

DIVERSITY AND SCHOOL BOARDS: AN ANALYSIS OF RACE, ETHNICITY, AND GEOGRAPHY IN GREATER HOUSTON

CMAS | REPORT V 2.4

March

2021

About CMAS

The Center for Mexican American Studies (CMAS) at the University of Houston was established in 1972 as an interdisciplinary academic program encompassing the liberal arts, education and social sciences focusing on the Mexican American and broader Latino experience in the U.S. Its mission is to advance knowledge, promote critical thinking and foster the value of service to the community. This involves designing a broad spectrum of public and scholarly programs. Located within the College of Liberal Arts and Social Sciences, CMAS has evolved into an academic unit with several major components: teaching, research and publications, recruitment and retention, leadership training, academic advising and community service.

DIVERSITY AND SCHOOL BOARDS:

AN ANALYSIS OF RACE, ETHNICITY, AND GEOGRAPHY IN GREATER HOUSTON

Isaiah Johnson
Guillermo Ortega, PhD
Graduate Fellows
Center for Mexican American Studies

Acknowledgments

This report was funded through the CMAS Graduate Fellow Program with the generous support of the Offices of the President and Provost of the University of Houston. We are grateful to them and to all our funders, who make possible for the Center for Mexican American Studies to advance its mission.

The data analysis and views expressed are those of the authors and should not be attributed to the Center for Mexican American Studies, or the University of Houston, or its Board of Regents. Funders do not determine research findings, insights, or recommendations of the Center for Mexican American Studies.

Executive Summary

The United States' educational system has a history of providing inequitable outcomes for students of color. After *Brown vs. Board of Education*, educational outcomes and opportunities in primary and secondary education continue to dwindle (Conway-Turner, Williams, & Winsler, 2020). Although the inequities throughout the educational system can be traced back to a myriad of causes such as school funding, redistricting, inadequate pedagogical practices, among others, the role of school boards, its racial and ethnic composition, and how they are elected and represent their communities (Feuerstein, 2002) is still a fertile area for research and (Meier & England, 1984).

A significant issue presently found in education policy is that prior research has yet to examine how exactly diversity in school boards is related to student performance on standardized testing. This problem becomes even more salient in racial and ethnically diverse communities, such as Greater Houston, a nine-county metropolitan area (Harris, Montgomery, Liberty, Chambers, Galveston, Brazoria, Fort Bend, Waller, and Austin counties).

Using academic performance data from the Stanford Education Data Archive (SEDA), we analyze fourteen independent school districts to measure whether descriptive representation – how well school board members represent the district racially, culturally, or ethnically – impacted student academic achievement (Reardon et al. 2019). We find that Greater Houston-area school boards are not only substantially non-Hispanic white, but districts with diverse racial and ethnic minorities tend to underperform in terms of academic achievement indicators, a severe problem for a region rich in culture and diversity. The daunting fact that representation seems to be a strong indicator of student success for non-Hispanic white school boards but a weak indicator for diverse boards raises severe concerns for Houston and the surrounding school districts.

Key Findings

The major themes that arise, based upon the information and analysis in this report, are:

1. There seems to be a correlation between the minority percentage of a school district and the number of students on free or reduced lunch, living in poverty, and with a single parent mom.
2. Geography plays a complex role in the Greater Houston area. Schools located further away from Houston's city limits seem to experience lower poverty and single-parent mother rates, as well as fewer students requiring free or reduced lunch. The minority rate, however, does not always correlate with geography in this aspect.
3. The implications of district composition on test scores imply that Whiter and more affluent communities correlate quite strongly with test score ratings.
4. School boards that match their district's diversity, such as Houston ISD, tend to underperform in terms of academic achievement, illustrating the limits of diversity without crucial policy reforms that need to be implemented.
5. Given the geographical and demographic patterns analyzed in this report, it is expected that COVID-19 will increase the academic achievement gap between racial minorities and non-Hispanic whites within the Houston area.
6. One policy recommendation is for state officials to reorganize the way in which they fund public school districts in Texas. Although there have been significant improvements over the past years, schools in Texas are mostly supported by local tax revenue; however, rural communities have a lower cost per student than larger urban centers. Providing more equitable funding based on environmental demographics is one way to potentially reduce the academic achievement gap.
7. Another policy recommendation is to enact legislation that allows districts to provide more input on state-sponsored tests to the Texas Education Agency (TEA). This input would include critical environmental considerations that contribute to the academic achievement gap. Houston ISD is different from Katy ISD, and as such, a myriad of testing approaches should be considered by TEA in conjunction with school district leaders.
8. Finally, we recommend policy considerations that would encourage state and district collaboration to improve academic achievement. The districts that face significant challenges are often diverse, impoverished, and urban. The displacement of these children is oftentimes a severe burden to parents and surrounding districts, leaving many students' academic achievement gap worse than it was previously.

Greater Houston is the most diverse metropolitan area of the nation. As of 2019, the city of Houston has no ethnic majority, and nearly a quarter of all residents are foreign-born (Mistretta, 2019). Over the last 60 years, Houston went from an astounding 70% non-Hispanic white in 1960 to 31% in 2019 (Kinder Institute Research, 2019). The Hispanic population in the city increases from a negligible percentage to a whopping 42%, making them the fastest growing and largest racial group in the Houston metropolitan area (Kinder Institute Research, 2019). Overall, due to the unprecedented growth rate of racial and ethnic groups in Houston, the greater Houston area is now a shining symbol of cultural pluralism in America.

As our region's diversity grows, it is vital to understand the relationship between school boards' diversity and its relationship with students' academic achievement.

The purpose of this report is to present an analysis of how school board diversity affects student test score outcomes in the fourteen Houston-area school districts that share various levels of diversity, socioeconomic status, and other critical environmental indicators of student success.

Background

"The main function of the school board is to provide local, citizen governance and oversight of education. Though ultimate responsibility for education rests with the state, Texas has delegated much of the authority to local communities who elect their local school trustees to govern the school district."

Texas Association of School
Boards

School board members provide policies and practices that enable serve their community's public educational institutions. For example, school board members are elected by local communities to help facilitate the approval of policies by the superintendent and their staff (Tallerico, 1989).

School boards, and subsequently, school board elections, are also a meaningful way to give community members the ability to affect school governance and the quality of their schools (Feuerstein, 2002). In short, effective school boards reflect the community's needs to enhance student achievement (Alsbury, 2008).

