



UNIVERSITY OF TORONTO

# MODULE – 4

# CHALLENGE REPORT

DATA BOOTCAMP

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## 1. SUMMARY OF ANALYSIS

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This report presents an analysis of school performance in a district based on various metrics such as math and reading scores, passing rates, and school size and type. The analysis reveals insights into which schools are performing well and which schools need improvement, as well as trends and correlations that can inform educational policy and practice.

**District Summary:** The district has a total of 15 schools and a student population of 39,170. The average math score is 79 and the average reading score is 82, with an overall passing rate of 65%. The district's overall performance falls within the average range and suggests room for improvement.

**School Summary:** Among the schools in the district, Cabrera High School performed the best with an overall passing rate of 91.33%. On the other hand, Rodriguez High School performed the worst with an overall passing rate of only 53%. The analysis also shows that charter schools outperformed district schools in both math and reading scores as well as overall passing rates.

**Math Scores and Reading Scores by Grade:** The analysis shows that there is not much variation in math scores and reading scores by grade across all schools.

**Scores by School Spending:** There is a negative correlation between school spending and academic performance. Schools with lower per-student budgets generally performed better than those with higher budgets. However, this correlation does not necessarily imply causation.

**Scores by School Size:** Small and Medium schools (with less than 2000 students) generally outperformed larger schools (with more than 2000 students) in both math and reading scores as well as overall passing rates. This suggests that smaller schools may be better able to provide individualized attention to students, leading to better academic outcomes.

**Scores by School Type:** Charter schools outperformed district schools in both math and reading scores as well as overall passing rates. This finding suggests that charter schools may be more effective at educating students than district schools.

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## 2. CONCLUSIONS

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1. School spending and school size are important factors that affect academic performance. Schools with lower per-student budgets and smaller student populations tend to perform better. This suggests that policymakers and educators should consider cutting down on high investment of resources and concentrate on factors such as schools with lower budgets may have more motivated and engaged teachers, or they may be located in areas with more supportive communities. Alternatively, schools with higher budgets may be serving students who face more significant academic challenges, such as poverty or language barriers.
2. Charter schools outperform district schools in terms of academic performance. This suggests that the charter school model may be more effective at educating students than traditional district schools. However, further research is needed to understand the factors that contribute to this difference in performance.

Overall, this analysis provides valuable insights into school performance in the district and highlights areas where improvements can be made to ensure that all students receive a high-quality education.

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### 3. LIMITATIONS

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The summary report provides a high-level overview of key metrics for the district. However, there are many other factors that could be explored in more detail to gain a deeper understanding of student performance and needs.

For example, the report could be expanded to include metrics for individual schools or grade levels in different districts. This could help identify specific areas of strength or weakness within the district and target resources more effectively.

Additionally, the report could be updated over time to track changes in student performance and identify trends or patterns that could inform future interventions.