Strategic Analysis of District-Wide Standardized Test Results

District Summary

The district consists of 15 unique schools, serving a population of approximately 39170 students. The combined budget of these institutions is $24649428, reflecting a substantial investment in children's education.
Academically, the average math score across the district is 78.99, while the reading average is 81.88. The percentage of students passing math is 74.98% which is slightly lower than the 85.81% passing reading. A pressing concern is that only 65.17% met the passing criteria for both subjects.

School Summary

Scores by school spending: There appears to be an inverse relationship between spending per student and academic performance. The data suggests that the most efficient spending range is the lowest one (<$585), which yields the best academic results. As spending per student increases, we see a decline in performance, indicating that higher investment does not necessarily translate into better academic outcomes.
Scores by school size: Schools with smaller populations tend to have higher overall passing rates compared to large schools. The average overall passing rate for small schools (less than 1000 students) is approximately 89.88%, which is significantly higher than the 58.29% observed in large schools (2000-5000 students).
District vs. Charter: Charter schools have significantly higher average scores in both math and reading compared to district schools. The average math score for charter schools is approximately 83.48, and the average reading score is around 83.90, whereas district schools have an average math score of about 76.96 and an average reading score of 80.97. In charter schools, about 93.62% of students pass math and 96.58% pass reading, leading to an overall passing rate of approximately 90.43%. Conversely, district schools have a 66.55% passing rate in math and 80.80% in reading, with an overall passing rate of 53.67%. The overall passing rate, which combines both math and reading, shows that students in charter schools are almost twice as likely to pass both subjects compared to students in district schools.

Conclusion

Two conclusions or comparisons from the calculations:

1. Smaller schools show higher overall passing rates, suggesting that they may provide an educational setting that allows for more personalized attention or better student engagement compared to larger schools.

2. Charter schools outperform district schools in both academic performance and passing rates. This could indicate that the operational flexibility and educational approaches taken by charter schools contribute significantly to student success.