Research has also been critical of how school boards have been utilized to exclude marginalized groups from participating in the educational process (Gutmann & Thompson, 2000). In racially diverse districts, one would expect that school boards would more accurately make up the population's demographics (Luttmer, 2004). Yet, once school board elections conclude, the vast majority of elected members are non-Hispanic white, maintaining the status quo held since before

Brown vs. Board of Education (1954-1955) desegregated American school districts (Hajnal, 2007). School boards are elected through small, local elections where voters tend to be predominantly non-Hispanic whites and are more likely to oppose political and academic issues that involve equitable assistance for people of color (Kinder & Sears, 1981).

Individual school districts have often produced non-Hispanic white students who have higher indicators of achievement, as measured via test scores in comparison to other racial/ethnic minorities (Orfield & Eaton, 1996; Conway-Turner, Williams, & Winsler 2020; United States Courts). And though school systems in the U.S. are no longer segregated legally, academic achievement in America still mostly follows a Black/Brown-White paradigm (Conway-Turner, Williams, & Winsler 2020). Overall, the literature on the effect school boards have on student outcomes is littered with racial animus displayed when analyzing descriptive representation and academic success indicators. Because of these findings, we chose to examine school board and district composition throughout several critical Houston-area communities to determine to what extent the descriptive representation matters in terms of school academic achievement.

Table 1: School Districts Characteristics

District	Asian	Hispanic	Black	White	Free/Reduced Lunch	Poverty	Single Mom
Stafford MSD	9%	44%	42%	5%	67%	12%	22%
Pearland ISD	10%	28%	16%	44%	26%	6%	14%
Alief ISD	12%	52%	31%	4%	82%	34%	30%
Houston ISD	3%	62%	27%	8%	69%	36%	30%
Sheldon ISD	1%	60%	25%	11%	80%	29%	22%
Aldine ISD	1%	70%	26%	2%	87%	38%	32%
Humble ISD	3%	31%	19%	47%	34%	10%	15%
Pasadena ISD	3%	82%	7%	8%	74%	28%	24%
Fort Bend ISD	24%	26%	30%	20%	37%	12%	16%
Katy ISD	12%	34%	10%	44%	30%	8%	13%
Cypress-Fairbanks ISD	9%	43%	17%	31%	48%	13%	17%
Spring Branch ISD	6%	59%	5%	29%	57%	27%	19%
Galena Park ISD	1%	76%	17%	5%	82%	31%	24%
Alvin ISD	8%	44%	14%	33%	52%	17%	15%

Table 1 shows the fourteen school districts that border the Houston metropolitan area. For this report's purposes, the racial groups analyzed include Asian, Hispanic, African American, and non-Hispanic white. A key indicator of school success is whether or not a student participates in the district's free or reduced lunch program. Therefore, the first critical environmental indicator is the percentage of students on free or reduced lunch. Next, the percentage rate of students from impoverished households is included as the family poverty rate is another key characteristic of

academic achievement. Finally, the report includes the percentage of students who report having a single parent mom at home, as this is indicative of student success.¹

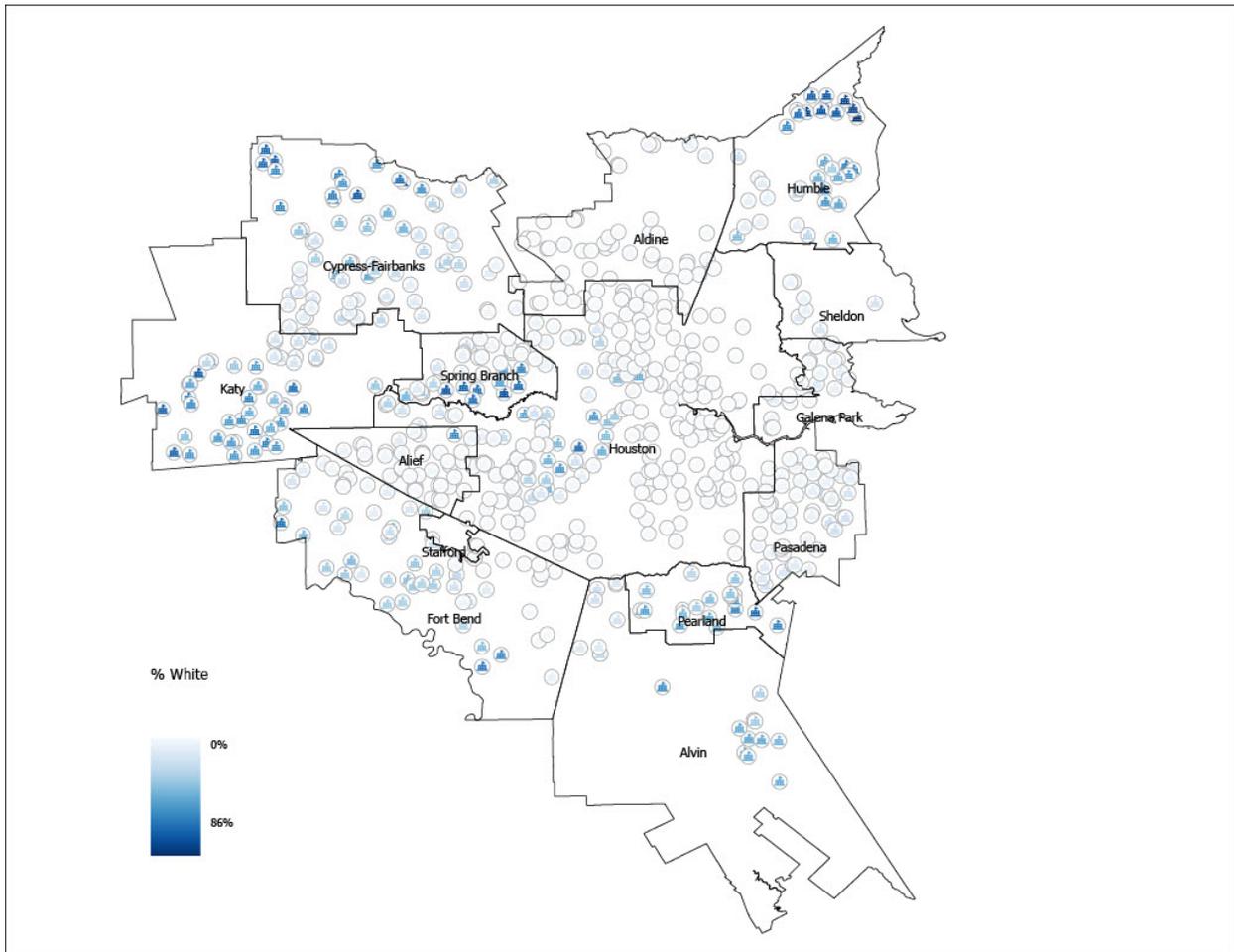
The threshold for deciding which district goes in a particular category is based on the percentage of racial and ethnic minorities in a given district. Simply put, the higher the percentage of non-Hispanic white students within a district, the lower the proportion available for racial and ethnic minorities to fill in diversity gaps. "Low Percentage Minority Districts" are those that have less than 40% of its student composition reporting a race or ethnic minority. "Medium Percentage Minority Districts" have an average student minority population that hovers near 40-60%. Finally, "High Percentage Minority Districts" are school districts that have minority populations north of 60%.

