# **PyCitySchools Analysis Report**

### **Summary of the Analysis**

In this analysis, the performance of students across schools within the district was assessed, focusing on math and reading scores. Key metrics like the total number of schools, students, and budget were calculated, along with the average math and reading scores across the district.

For individual schools, we calculated the percentage of students passing math and reading as well as the percentage passing both subjects. These metrics were used to rank schools from the highest to lowest performers. Further analysis examined the relationship between school spending, size, and type with student performance, to identify trends in the data.

## **Key Findings:**

#### 1. School Type Performance:

- Charter schools consistently outperformed district schools in terms of both math and reading scores. The average math score for charter schools was 83.47 compared to 76.95 for district schools. Similarly, charter schools had a higher percentage of students passing math (93.62%) and reading (96.58%), with a combined overall passing rate of 90.43%.
- District schools, on the other hand, had a significantly lower combined overall passing rate of 53.67%, indicating a potential gap in performance between the two types of schools.

#### 2. Impact of School Spending on Performance:

- Interestingly, schools with lower per-student spending (less than \$585 per student) performed better overall. These schools had an average math score of 83.46 and a reading score of 83.93, with over 90% of students passing both math and reading.
- In contrast, schools that spent more than \$645 per student saw lower average math and reading scores (76.99 for math and 81.02 for reading) and significantly lower passing rates (53.53% overall passing rate). This suggests that higher spending per student does not necessarily lead to better performance.

#### **Conclusions:**

- Charter schools consistently outperform district schools: This difference suggests
  that the school type may play a significant role in student outcomes. Policymakers might
  investigate the practices and resources available at charter schools to see if they can be
  implemented in district schools to boost performance.
- 2. **More spending per student does not guarantee better results**: Schools with lower per-student spending showed better performance, particularly in terms of passing rates for both math and reading. This indicates that effective resource utilization, rather than sheer budget size, may be a more critical factor in improving student outcomes.