SAT continues to be a valid predictor of first-year outcomes in college.² Among fall 2021 first-year enrollees with the same high school grades, students with higher SAT scores—regardless of their decision to disclose or withhold their test scores—had higher average first-year grades, credit accumulation, and retention rates.

2. Westrick, P.A., Marini, J. P., Young, L., Ng, H., Shmueli, D., and Shaw, E. 2019. Validity of the SAT for Predicting First-Year Grades and Retention to the Second Year. College Board: New York, NY. May 2019. Retrieved from <https://satsuite.collegeboard.org/media/pdf/national-sat-validity-study.pdf>.

Because students with higher test scores were more likely to disclose those scores and, conversely, lower-scoring students were more likely to withhold their scores, aggregate outcomes for their first year in college followed a logical pattern: (see Figure 4).

Figure 4: All First-Year Student Outcomes, by ARC Segment and Score Disclosure Status

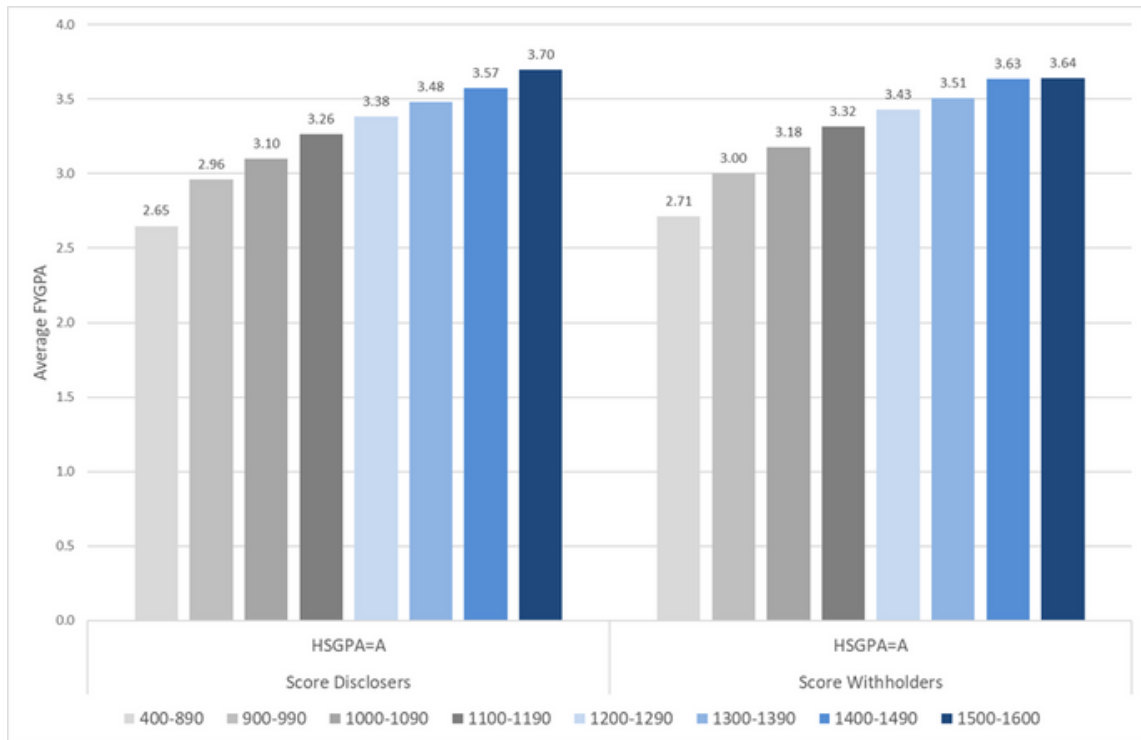


Source: College Board, [College Outcomes Following Pandemic-Induced Changes in College Admissions Policies](#), Figure 13.