Low Percentage Minority Districts: Humble, Katy, and Pearland

Humble ISD, compared to other districts, has a relatively low percentage of racial heterogeneity. Hispanics and non-Hispanic white students represent each around 36% of the student body population. The district has a low poverty rate, roughly 9%, while the single mother percentage is about 15%. The free or reduced lunch rate is relatively low also, at 34%. **Katy ISD** is almost identical to Humble in terms of the student demographic breakdown, with a 43% majority non-Hispanic white population. The percentage of students on free or reduced lunch is the second-lowest on our list, with 30%. This is also represented in the rates for single-parent moms and poverty, with the former at 12% and the latter at 8%. Next on our list is **Pearland ISD**, which has a student population like Katy ISD, with a plurality 36% non-Hispanic white student body. The percentage of students within the district on free or reduced lunch is the lowest of our analysis, with roughly a quarter of the population requiring services. The poverty rate is also significantly low, at 6%. At the same time, the percentage of single-parent moms is 14%.

¹ Note: A glossary for certain terms is included at the end of the report.

Figure 2: School Districts by Percentage White

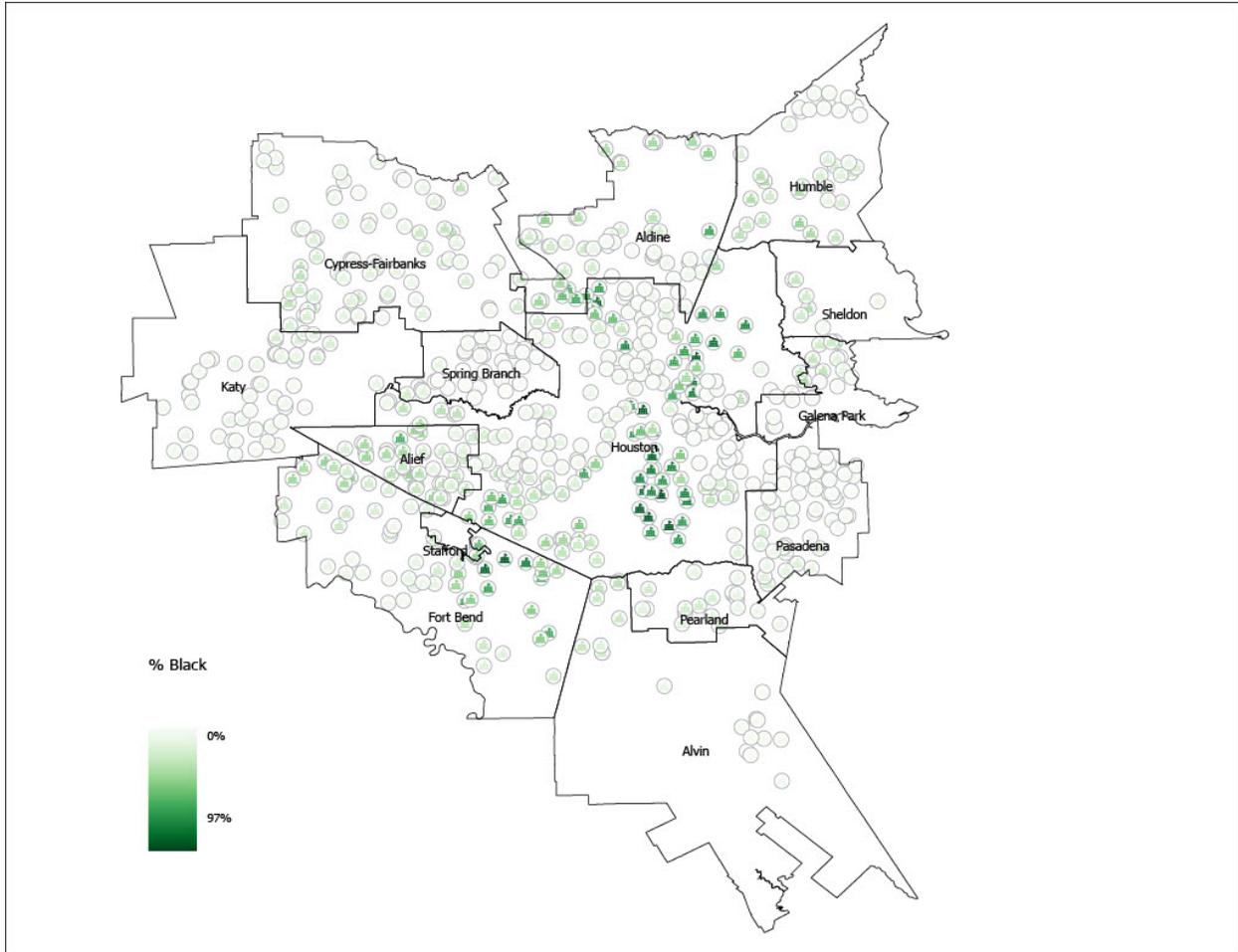


Medium Percentage Minority Districts: Alief, Alvin, Cypress-Fairbanks, and Spring Branch

First is **Alief ISD**, with a slightly above average (54%) Hispanic student population. Alief has roughly 80% of its students being offered free or reduced lunch. The percentage of single-parent mothers in the district is about 30%, while the poverty percentage is 34%. Next, we review **Alvin ISD**, which has a student body that is more demographically split, though Hispanics make up the majority with 40%. The percent of single-parent moms within the district is roughly 15%. While the district poverty rate reflects this with 17% living at or below the poverty line, the percentage of students on free or reduced lunch is relatively high, at about 52%. **Cypress-Fairbanks ISD** has a similar student population distribution as Alvin, with a 44% Hispanic population leading the pack. The poverty rate in Cy-Fair is 13%, with 17% of the district reporting a single parent mom. The percentage of students on free or reduced lunch is slightly lower than Alvin, at 48%. **Spring Branch ISD** has a student population made up of 59% Hispanics. The

poverty rate of Spring Branch is around 27%, while the percentage of single-parent moms is about 19%. As for free or reduced lunch, students requiring this service sit at about 57%.

