



# Economic Disparity in SAT Scores

Max Pearson<sup>1</sup> and Lissette Moore-Guerra<sup>2</sup>

<sup>1</sup>Palo Alto High School, <sup>2</sup>Palo Alto Unified School District



## INTRODUCTION

More than 4 million students took either the SAT or ACT last year. Now imagine if these tests that are meant to test college readiness were heavily skewed to benefit people that are affluent and can afford extra preparation. You don't have to imagine. There is a problem with how the SAT and ACT scores relate to income or financial well being. Despite the SAT and ACT intending to test readiness for college, they end up being heavily affected by how much money a student's parents are able and willing to pay for tutoring and test preparations in general. This problem has negatively impacted less affluent students because they can't afford this tutoring that essentially guarantees a raise in score.

## RESEARCH METHODOLOGIES

Identify the issue at hand and the potential gaps in research.

Filled out the PAUSD innovation grant in order to hopefully fund an SAT prep course for low-income and historically underrepresented students.

Surveyed local high schools on what methods they are utilizing to combat and publicize the issue, if any at all.

## CONCLUSIONS AND ANALYSIS

My findings indicate a couple of different things. One of these things is that not only is there a clear divide in SAT scores based on financial status, but it's getting worse, not better. Despite efforts from the College Board to implement an adversity score, which was quickly shot down, the issue is moving in the wrong direction.

There are quite clearly many factors that contribute to the achievement gap within standardized testing and more specifically the SAT, but one of the main contributors is the effects of shadow education. Shadow education is shown in full effect through some of the local companies that offer various types of test prep. As shown in figure #2, the prices of test prep highly outweigh the prices of the SAT themselves. It has been shown throughout research that private tutoring is much more effective in SAT preparation than it's free counterparts.

