PyCity Schools Summary Analysis

The PyCity School District, which serves 39,170 students across 15 Charter and District high schools, operates on a budget of \$24.65 million. This breaks down to an average spending of \$629 per student, though actual spending across schools ranges from \$585 to \$680.

Key District Statistics:

- Average Math Score: ~79%
- Average Reading Score: ~81.9%
- Percentage of Students Passing Math: 75%
- Percentage of Students Passing Reading: 85.8%
- Percentage of Students Passing Both: 65.2%

These figures provide a broad overview of the district's performance. However, the data also suggests disparities in performance, especially when it comes to the percentage of students passing both math and reading, which is significantly lower (65.2%) compared to the individual passing rates for math (75%) and reading (85.8%). Per Student Spending

1. Per Student Spending

Finding: Higher per-student spending is not correlated with better performance. Schools spending \$585 or less per student tend to perform better in all categories, while performance decreases as spending increases further.

Insight: This inverse relationship could suggest that factors beyond just financial investment (like resource allocation, teaching quality, or school culture) may play a more significant role in student performance. Schools with the highest per-student spending might face other challenges, such as higher operational costs or inefficiencies that impact outcomes.

2. Charter vs. District Schools

Finding: Charter schools slightly outperform District schools in average math and reading scores. However, Charter schools show a significantly higher percentage of students passing, with ~16% better performance in reading, ~27% better in math, and ~37% better in overall passing rates.

Insight: This suggests a greater consistency in student performance in Charter schools, while District schools may have a wider range in achievement. The variance in District school performance could indicate disparities in resources, and should be examined further.

3. School Size

Finding: Larger schools (over 2000 students) perform worse than smaller or medium-sized schools. Smaller and medium-sized schools have virtually the same scores and passing rates.

Insight: School size appears to be a clear indicator of performance. Larger schools may struggle with overcrowding, less individualized attention, or strained resources. Smaller and medium-sized schools could offer more personalized learning environments, contributing to better student outcomes.

Potential Actionable Insights

Targeted Resource Allocation: Schools with lower per-student spending but higher performance might serve as models for more efficient use of funds. District-wide strategies could focus on emulating best practices from these schools.

District School Support: Given the wide performance variance in District schools, interventions targeting underperforming students or schools may help close the achievement gap. A focus on teacher development or student support programs in these schools may be beneficial.

Managing School Size: Efforts to reduce overcrowding in larger schools or increase the number of medium/small-sized schools could lead to performance improvements.