Figure 3: School Districts by Percentage Black



High Percentage Minority Districts: Aldine, Fort Bend, Galena Park, Houston, Pasadena, and Stafford

Starting first with **Aldine ISD**, which is a district comprised mainly of minorities, with the highest student population being Hispanic at 73%. This district has roughly 32% of its students reported having a single-parent mother, with the poverty rating being nearly 40% of the entire district. One of the highest descriptive statistic found for Aldine is that almost 90% of their students are on free or reduced lunch, which is a crucial indicator of household incomes for the district at-large. **Fort Bend ISD's** student body is almost evenly split amongst the largest racial subgroups in the Houston area, with the majority being African American at just 27% of the population, alluding to just how diverse the district student body is. The percentage of students on

free or reduced lunch is relatively low, at 38%. The poverty rate and percentage of single-parent moms reflect this, with the former being 12% and the latter being 16%. **Galena Park ISD** has a student population that is 79% Hispanic, one of the largest percentages for the racial group. 31% of Galena Park is considered living in poverty, with the percentage of single-parent moms coming in at roughly 24%. Next, we review **Houston ISD**, the largest district in the region, which has a student body that is made up of 62% Hispanics. The percentage of free or reduced lunch is relatively high, approaching 70%. Looking at the poverty rate and percentage single parent mom supports this, with our data reporting 43% and 49%, respectively. **Pasadena ISD** has a large Hispanic population, with 83% of the student body marking this as their racial identification. The poverty and single-parent mom rate are both roughly about a quarter of the district. However, the free or reduced lunch percentage for Pasadena is relatively high, nearly 75%. **Sheldon ISD** has a student body that is majority Hispanic, with 71% of the district population making up this racial group. The percentage of students on free or reduced lunch is one of the highest, near 81%. The percentage of single-parent moms is 22%, while the poverty rate is near 30%. Finally, the last school on our list is **Stafford MSD**, which has a student body that is closely split between 47% Hispanic and 41% African American. Free or reduced lunch rates hover around 67%. While the percentage of single-parent moms 20%, with the poverty rate near 30%.

Figure 4: School Districts by Percentage Hispanic

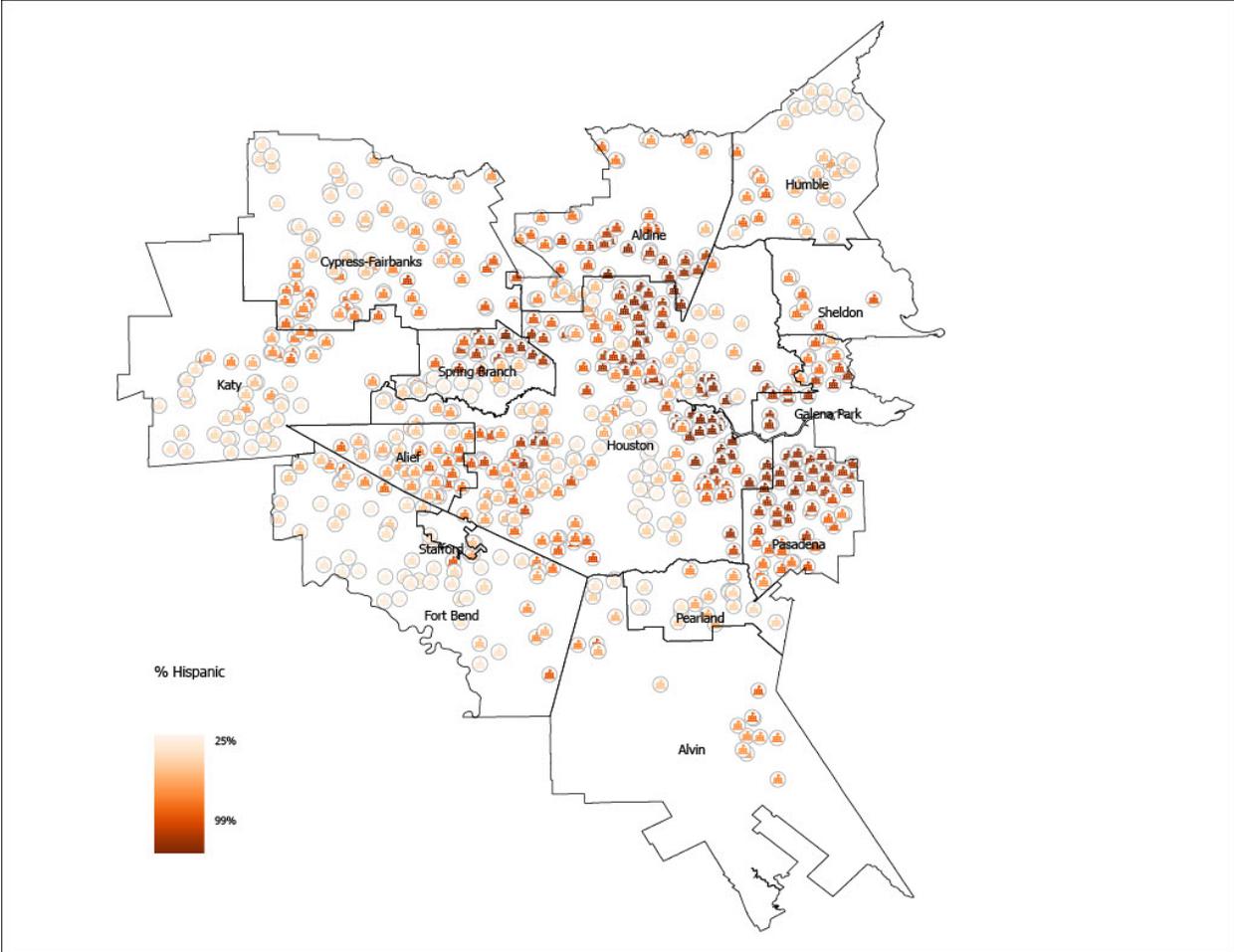
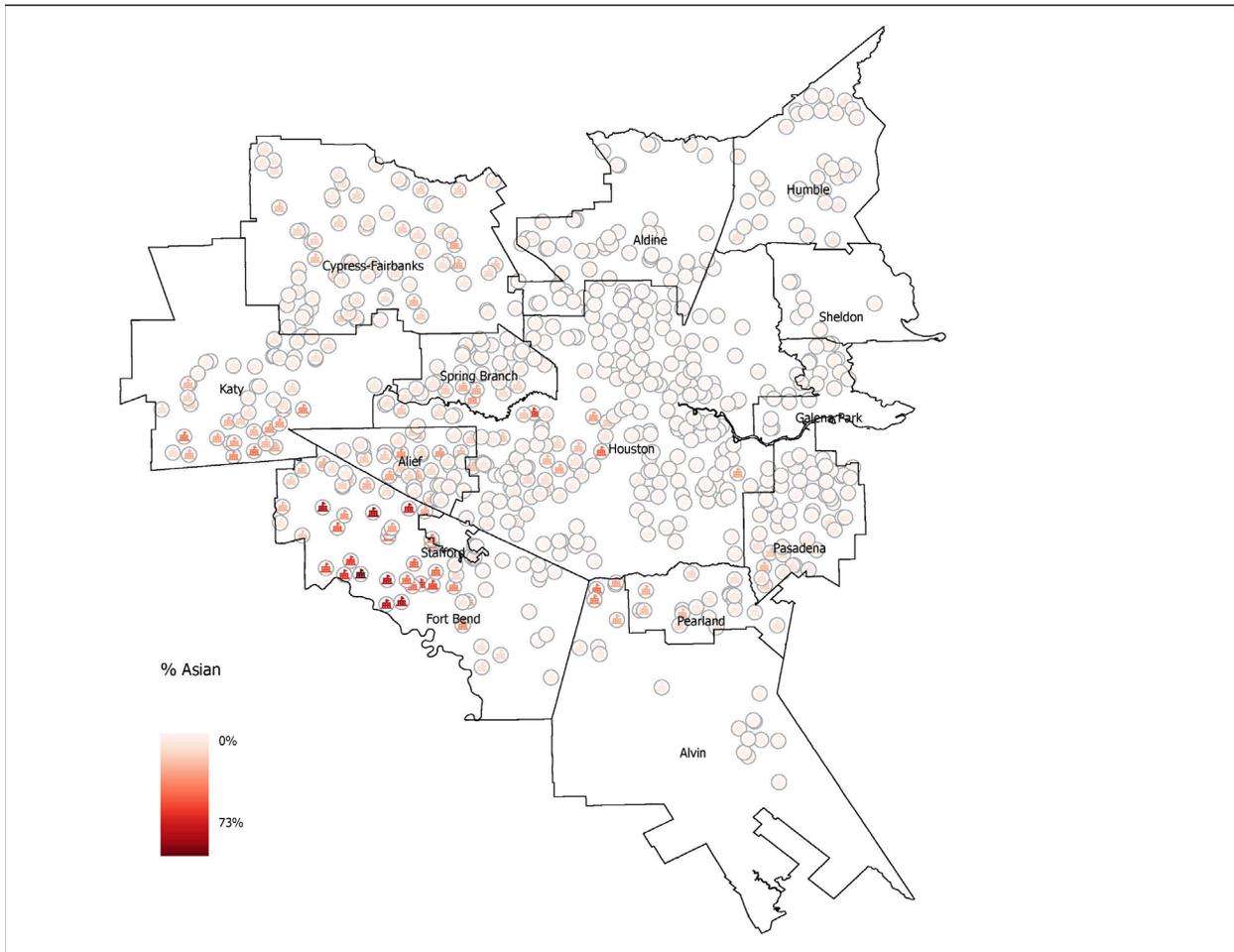


