

## Written Report (15 points)

To receive all points, the written report presents a cohesive written analysis that:

- Summarizes the analysis (5 points)

There are 15 schools with a total of 39,170 students and \$25M budget. The average math and reading scores for those schools are 79 and 82 respectively. 75% of the students in those 15 schools passed math and 86% of the students in those 15 schools passed reading. 65% of the students in those 15 school passed both math and reading.

We did various analyses to understand drivers for students' academic performance by looking at students' performance by school type, per student budget and size. We also examined students' academic performance by grade to understand if different patterns in academic performances can be observed across different grades.

Schools with large size generally perform the worst compared to schools with small to medium sizes even though most large size schools have higher per student budget vs. small to medium size schools. This is confirmed by the scores by school size analysis which shows large schools on average perform worse than small to medium schools in both math and reading. We should investigate how large schools manage their budget and resources to uncover the reasons for their underperformance.

- Draws two correct conclusions or comparisons from the calculations (10 points)

(1) Students in charter schools appear to perform better in math and reading than students in district schools. As shown in the analysis, the highest performing schools measured by the overall passing rate of math and reading are all charter schools. The lowest performing schools measured by the overall passing rate of math and reading are all district schools. This is also confirmed by the scores by school type analysis where charter schools on average perform better than district schools in both math and reading.

We should investigate reasons causing the diverging academic performances between charter and district schools and leverage practices observed in charter schools to help district schools improve their students' academic performance.

(2) Students in schools with lower per student budget generally perform better in math and reading than students in schools with higher per student budget. As shown in the analysis, the per student budget of schools with the lowest overall passing % such as Rodriguez High School and Huang High School falls in the highest spending bins of \$645-\$680. While the per student budget of schools with the highest overall passing % such as Cabrera High School and Wilson High School falls in the lowest spending bins of \$585.

We should investigate those schools with the lowest overall passing but highest per student budget. Those schools probably are spending using their budget efficiently which result in poor academic results.

