School District Analysis

The following data analyzes key metrics to give high-level screenshots of the performance of this school district, as well as each individual school in the district. This school district contains 15 high schools and just under 40,000 students. The total budget for the entire district is $24,649,428.

As a district, the average math score is 78.985% with about 75% of students passing their math classes, while the average reading score is 81.877% with 85.8% of students are passing their reading classes. Overall, only 65.17% of students are passing both their math and reading courses. At face value, this may indicate that the district is putting more emphasis in reading than they are in math.

Looking further at each school within the district, we can see that 8 of the schools are charter schools while the other 7 are district schools. The top 5 schools in overall passing percentage all happen to be charter schools, while the bottom 5 schools in passing percentage are all district schools. This comes as no surprise--charter schools by nature are more independent and flexible than traditional public schools. They can use strategies and more individualized learning plans that other schools may not be able to.

As we dive into each individual grade, we can see consistency across all schools. None of the schools had a decline or incline of average greater than 1.5% in math or reading from 9^{th} grade to 12^{th} grade. This would indicate that the staff of each school are on the same page, and the teaching is consistent throughout students'

tenures at each school. While some schools can be pushed to perform better, consistency is a good sign for this district.

Lastly, we were able to organize school performance by budget per student and by school size. Surprisingly, the schools that were given a smaller per-student budget outperformed the schools with a larger per-student budget by an overwhelming margin. Additionally, the schools with less than 2,000 students perform much greater than schools with over 2,000 students. From this, we can draw two possible conclusions: 1) Schools with less students have a better opportunity to help more students succeed in their class than schools with a larger number of students, and 2) having a smaller budget can push schools/staff to be more creative and engaging with students in their methods to produce results.

Charter schools have consistently high scores for both subjects, and district schools have decent passing rates in the subject of reading. Overall, what seems to be dragging down the district's numbers are the number of students passing math within district schools. As we see with this data, it is not for lack of resources. The school board should explore options how to improve math scores to raise the overall performance of the district. These options could include revamping of the math curriculum, asking math teachers what they may need to succeed, staffing changes, or otherwise.