Figure 5: School Districts by Percentage Asian



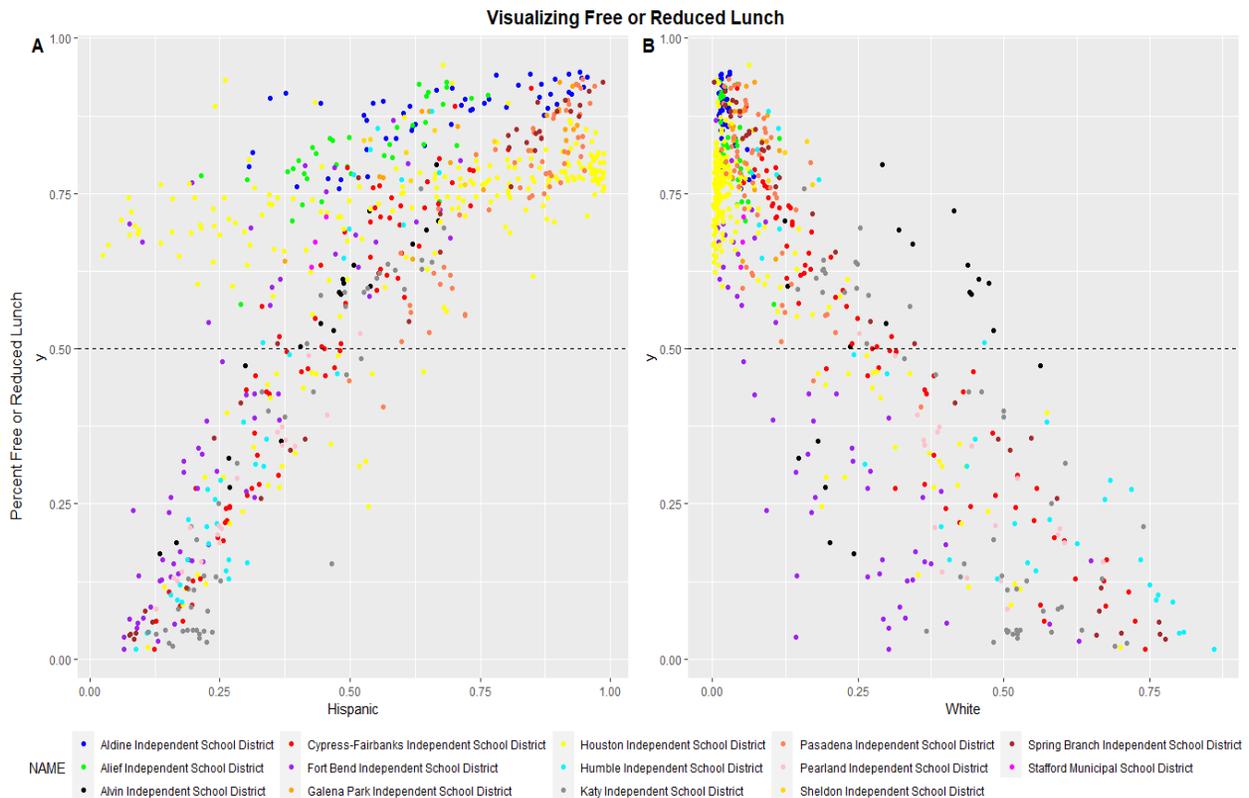
A Tale of Two Demographics:

An examination of the correlation between free or reduced lunch and the racial composition of schools within all districts is analyzed in Figure 5 below. Graph A plots the percentage of Hispanics along the x-axis, with the y-axis plotting the percent of students within a district on free or reduced lunch. Graph B plots the percentage of non-Hispanic white students along the x-axis, with the percentage of students on free or reduced lunch plotted along the y-axis. Each of the fourteen school districts are color-coded, with the schools within each district shown in the graph corresponding with the color displayed on the legend.