First-Year GPA

Relying on HSGPA and other metrics can be useful to predict and understand student success, but test scores provide additional information that can be particularly helpful for supporting a student before they're a retention risk. Students with the same HSGPA can have considerably different first-year GPAs, credit accumulation, and first-to-second-year retention rates depending on their test score. Figure 5 shows that students with an A-average HSGPA have substantially different FYGPAs depending on their test score, and these patterns are the same for score disclosers and withholders. Said another way, for score withholders in this sample who have an A-average HSGPA, you would expect their average first-year GPA to be about a 3.35. However, with the added information from SAT scores, you would know that the A-average HSGPA students with an SAT score in the range of 1000 to 1090 tend to earn about a 3.18 while A-average HSGPA students with an SAT score in a range of 1400-1490 tend to earn about a 3.63 first-year GPA. This is critical information for colleges to understand when making decisions on scholarships and placement into competitive majors or honors programs.

Figure 5: First-Year GPAs for Students with A-Average HSGPAs, by SAT Bands and Disclosure Status

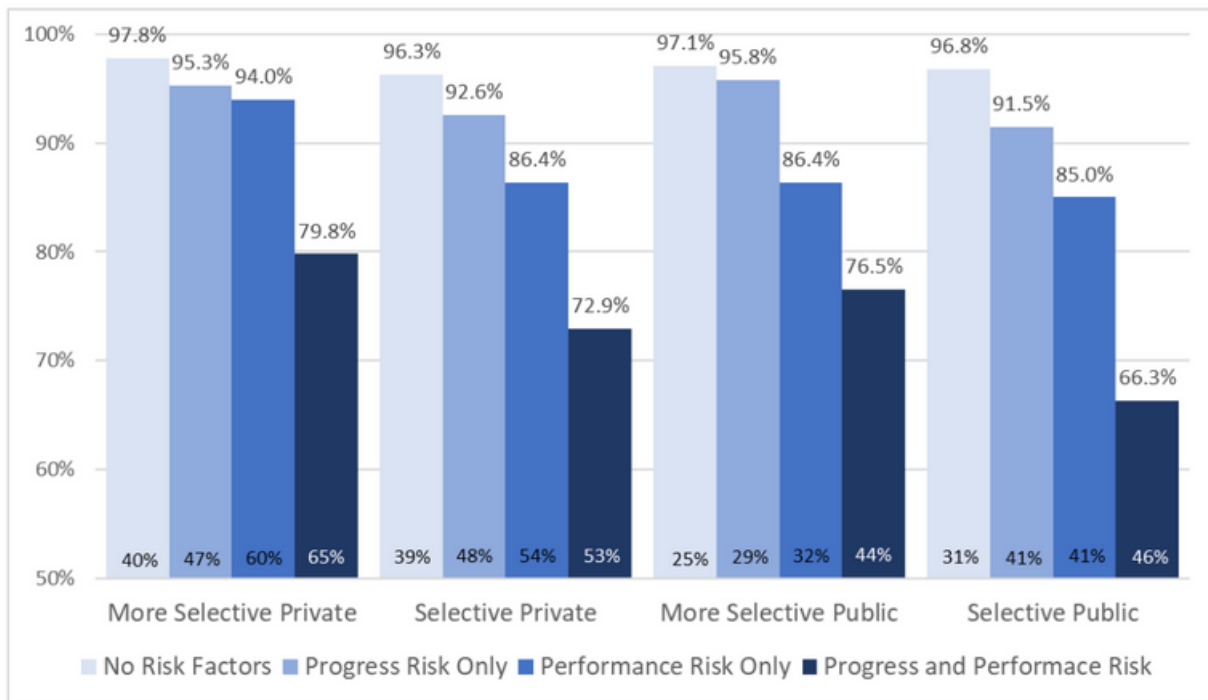


Source: College Board, [College Outcomes Following Pandemic-Induced Changes in College Admissions Policies](#), adapted from Figure 14.

