

## CALCULATING THE ODDS: COUNSELOR VIEWS ON MATH COURSETAKING AND COLLEGE ADMISSIONS

### Quotes from High School Counselors

#### Counselors' perspectives of calculus and admissions:

*It is deeply problematic that college admission offices—many of which are entirely unaware of how actual math content, sequencing, programs work—use calculus as a benchmark for college admission. It's one of the most frustrating things about the process. (p. 2)*

*We know that it is not developmentally appropriate for students to race to calculus. Unfortunately, it also seems that students who do not get to calculus are disadvantaged during the admissions process. The college counseling office and math department are in constant communication about how to both meet the developmental needs of students and ensure they are competitive applicants. It is a very difficult balance. (p. 6)*

*The true educational value of calculus may well be vastly overrated, at least for students who aren't pursuing rigorous STEM majors like engineering or computer science. [Yet] for students seeking entry to selective and highly selective colleges, taking calculus in high school is very important, and not advising them accordingly is irresponsible. (p. 9)*

#### Counselors say they recommend calculus even for students who have aspirations for a career outside of STEM:

*Even if calculus isn't important in the long run (because a student is, say, an English major), admission officers have said that it's a necessity for admission today at most selective schools. (p. 11)*

#### Counselors say there are covert expectations for students to take calculus:

*From my time working at a highly selective college, and from what I hear from colleges, I believe that calculus is viewed as a gatekeeper course by many colleges. I don't believe this should be the case, based on research and student outcomes, but I don't want to disadvantage my students by advising them otherwise. (p. 13)*

## **Counselors on the value of statistics in admissions:**

*We only recommend calculus because of the impact on admission. More students would be better served in statistics, but they have been negatively impacted in admission in the past. (p. 21)*

*Some of my students interested in business, psychology, etc., certainly can make a case for taking statistics or another math course. I encourage them to explain this decision on their application so there is no guessing on the part of the admission office about why they chose the math curriculum they chose. (p. 21)*

## **Counselors share concerns and call for change:**

*Math unfortunately seems to rule our building. There is an unnecessary amount of pressure and stress to achieve the highest levels of math. (p. 23)*

*Our biggest concern is that many parents pressure their students to take more and more advanced math earlier and earlier. This often leads to unnecessary stress and struggle. In some cases it undermines math confidence for these students where, if they slowed down and took the more traditional path, reaching precalculus by their senior year, they might be more confident and perform better. (p. 23)*

*I believe that colleges highly value (overvalue) calculus in admission. I think it's wrong of them to do so. (p. 24)*

*The fixation on calculus in college admissions offices is way out of line not only with what their own respective institutions are advising to students once they enroll (i.e., many more students could use statistics than calculus) but is also out of touch with 21st century workplace/industry trends, which demonstrably show that statistics is at least as useful—and in many instances is actually more useful—than calculus. (p. 24)*