Figure 5 shows a clear and stark impact of race on the percentage of students reporting being on free or reduced lunch. As Hispanic students' rate increases, the percentage of students on free or reduced lunch increases quite dramatically. Similarly, as the percentage of non-Hispanic white students increase throughout the districts examined, the proportion of students reporting free

or reduced lunch status decreases. We can interpret from Figure 5 that being a racial minority systematically contributes to the percentage of students who meet the threshold for free or reduced lunch. Not only does race matter, but school location matters as well. Schools located in more urban and minority-majority districts, such as Houston ISD (yellow dots), are disproportionately more likely to have a student on free or reduced lunch than majority-white districts like Humble ISD (light-blue dots). Unfortunately for the Houston-area school districts, there still seems to be deep unequal divides across critical environmental indicators.

Figure 6: Free or Reduced Lunch by School District



Data

Using the Stanford Education Data Archive (SEDA) reported "Grade (within cohort) Standardized" scale (GCS), the research team compiled "below" and "above" average

achievement indicators for each of the fourteen Houston-area school districts.² The GCS academic achievement indicators were then combined with the Texas Education Agency's (TEA) "Student Enrollment Reports," which contained fundamental historical data on the student body demographic and socioeconomic makeup. To analyze how school board composition contributes to student academic success, as measured by test scores, data was also compiled through a content analysis of the sampled school district's school board web pages. Key demographic indicators such as race, gender, election type, teaching experience, and overall school board diversity were examined and combined with SEDA and TEA datasets.

The correlations found between environmental indicators (e.g., the percent of students receiving free or reduced lunch) is the primary objective of this report. As such, we by no means suggest that school board composition (e.g., demographics, previous employment, etc.) is the only or even the most important predictor of academic achievement. Numerous other indicators such as local and state budgets, resource allocation, administrative composition, school leadership structure, and local/state governments' tax structure are held constant throughout this analysis and go beyond this report's objective. These determinants, though important, are left for future research surrounding academic achievement to explore further in-depth.

Using a Geographic Information System (GIS) framework, spatial maps of the sampled school districts were created to correctly display how demographics, SES, environmental indicators (poverty, single-parent mother household), and school board diversity contribute to the growing disparity in academic achievement.

Results

The results show that Houston-area school boards are overwhelmingly made up of predominately non-Hispanic white members that served majority-non-Hispanic white school districts. Diverse school boards are mainly located within the Houston Metroplex, and these boards predominantly serve majority-minority student populations.

² The Educational Opportunity Project at Stanford University (EOP) contains the Stanford Education Data Archive (SEDA), which is the "first national database of academic performance" offered to social scientists to research further how average test scores, learning rates, and overall trends in test scores affect local schools and communities (Reardon et al. 2019).

Non-Hispanic white school boards and majority-white districts outperformed diverse school boards from majority-minority districts.

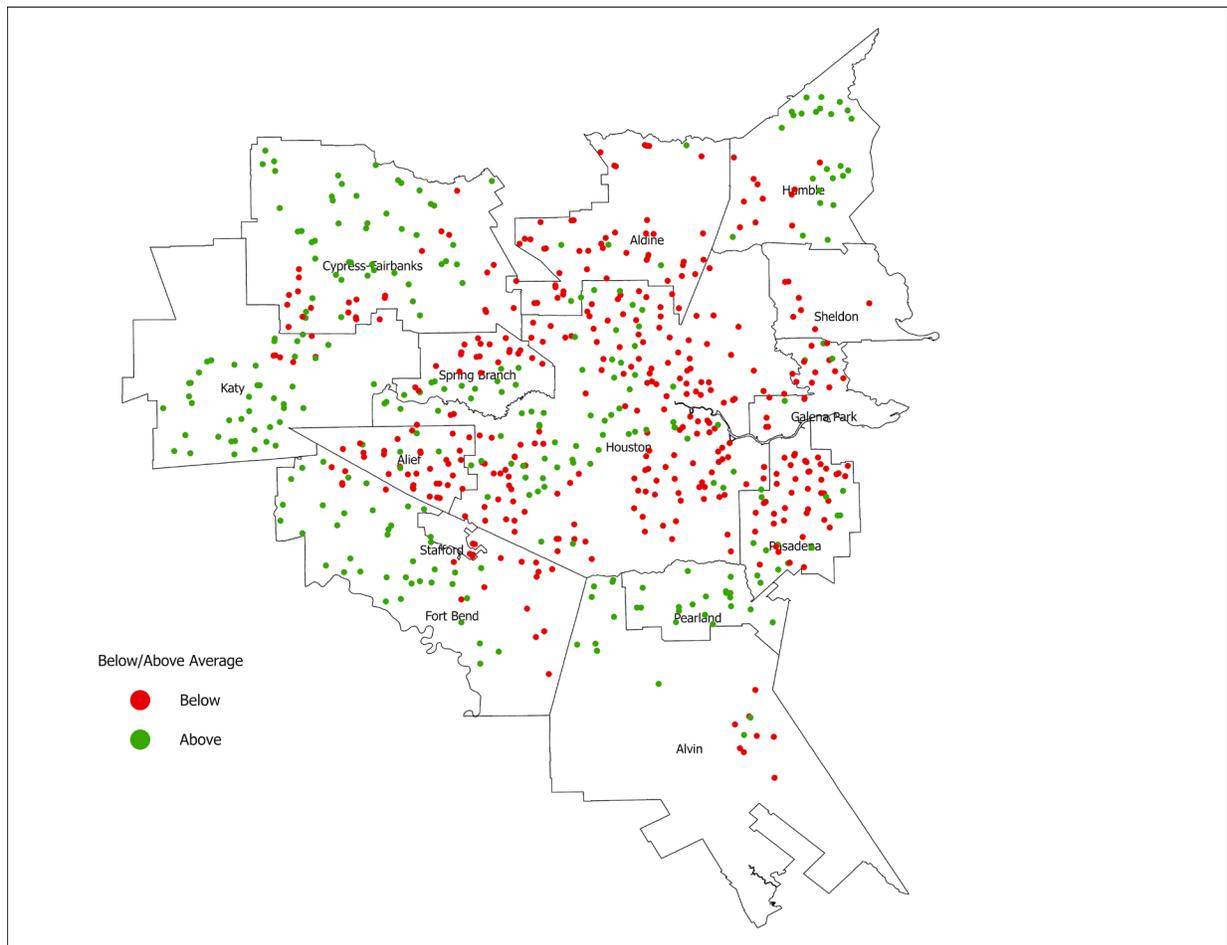
School boards that have diverse members tend to serve racial and ethnic minorities that tend to underperform in comparison to non-Hispanic white districts.