Retention

The findings above that show the significantly different FYGPAs for students with the same HSGPA, but different SAT scores have implications for first-to-second-year retention. When first-year GPA and credit accumulation outcomes are studied together, substantial retention rate differences appear: students earning first-year grades below a 2.5 (shown as *performance risks* in the Figure 6) and earning fewer credits than was typical prior to the pandemic (shown as *progress risks* in Figure 6) have **retention rates 20-30 points below** students without these risk factors.

Figure 6: First-Year Retention Rates and Score Non-Disclosure Rates in 2021-22, by Performance and Progress Risk and ARC Segment



Source: College Board, [College Outcomes Following Pandemic-Induced Changes in College Admissions Policies](#), Figure 11. Note: Percentages at the base of each bar are the fraction of that group who didn't disclose a test score.

Students with lower retention rates on consortium campuses are disproportionately underrepresented students, first-generation students, and students from more challenging neighborhood environments. Additionally, students with the lowest retention rates are much less likely to have disclosed an SAT or ACT score for consideration in admissions, reducing institutions' visibility into retention risk at the point of enrollment.

3. How do these findings inform future practices, requirements, and policy decisions?

Institutions want to enroll students who will succeed and support existing students who may be struggling. The more visibility, and earlier visibility, institutions have into predicting student outcomes, the better they'll be able to allocate resources and guide students to stay on track and graduate on time.

Though a number of factors contribute to a campus admission test policy, the results show that test scores provide important information strongly associated with key success outcomes. That's why some institutions have required students to submit scores when applying to academic programs or majors for which test scores have an even greater relationship with outcomes.

Additionally, many institutions have started collecting test scores **outside** the high-stakes admissions process, but as a requirement upon enrollment. This allows institutions to understand the test score within the student's broader academic portfolio, and more accurately and proactively advise on credit load, course selection, course placement, and to offer additional supports like summer bridge programs, peer tutoring, and mentor/mentee advising. A policy to require test scores for enrollment also still allows students and institutions the freedom to choose whether tests are submitted and considered in the admissions process. But more importantly, it provides incremental and helpful information to support students once they arrive on campus.

Finally, institutions need to continue to hone their test policy language to help students make informed choices about whether to submit their scores for consideration in admissions. Although most students' test disclosure decisions were driven by the score itself, test policy language has a significant impact on student behavior. When institutions clearly articulate the way they use scores in their evaluation of candidates for admission, student behavior changes. For example, higher rates of score disclosure are seen when institutions clearly articulate a desire for scores compared to lower rates of disclosure when institutions indicate a lack of desire for scores.

Reminder of Context and Looking Ahead

These results and implications should be taken with caution because the group of students who applied in fall 2021 had unique disruptions and circumstances no other cohort will endure. Though analysis and understanding of future cohorts is critical to assess long-term impacts, these early results indicate that the near-universal shift to test-optional policies has (1) resulted in increases in applications to consortium institutions but hasn't decidedly changed the composition of incoming classes, based on racial or socioeconomic characteristics and (2) further complicated institutions' ability to identify and support lower-scoring students who withhold their scores. Because the primary goal of institutions is to support students from the start, and because lower-scoring students have markedly lower first-year GPA, credit accumulation, and retention outcomes, it's no surprise that in a recent survey of consortium institutions, *over 50% of institutions have begun requesting test scores at the point of enrollment*, regardless of whether the student disclosed their scores in the admissions process.

APPENDIX A: Institutional Case Studies

Consortium institutions have been adapting admissions practices to increase transparency and clarify policies for students, parents, and counselors. The following spotlights describe practices that may interest other institutions and be important for them to know about.

Institution Spotlight #1: Helping students make score disclosure decisions

Institutions have historically published the middle 50% score ranges for enrolled students. Given recent findings that about 50% of all applicants to consortium institutions disclosed a test score for consideration in their application, institutions can only report scores for those students that disclose. Because students who disclose tend to be higher-scoring students than students who withhold, the institutions' middle 50% score range no longer reflects scores of all enrollees. As a result, publicizing middle 50% score ranges, without any qualifying language about which students these scores represent, may misrepresent actual score ranges of all enrollees.