## DATA AND FINDINGS

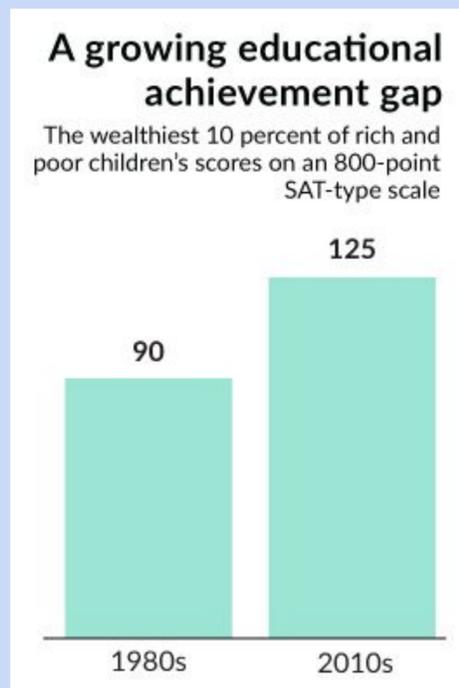


Figure #1: Growing educational achievement gap

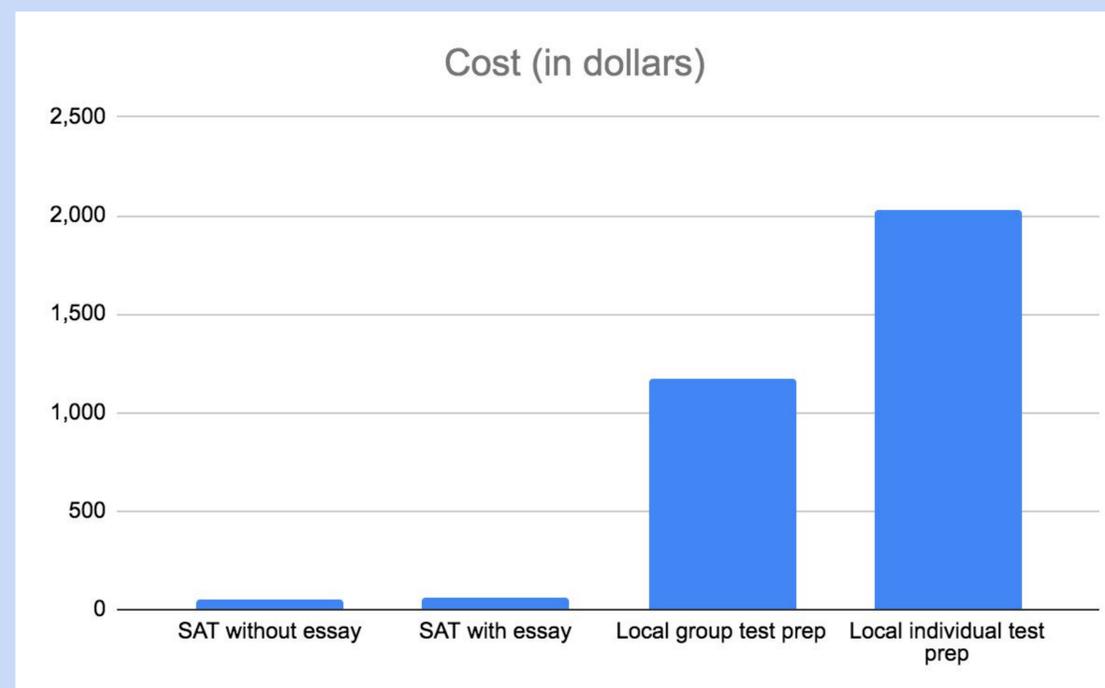
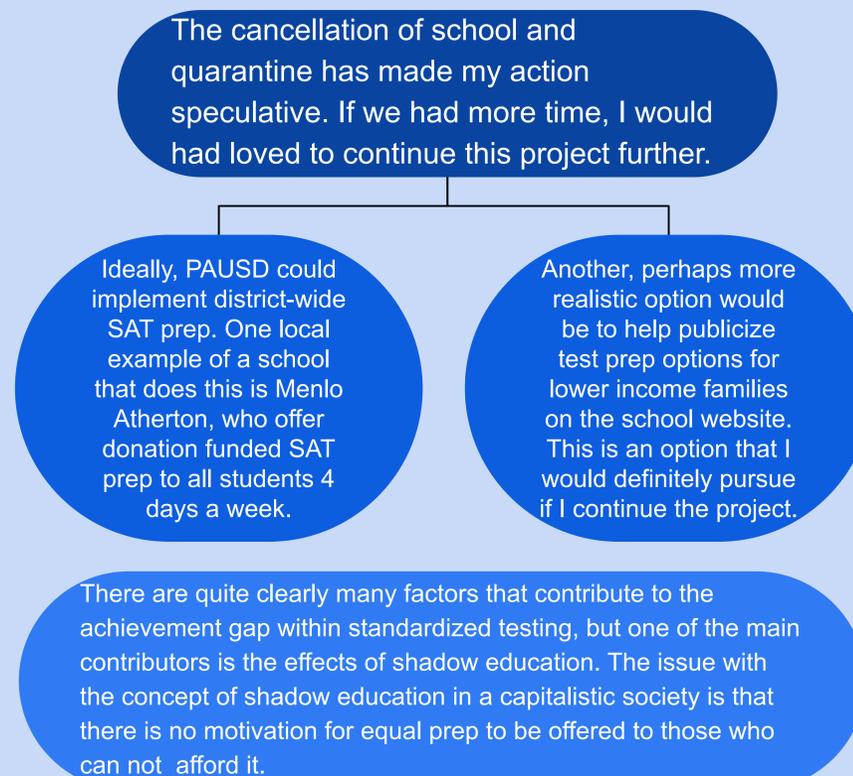


Figure #2: Costs of SAT related classes and the SAT itself

## IMPLICATIONS AND NEXT STEPS



## REFERENCES

Buchmann, C. J., Condrón, D. J., & Roscigno, V. (2010, December 1). Shadow Education, American Style: Test Preparation, the SAT and College Enrollment. Retrieved October 4, 2019, from <https://academic.oup.com/sf/article/89/2/435/2235270/>.

Choi, Y. (2018). The Heterogeneous Effects of Shadow Education on SAT Scores. *Development and Society*, 47(3), 451-476. Retrieved from <https://www.jstor.org/stable/26506194>

Engberg, M., & Allen, D. (2011). Uncontrolled Destinies: Improving Opportunity for Low-Income Students in American Higher Education. *Research in Higher Education*, 52(8), 786-807. Retrieved from <http://www.jstor.org/stable/41483818>

Grodsky, E., Warren, J., & Felts, E. (2008). Testing and Social Stratification in American Education. *Annual Review of Sociology*, 34, 385-404. Retrieved from <http://www.jstor.org/stable/29737796>

Gullatt, Y., & Jan, W. (2003). How do pre-collegiate academic outreach programs impact college-going among underrepresented students. *Washington, DC: Pathways to College Network Clearinghouse*.

Hair, N. L., Hanson, J. L., Wolfe, B. L., & Pollak, S. D. (2015). Association of Child Poverty, Brain Development, and Academic Achievement. *JAMA Pediatrics*, 169(9), 822. doi: 10.1001/jamapediatrics.2015.1475

Hartline-Grafton, H., Vollinger, E., & Ashbrook, A. (2019, September 19). School Meal Eligibility and Reimbursements. Retrieved October 4, 2019, from <https://frac.org/school-meal-eligibility-reimbursements>.

Starr, J. (2017). The paradox of standardized testing. *The Phi Delta Kappan*, 99(3), 72-73. Retrieved from <http://www.jstor.org/stable/26388255>

## ACKNOWLEDGEMENTS

I would like to thank a number of people that helped me along the way of this project. I would like to Deanna Chute who helped me shape my project and work out a number of kinks. I would also like to thank my mentor, Lissette Moore-Guerra, who has been an absolute joy to work with and a huge help. I would additionally like to thank Linda Lyon and Chelsea Greene who provided a lot of great information and advice throughout my project.