In terms of academic achievement, the research team found that non-Hispanic white school boards and majority-white districts outperformed diverse school boards from majority-minority districts. The results from the analysis suggest that school boards that have diverse members tend to serve racial and ethnic minorities that substantially underperform on the GCS scale. Figure 6 provides an overview of school district academic achievement on the GCS scale. Each observation represents a specific school within a district. It is clear from the map that districts with a higher percentage of

racial groups and more diversity at the school board level tend to underperform in terms of academic achievement. For example, districts such as Houston ISD tend to have the largest population of Hispanics and African Americans, who also score well below their non-Hispanic white-majority counterparts on standardized testing. These minority-majority school districts are also the most impoverished, maintain the lowest SES, and have the highest percentage of single-parent mothers within the household. This can be juxtaposed with non-Hispanic white school districts, such as Katy ISD, which run contrapositive to majority-minority districts and experience higher than average SES, lower poverty, as well as a significant decrease in the percentage of single-parent mothers.

These results from Figure 6 indicate that as far as school board diversity and academic achievement are concerned, within the Houston area, school districts are still primarily divided along a Black/Brown-White paradigm. In geographic terms, the Houston area highway system, known as the "Beltway," systematically distinguishes between academic success or hardship for the region's student population. The maps created only further exemplifies the geographic and racial divide providing evidence that the public-school system in Houston is still unequal and negatively affects minority students' academic achievement primarily.

Figure 7: Academic Achievement Score by School and District



The Impact of COVID-19

As school districts across the country began to either move to virtual learning or drastically reduce the levels of students and faculty allowed within a given school due to the COVID-19 pandemic, questions of inequality and academic achievement started to swirl almost parallel to the virus itself.

Texas state officials in March of 2020 chose to cancel the state's academic achievement test – STAAR – in the wake of the pandemic and the lack of resources available to enable students to take the examination safely (Texas Education Agency 2020). However, a year later, the state plans to resume STAAR exams with the qualification that only student's enrolled "in-person" (e.g., physically at the school) will have to take it (Swaby, 2021). As both recent and historical economic research has concluded, Black and Hispanic community members – which make up a significant

part of Houston area school populations – are significantly less likely to have jobs that provide the opportunity to telework (Gould and Shierholz, 2020). Without this privileged option, African American and Hispanic children are significantly less likely to have their children enrolled in virtual learning. As we have discussed previously, measures of academic achievement decrease significantly for minority communities within the Houston area. Therefore, by creating a virtual-opt-out option, Texas is requiring the very individuals who, through various socioeconomic indicators, are less likely to meet minimum testing requirements and take STAAR presumably at a higher proportion than their fellow non-Hispanic white counterparts. Though data has not yet been released, initial research concluded throughout this article predicts that this will only increase the academic achievement gap between racial minorities and Whites within the Houston area, leading to funding loss and potential district closure.

Another aspect of the COVID-19 pandemic that has rippled through Houston-area school districts is the drastic decrease in student enrollment from pre-pandemic levels. On average, from October 2019-October 2020, school districts across the entire state lost roughly 157,000 students, or 3% of the state's student population (Texas Education Agency, 2021). The largest enrollment drops occurred in early educational settings, where a whopping 54% of students unenrolled (Texas Education Agency, 2021). Locally, diverse and urban school districts like Houston and Alief experienced enrollment drops of roughly 15,000 and 4,400, respectively (Miles, 2020). More rural and whiter communities such as Katy and Cypress-Fairbanks experienced dramatically lower enrollment drops of 300 and 2,575 each (Miles, 2020).

Though the Texas Education Commission (TEA) has yet to release data that would allow for a complete analysis of Houston area schools, the little available data paints a picture of growing inequality and unenrollment for students who reside in more diverse and urban settings. With pandemic data showing that racial and ethnic minorities are more likely to become infected by COVID-19 than their non-Hispanic white counterparts, coupled with research depicted above showing that minority communities are less likely to be able to work from home, it seems plausible that African American and Hispanic members de-enrolled their children entirely in an effort to not expose them to the virus (Marshall III, 2020; Gould and Shierholz, 2020). With the impacts of the global pandemic still raging, it will take researchers and community members years to unearth the actual and likely dramatic effects of COVID-19. However, this snippet of research highlights some of the initial findings specific to Texas and Houston-area school districts that paint an eerie picture of racial and ethnic inequality across academic achievement and student enrollment.

Conclusion

This study offers significant findings that should be of interest to policymakers, education policy researchers, and members of government public education boards in the state of Texas.

These findings offer critical insight into how Houston area school districts still face significant unequal outcomes that negatively affect minority students' academic achievement. Findings by Sohoni and Saporito (2009), who utilize similar mapping techniques to measure racial inequality in urban school districts, support providing more opportunities for students to attend their local neighborhood schools to decrease racial disparities within school districts. Policy recommendations to help reduce racial inequality should include ways to reduce private, magnet, and charter school's contributions to the issue (Sohoni and Saporito, 2009) and increase or facilitate disadvantaged and underrepresented groups' attendance.

The research conducted showcases how descriptive representation and school board professionalism, though necessary, may not be the most significant indicator of school district success in terms of test scores. Deep socioeconomic and racial cleavages still plunder much of the more urban Houston-area school districts. Until these environmental and local issues are dealt with at the district level, our results show that no matter how representative and professional the school board is, academic achievement gaps between majority-minority and majority-white school districts will persist. Altaweel (2019) notes that one-way education policy experts might alleviate the academic achievement gap in urban school districts is to create a more equitable appropriation system for school funding via legislation. Because federal funding and local taxes tend to favor suburban regions rather than urban centers, schools located within major cities such as Houston face financial hardships that result in a disproportionate number of students falling through the cracks (Altaweel 2019). With the recent setbacks experienced by Houston ISD – one of the most diverse and professional school boards in the region – due to deficient levels of academic achievement amongst its diverse student body, it is now crucial to consider what policies and resources can be developed and devoted to increasing the academic success of underrepresented students in the Houston area.

