**Standardized test Performance Analysis Report**

A performance analysis of the standardized test results of students belonging to a particular school district is made for the given data, which consists of two csv files that provide the details of the students, their test results, and the schools they attend. The analysis is made on the reading and math tests based on grades, schools, school spending range, school size and type. A summary and findings of the performance is provided below.

**District summary**

As depicted in Fig 1.1, 15 schools with 39,170 students are considered for the analysis. The total budget allocated by all the schools is $24,649,428.00. The average marks scored by students of the entire district in Math and reading are 78.985371 and 81.87784 respectively. The district summary also provides the passing percentage (>=70) of students in math as 74.980853, reading as 85.805463. The overall passing percentage for the school district is 65.172326.

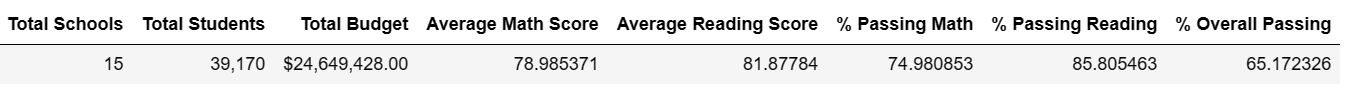


Fig 1.1

**School summary**

School summary provides school wise performance details of students.

A table of numbers and a number of people

Description automatically generated with medium confidence

Fig 1.2

Fig 1.2 lists all the 15 schools in the district with their budget, school type and performance of students.

Average of the scores secured by students in math and reading in every school is listed along with percentage of students who have passed by securing a score >=70 in each section as well as the overall percentage. Overall percentage is the percentage of students who have secured scores >= 70 in both the sections.

**Highest performing schools**

Top 5 schools are identified in the school district based on the overall passing percentage. The highest performing school list is given below in Fig 1.3.

A screenshot of a table

Description automatically generated

Fig 1.3

**Bottom performing schools**

The bottom performing 5 schools are identified in the school district based on the overall passing percentage. The bottom performing school list is given below in Fig 1.4.

A screenshot of a computer

Description automatically generated

Fig 1.4

**Math scores by grade**

Math scores are summarized based on grades of students in each school.

A table with numbers and letters

Description automatically generated

Fig 1.5

**Reading scores by grade**

Readingscores are summarized based on grades of students in each school.

A table of school numbers

Description automatically generated with medium confidence

Fig 1.6

**Scores by school spending**

Performance/scores by school pending is depicted in Fig 1.7. It is an interesting find that the students attending schools that spend more on students have underperformed than the students attending schools that spend less comparatively.

**A screenshot of a graph

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Fig 1.7

**Scores by school size**

Small (<1000) and medium (1000-2000) schools achieved a better performance as compared to large (2000-5000) schools. Here the size of the school is based on the number of students attending it..

**A screenshot of a graph

Description automatically generated**

Fig 1.8

**Scores by school type**

The average scores in math and reading, the passing percentages of the charter schools are higher than the district, thus making the overall performance of charter schools better than the district schools as shown in Fig 1.9

**A screenshot of a score

Description automatically generated**

Fig 1.9

**Conclusions**

1. From the district summary and school summary, it can be concluded that average scores in reading are higher than the average scores of math. It is also seen that the passing rates of students in reading are higher than the passing rates in math.
2. Small (<1000) and medium (1000-2000) schools achieved a better performance as compared to large (2000-5000) schools.
3. The average scores in math and reading, the passing percentages of the charter schools are higher than the district, thus making the overall performance of charter schools better than the district schools.
4. Students attending schools that spend more on students have underperformed than the students attending schools that spend less comparatively.