One selective public institution is choosing to continue sharing the middle 50% score range of all students who enrolled pre-pandemic, and prior to the implementation of the institution's test-optional policy in 2021, rather than their most recent middle 50% score range, which represents only half of their enrolling class. Another selective private institution is publishing the middle 50% of all enrollees, regardless of whether they disclosed their score in the admissions process. By doing this they can more accurately reflect scores of all enrollees. In both cases, the decisions were motivated by their desires to provide better guidance to applicants about whether or not to disclose test scores, and to mitigate the effects of publishing misleading score ranges that don't accurately reflect all enrolling students.

Institution Spotlight #2: How test policy language impacts score disclosure rates

Score disclosure rates of applicants at consortium institutions had a wide range of 21%–73% in the fall 2021 admission cycle. At one selective public institution, for example, only 27% of applicants disclosed test scores in response to test policy language that “strongly recommended” students apply without them. The institution also communicated that the applicant’s high school performance would be given more weight than test scores as an indicator of academic ability. By contrast, almost 60% of applicants to a more selective, private institution disclosed test scores when applying for fall 2021 admission in response to test policy language that encouraged students to submit scores if they had them. The language stipulated that students who didn’t have the opportunity to test wouldn’t be penalized. The institution also communicated that test scores would be used as one part of a holistic review and that each applicant would be treated as an individual.

Although the primary driver of students’ score disclosure decisions is their test score relative to the institution’s score, institutions still have an opportunity to influence student score disclosing behavior when they communicate their test-optional policies.³ Analyses of consortium test policy language and student behavior demonstrated this to be the case.⁴ These findings encouraged institutions to clarify test policy language in the most recent application cycle to help students better understand their policy and to positively influence score sending among applicants.

3. Howell, J.S., Hurwitz, M., Imlay, S., and Perfetto, G. 2022. New Evidence on Recent Changes in College Applications, Admissions, and Enrollments. College Board: New York, NY. July 2022. Retrieved from <https://research.collegeboard.org/media/pdf/ARC-Research-Brief.pdf>.

4. McManus, B., Hurwitz, J., and Howell, J.S. 2023. Strategic Disclosure of Test Scores: Evidence from U.S. College Admissions. Working Paper.

Institution Spotlight #3: Identifying and supporting at-risk students

One small, selective private consortium institution experienced a 30% increase in applications between fall 2020 and 2021; about half of their applicants disclosed test scores in the fall 2021 and 2022 cycles. Through research shared with consortium institutions, they learned that the gap in the average scores of disclosers versus withholders was almost 200 points. In order to better identify which students will need early guidance for course placement, especially into STEM courses, the institution now requests scores from all students at the point of enrollment, regardless of whether or not they were used in evaluation.

On average, score withholders are earning slightly lower first-year GPAs and earning slightly fewer credits, but they're retaining to the second year at the same high rate as disclosers. The few students who don't retain appear to be leaving for nonacademic reasons, citing poor fit or match resulting from inability to visit campus prior to enrollment due to covid. A recent survey of consortium colleges revealed that over half of institutions will request test scores at the point of enrollment, after the admissions process is completed.

Apart from collecting scores at enrollment, consortium institutions rely on a variety of strategies to facilitate early identification of students who need support. The factors most often used to identify students who may need additional support are high school grades, the rigor of a student's high school curriculum, and demographic and socioeconomic characteristics. Institutions have also implemented new academic support services, including summer bridge programs with a focus on math tutoring; new centers on campus that provide integrated support for first-generation and low-income students across academic, financial, and personal advising; and early progress report monitoring for all students, not just those predicted to be at risk. Like the institution above, however, many consortium institutions report that students' reasons for not retaining are different post-pandemic, compared to those of pre-pandemic cohorts. Academic performance continues to be cited as a reason for not retaining, but mental health issues and lack of engagement/sense of belonging are increasingly cited as reasons students discontinue their enrollment. The support services institutions provide will have to shift to meet students' needs.