References

- "Not Only Is Houston Getting More Diverse, but Residents' Households Are, Too." (2019). *The Kinder Institute for Urban Research*. <https://kinder.rice.edu/urbanedge/2019/05/14/not-only-houston-getting-more-diverse-residents-households-are-too>.
- Agency, Texas Education. 2020. "Cancellation of STAAR Testing for the Remainder of the School Year." <https://tea.texas.gov/about-tea/news-and-multimedia/correspondence/taa-letters/cancellation-of-staar-testing-for-the-remainder-of-the-school-year> (February 26, 2021).
- . 2021. "TEA Statement on SY 2020-21 Enrollment in Texas Public Schools." <https://tea.texas.gov/about-tea/news-and-multimedia/news-releases/news-2021/tea-statement-on-sy-2020-21-enrollment-in-texas-public-schools> (February 26, 2021).
- Alsbury, T. L. (2008). *The Future of School Board Governance: Relevancy and Revelation*. Rowman & Littlefield Education.
- Altaweel, Mark. 2019. "Mapping School Performance and Inequality With GIS." *GIS Lounge*. <https://www.gislounge.com/mapping-school-performance-and-inequality-with-gis/> (December 11, 2020).
- Conway-Turner, J., Williams, J., & Winsler, A. (2020). Does Diversity Matter? School Racial Composition and Academic Achievement of Students in a Diverse Sample. *Urban Education*, 0042085920902257.
- Feuerstein, A. (2002). Elections, voting, and democracy in local school district governance. *Educational Policy*, 16(1), 15-36.
- Gould, Elise, and Heidi Shierholz. "Not Everybody Can Work from Home: Black and Hispanic Workers Are Much Less Likely to Be Able to Telework." *Economic Policy Institute*. <https://www.epi.org/blog/black-and-hispanic-workers-are-much-less-likely-to-be-able-to-work-from-home/> (February 26, 2021).
- Marshall, III, William. 2020. "Why Is COVID-19 More Severely Affecting People of Color?" *Mayo Clinic*. <https://www.mayoclinic.org/diseases-conditions/coronavirus/expert-answers/coronavirus-infection-by-race/faq-20488802> (February 26, 2021).
- Meier, K. J., & England, R. E. (1984). Black representation and educational policy: Are they related?. *American Political Science Review*, 78(2), 392-403.
- Miles, Jason. 2020. "'It's a Lot More than What We Thought.' Fewer Students Mean Fewer Dollars Fo Houston-Area School Districts." *khou.com*. <https://www.khou.com/article/news/education/covid-19-causes-drop-in->

[enrollment-for-houston-school-districts/285-a0ca77c8-914a-4d99-9734-3a7257079eb0](https://www.houston.org/news/houston-still-most-diverse-city-nation-report-finds) (February 26, 2021).

- Mistretta, A.J. (2019). "Houston Still Most Diverse City in the Nation, Report Finds." *Greater Houston Partnership*. <https://www.houston.org/news/houston-still-most-diverse-city-nation-report-finds>.
- Orfield, G., & Eaton, S. E. (1996). *Dismantling Desegregation. The Quiet Reversal of Brown v. Board of Education*. The New Press, 500 Fifth Avenue, New York, NY 10110.
- Reardon, S. F., Kalogrides, D., & Ho, A. D. (2019). Validation methods for aggregate-level test scale linking: A case study mapping school district test score distributions to a common scale. *Journal of Educational and Behavioral Statistics*, 1076998619874089.
- Sohoni, Deenesh & Saporito, Salvatore. (2009). Mapping School Segregation: Using GIS to Explore Racial Segregation between Schools and Their Corresponding Attendance Areas. *American Journal of Education*. 115. 10.1086/599782.
- Swaby, Aliyya. 2021. "Watch: Texas Education Commissioner Mike Morath on Educating Students during a Pandemic." *The Texas Tribune*. <https://www.texastribune.org/2021/02/05/texas-public-education-mike-morath/> (February 26, 2021).
- Tallerico, M. (1989). The dynamics of superintendent-school board relationships: A continuing challenge. *Urban Education*, 24(2), 215-232.
- Texas Tribune. (2019). *TEA to take over Houston ISD by replacing school board and superintendent*. Retrieved from <https://www.texastribune.org/2019/11/06/tea-take-over-houston-isd-school-board-replace-superintendent/>.
- United States Census Bureau. (2020). *National center for education statistics*. Washington, DC. Retrieved from <http://nces.ed.gov/pubsearch>.
- World Population Review. (2019). *Houston Texas population 2020*. Retrieved from <https://worldpopulationreview.com/us-cities/houston-population/>.

Glossary

Free or reduced lunch: A state program by which students are eligible for breakfast and lunch at either a reduced or free price. Students are categorically eligible through participation in certain Federal Assistance Programs, such as the Supplemental Nutrition Assistance Program (SNAP), or based on certain factors such as homelessness, migrant status, runaway, or foster. Household income is also a large contributor to eligibility for free or reduced lunch programs.³

Environmental Indicator: An environmental indicator is a individual's geography, neighborhood, home life, socioeconomic status, and family circumstances that potentially contribute to certain objectives such as academic success, economic well-being, psychological well-being, and more. Environmental indicators, for the purposes of this paper, are a critical predictor of academic achievement on standardized testing.

Family Poverty Rate: The family poverty rate is the percentage of households within a school district or community that falls below the income threshold set by the Department of Health and Human Services. For example, a family of four (mom, dad, brother, sister) are considered impoverished if their family income is below \$26,500.⁴

Academic Achievement: For the purposes of this paper, academic achievement is considered the level of student success measured by a certain percentage achieved on tests or state-sponsored examinations.

Single Parent Mom: Single parent mom is defined in this paper as a family-unit which contains any amount of children but only has one biological parent – the mother – providing support (financially, emotionally, etc.) for the household.

³ See more information on definition and eligibility at <https://www.benefits.gov/benefit/1990>.

⁴ The Department of Health and Human Services provides more categories of income for meeting the poverty requirement. This information can be found here <https://aspe.hhs.gov/poverty-guidelines>.

U N I V E R S I T Y of
HOUSTON

CENTER for MEXICAN AMERICAN STUDIES