**PyCity School Analysis**

This report is based on the data obtained from the Schools\_complete.csv and Students\_complete.csv files.

My findings indicate the following:

* Charter schools tend to outperform District schools in both average math and reading scores, as well as in the percentage of students passing both subjects. (See Data 1 for details.)
* The analysis also reveals an unexpected trend: higher per-student spending in District schools does not consistently correlate with improved academic performance. (Refer to Data 2 for further information.)

District Summary:

1. Total Schools:

• There are a total of 15 schools in the district.

2. Total Students:

• The district has a student population of 39,170.

3. Total Budget:

• The combined budget for all schools in the district is $24,649,428.00.

4. Average Math Score:

• The average math score across all students in the district is 78.99%.

5. Average Reading Score:

• The average reading score across all students in the district is 81.88%.

6. Percentage Passing Math:

• Approximately 74.98% of students in the district have passed the math assessment.

7. Percentage Passing Reading:

• Approximately 85.81% of students in the district have passed the reading assessment.

8. Overall Passing Percentage:

• The overall passing percentage, considering both math and reading, is approximately 65.17%.

**DATA 1 :**

Highest-Performing Schools % Overall Passing

Top 5 Highest were Charter school Types

School Type Total Students % Overall Passing

Charter 1858 91.33476857

Charter 1635 90.94801223

Charter 1468 90.59945504

Charter 2283 90.5825668

Charter 962 90.54054054

Charter 1800 90.33333333

Charter 1761 89.89210676

Bottom Performing Schools % Overall passing

The Top 5 lowest were District school Type

School Type Total Students % Overall Passing

District 3999 52.98824706

District 2949 53.20447609

District 2917 53.51388413

District 4635 53.52750809

District 4761 53.53917244

District 2739 54.28988682

District 4976 54.64228296

**Data 2 :**

In this report reflection of per student budget can be seen.

School Type Total Students Total School Budget Per Student Budget Spending Ranges (Per Student)

District 4976 $3,124,928.00 $628.00 $585-630

Charter 1858 $1,081,356.00 $582.00 <$585

District 2949 $1,884,411.00 $639.00 $630-645

District 2739 $1,763,916.00 $644.00 $630-645

Charter 1468 $917,500.00 $625.00 $585-630

District 4635 $3,022,020.00 $652.00 $645-680

Charter 427 $248,087.00 $581.00 <$585

District 2917 $1,910,635.00 $655.00 $645-680

District 4761 $3,094,650.00 $650.00 $645-680

Charter 962 $585,858.00 $609.00 $585-630

District 3999 $2,547,363.00 $637.00 $630-645

Charter 1761 $1,056,600.00 $600.00 $585-630

Charter 1635 $1,043,130.00 $638.00 $630-645

Charter 2283 $1,319,574.00 $578.00 <$585

**Scores By School Type Summary**

Charter schools show considerably better average performance in both math and reading when compared to district schools. Additionally, charter schools have a significantly higher proportion of students passing both subjects, leading to a notably greater overall pass rate. These findings suggest that there may be differences in teaching methods and educational outcomes between charter and district schools.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| school type | Average Math Score | Average Reading Score | % Passing Math | % Passing Reading | % Overall Passing |
| charter | 83.47385187 | 83.89642074 | 93.62083004 | 96.58648927 | 90.43224369 |
| district | 76.95673307 | 80.96663633 | 66.54845257 | 80.79906211 | 53.67220823 |
|  |  |  |  |  |  |

**Scores by School Size Summary**

 On average, charter schools outperform district schools in both math and reading scores, as well as in the proportion of students passing both subjects.

 Charter schools show higher overall passing rates, reflecting stronger overall academic performance.

 While district schools serve larger student populations, this does not always result in higher academic achievement.

 Smaller and mid-sized schools, whether charter or district, generally report higher overall passing rates.

**Scores by School Spending**

1. **<$585:**
   * Charter schools with lower per-student budgets demonstrate strong academic performance across all metrics.
2. **$585-630:**
   * Both charter and district schools fall into this range, with varied performance.
   * Charter schools tend to have higher average scores and passing percentages.
3. **$630-645:**
   * District schools in this range show moderate academic performance.
   * Charter schools exhibit higher average scores and passing percentages.
4. **$645-680:**
   * District schools in this range have lower passing percentages.
   * Charter schools maintain higher academic performance.

In summary, this analysis offers valuable insights into the factors that impact academic performance across PyCity schools. It highlights the importance of adopting a more nuanced perspective on education, one that takes into account not just budget allocations, but also the effectiveness of various school types and sizes.