Written Report:

Analysis Summary

The analysis first reveals that the datasets being analyzed include information about 15 schools and 39,170 students who attend these schools. In total, the 15 schools have around 27 million dollars in budget to spend on the students, who collectively achieved an average math score of 78.8% and an average reading score of 81.9%. It also reveals that about 75% of all students passed math, 86% of students passed reading, and 65.2% of students passed both math and reading.

The second analysis broke all the data mentioned above down further to look at it on a school-by-school basis. It also included the type of school (district vs. charter) and calculated a 'Per Student Budget' by dividing each school's total budget by the number of students at that school. Next, we sorted the schools by the overall percentage of students who passed both math and English, first from highest to lowest to show the top-performing schools, and then from lowest to highest to show the lowest-performing schools.

The third analysis looked at both English and math scores but separated the data by both grade and school to reveal differences in grade-by-grade success. In contrast, the fourth analysis used the school-by-school data frame created for the second analysis and divided the data into various bins for further analysis. The first prompt separated the data by spending range (per student) into four categories, the second separated the data by three school sizes (small, medium, or large), and the third separated the data by school type (charter or district). For each of these data groupings, the average math score, average reading score, percentage passing math, percentage passing reading, and overall passing percentage were displayed based on the categories outlined above to provide further insights into student success.

Two conclusions

1) The top five performing schools based on % overall passing were all charter schools. Additionally, the final analysis, which looked at the average math score, average reading score, % passing math, % passing reading, and % overall passing for charter schools versus district schools, revealed that charter schools performed significantly better in each measure of success. These results point to the conclusion that charter school students have much better academic outcomes than district school students.
2) Placing the “Per Student Budget” data into bins indicated that students in the higher per student spending ranges actually did not perform better than students in the lower per student spending ranges. In fact, students in the “<$585” category (which was the lowest category) had the highest overall passing rate which was about 90.4%. This fact points to the conclusion that higher per student spending does not correlate with better academic outcomes.