PyCitySchools Data Analysis Report: Lois Stetson

Analysis #1: Smaller Schools Tend to Have Higher Performing Students

The School Size breakdown table shows that smaller schools tend to have higher average math and reading scores than larger schools. This is likely due to the fact that smaller schools have a lower student-to-teacher ratio, which allows teachers to give more individual attention to students. Additionally, smaller schools may have a more close-knit community, which can help to motivate students to succeed.

A good way to confirm this hypothesis would be to include the teacher quantity and teacher reviews in this analysis. If smaller schools do indeed have more teachers per student, then this would provide further evidence that smaller schools are more conducive to student success. Additionally, if smaller schools have higher teacher reviews, then this would suggest that teachers in smaller schools are more effective at teaching students.

Analysis #2: Charter Schools Outperform District Schools

The School Type breakdown table shows that Charter schools have higher average math and reading scores than District schools. This is also reflected in the passing percentages, with Charter schools having a significantly higher percentage of students passing math and reading.

There are a few possible explanations for this trend. First, Charter schools are typically more selective than District schools, meaning that they only admit students who are more likely to succeed. Second, Charter schools have more freedom to innovate and experiment with different teaching methods, which can lead to better outcomes for students. Third, Charter schools are often funded by private donations, which can give them more resources to invest in student achievement.

The comparison between the top five schools and the bottom five schools further supports this trend. The top five schools are all Charter schools, while the bottom five schools are all District schools. This suggests that Charter schools are more likely to produce high-performing schools than District schools.

Analysis #3: No Correlation Between School Budget and overall success/graduation

The budget breakdown table shows that there is no clear correlation between school budget and student success. This means that schools with higher budgets do not necessarily have higher average math and reading scores, or higher percentages of students passing math and reading.

There are a few possible explanations for this trend. First, it is possible that other factors, such as school size or teacher quality, are more important than school budget for student success. Second, it is also possible that the budget data is not accurate or complete, which could be skewing the results.

Despite the lack of correlation, it is still important for schools to have adequate funding. This is because funding can be used to hire more teachers, provide better resources for students, and improve school facilities. Additionally, funding can also be used to support innovative programs that can help to improve student achievement.

Overall, these three observable trends provide some interesting insights into the factors that contribute to student success. While there is no single factor that can guarantee success, it is clear that school type, school size, and school budget all play a role. By understanding these factors, schools can make informed decisions about how to allocate resources and improve student achievement.