

Module 4 - Analysis of Area-wide Standardized Test Results

The analysis presented was undertaken to identify trends in school performance, with the goal of informing strategic decisions regarding future school budgets and priorities for the local government. The analysis includes an examination of the performance of 15 schools, which were divided into two types: Government and Independent schools. The analysis also took into consideration the school size (number of students) and budget. The data included maths and reading scores, as well as the overall passing rate. Below is a summary of the tables included in the report.

Summary of Key Metrics for Each School

This table includes the following metrics for each school: School name; School type; Total students; Total school budget; budget per student; average maths score; average reading score; the percentage of students who passed maths; the percentage of students who passed reading; and the percentage of students who passed maths and reading.

Main Observation

The snapshot indicates that the schools are performing reasonably well in terms of math and reading scores, and that most students are passing both subjects.

Highest-Performing Schools by Overall Passing and Lowest-Performing Schools by Overall Passing

This table displays the top 5 schools sorted by Overall Passing in descending order, and the second table displays the bottom 5 schools sorted by Overall Passing in ascending order. Based on the data, it is possible to note a correlation between school type and performance.

Main Observation

The independent schools outperformed the government schools, with an average passing rate higher in comparison to the government schools. The independent schools also had a higher average budget per student than the government schools.

Maths Scores and Reading Scores by Year

This table shows the average maths and reading scores for students of each year level (9, 10, 11, 12) at each school.

Main Observation

There doesn't appear to be a strong correlation between passing scores for math and reading within each school. The passing scores for math and reading can increase, decrease, or stay relatively stable from one year level to the next.

Scores by School Spending

This table displays the school performance based on average spending ranges per student. The metrics included in the table are: Average math score; Average reading score; the percentage of students who passed math; the percentage of students who passed reading; and the percentage of students who passed math and reading.

Main Observation

Schools with a lower budget per student tend to have lower average scores and lower passing rates in both math and reading.

Scores by School Size

This table summarizes school performance based on school size (small, medium, or large).

Main Observation

The main trend observed regarding the school size is that smaller schools tend to perform better academically and have higher passing rates compared to larger schools.

Scores by School Type

This table shows school performance based on the school type (Government or Independent).

Main Observation

Among the schools, independent schools outperformed government schools in terms of average scores and passing rates in both math and reading.

Conclusion

The analysis indicates that funding plays a role in student performance, and investment in education may be important for academic success of students.

The size of a school has a significant impact on academic performance. Our analysis showed that small schools tend to perform significantly better than larger schools. The small schools had higher average scores, higher passing rates, and higher overall passing rates. This suggests that smaller schools may provide a more personalized and effective learning experience for their students.

In addition, our analysis also revealed that independent schools tended to outperform government schools in terms of academic performance. This suggests that the type of school governance may also have an impact on student outcomes.

It is important to note that the analysis presented in this report only considers math and reading scores for four year levels. While this provides valuable insights, it is worth acknowledging that a school's educational program is much broader than just these two subjects, and thus this analysis only offers a snapshot of a much more complex picture. New research could explore additional variables such as teacher experience, curriculum quality, and extracurricular activities. Secondly it is worth noting that this analysis can not be transferred to younger primary level education, and that similar comparison analysis would need to be undertaken to determine if the outcomes and trends align.

In conclusion further research should be conducted to understand the relationship between budget and academic performance and to identify strategies for optimizing the use of resources to improve student outcomes. It is important to recognize that the relationship between a school's budget and its academic success is not always straightforward.