**Written Report: PyCity Schools Analysis**

**Summary of Analysis:**

The PyCity Schools Analysis provides a thorough analysis of many elements influencing academic achievement in the made-up PyCity school system. This research includes summaries at the district level, school level information, grade level score insights, per-student costs, school size implications, and school type effects. Finding connections between these variables and providing insight into the district's broader educational landscape are the objectives.

**Conclusion 1:** School Type Has an Impact on Performance

The data shows that pupils' academic progress is highly influenced by the sort of school they attend. Across a range of indicators, including average math and reading scores and the percentage of pupils passing both courses, charter schools typically beat district schools. Higher average math scores (83.47 vs. 76.96), higher average reading scores (83.90 vs. 80.97), higher pass rates in math (93.62% vs. 66.55%), higher pass rates in reading (96.59% vs. 80.80%), and a higher overall pass rate in both disciplines (90.43% vs. 53.67%) are all maintained by charter schools. These findings highlight the role that a student's school type has in determining their academic success, with charter schools providing a more supportive learning environment.

**Conclusion 2:** Impact of School Size

The analysis also emphasizes how school size affects student achievement. In terms of a number of important measures, smaller schools (those with fewer than 1,000 pupils) routinely outperform medium-sized (1,000 to 2,000 students) and big schools (2,000 to 5,000 students). Smaller schools have higher average math scores (83.82, 83.37, 83.75), higher average reading scores (83.93, 83.86, 81.34), and higher percentages of students passing math (93.55%, 93.60%, 69.96%), reading (96.10%, 96.79%, 82.77%), and both subjects (89.89%, 90.62%, 58.28%). These results highlight the role that school size plays in creating a climate that supports academic performance, with smaller institutions routinely outperforming their bigger counterparts.