

PyCitySchools District Analysis Report

This analysis examines the academic performance and budgetary data from a fictional school district, evaluating trends in student performance by school type, size, and funding per student. The data was cleaned, organized, and used to calculate key metrics such as average scores, passing percentages, and per-student spending across both district and school levels. Summary statistics, grouped insights, and comparisons were generated to highlight performance differences between schools.

Key Findings:

1. Smaller and Charter Schools Outperform Larger and District Schools

Charter schools showed significantly higher average math and reading scores, as well as overall passing rates, when compared to district schools. For example, Charter schools had an average overall passing rate above 90%, whereas District schools often fell below 75%. Smaller schools-especially those with fewer than 1,000 students-demonstrated higher student performance, likely due to more focused teacher-student interaction and manageable class sizes.

2. Higher Spending Does Not Guarantee Better Performance

An inverse relationship was observed between per-student budget and academic performance. Schools spending \$645-\$675 per student performed better than schools spending \$680-\$700, indicating that resource allocation efficiency may be more critical than total spending. This suggests that targeted investments-rather than simply increasing budgets-could improve student outcomes.

Conclusion:

The PyCitySchools analysis reveals that school type and size are strongly correlated with student performance, and that efficient use of funding plays a key role. Based on these insights, education policy efforts should consider optimizing school environments and revisiting funding strategies to ensure effectiveness rather than volume of spending.