

Written Report:

Summary of Analysis:

In this analysis, we focused on evaluating school performance metrics in a hypothetical school district. We gathered data on various aspects of schools, including student scores in math and reading, school budgets, and student pass rates. The goal was to gain insights into the factors that contribute to student success and to identify trends within the dataset.

We began by calculating key metrics, including average math and reading scores, as well as the percentage of students passing in both subjects. We categorized schools into size, spending, and type categories to analyze how these factors relate to student performance.

Conclusions and Comparisons:

1. School Size vs. Student Performance:

One of the key insights from the analysis is that school size appears to have a significant impact on student performance. We categorized schools into small, medium, and large based on the number of students, and we observed that smaller schools tend to have higher average math and reading scores, as well as higher pass rates.

- Small schools (less than 1,000 students) consistently outperformed medium and large schools in both math and reading.
- Smaller class sizes in these schools may allow for more individualized instruction, which could contribute to higher student success rates.

2. Per Student Budget vs. Student Performance:

Another interesting finding is the relationship between per student budget and student performance. We categorized schools based on their per student budget into different spending ranges. Contrary to our initial expectations, schools with higher per student budgets did not necessarily exhibit better student performance.

- Schools with lower per student budgets (under \$585) had similar or even higher average math and reading scores compared to schools with higher budgets.
- This suggests that the allocation of resources and effective budget management play a crucial role in student success, rather than the sheer amount of funding available.

3. School Type vs. Student Performance:

We also considered school type (charter vs. district) in our analysis. We observed that charter schools tend to outperform district schools in terms of average math and reading scores, as well as pass rates.

- Charter schools consistently scored higher than district schools, indicating that there may be differences in teaching methods or curriculum.

- Further research is needed to understand the specific factors that contribute to the success of charter schools.

In conclusion, our analysis revealed that school size and per student budget are significant factors influencing student performance. Smaller schools with efficient budget management tend to yield better academic results. Additionally, charter schools outperform district schools, suggesting potential differences in educational approaches. These findings provide valuable insights for school administrators and policymakers to make informed decisions and improve student outcomes in the district. Further research and exploration are recommended to better understand the underlying factors driving these trends.