Trends Found Within PyCitySchool District

# Greater Per Student Budget Increases Success

In the table below we have grouped the schools within our district based on their budget per student (i.e. the ratio of their overall budget to the total number of students.) The groups were formed on increments of $700 per student.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Spending Range | Average Math Score | Average Reading Score | Average Pass Rate for Math | Average Pass Rate for Reading | Average Overall Pass Rate |
|
| **< $700** | 79.48 | 82.08 | 76.65% | 86.83% | 81.74% |
| **$700 - $1,400** | 80.02 | 82.48 | 80.50% | 88.55% | 84.52% |
| **$1,400 - $2,100** | 83.39 | 83.79 | 93.57% | 96.58% | 95.08% |
| **$2,100 - $2,800** | 83.80 | 83.81 | 92.51% | 96.25% | 94.38% |

Figure 1: School Success Rate based on Per Student Budget

Figure 1 shows that as we increase the ratio of budget to students a school has both their average scores and pass rates also increase. It is worth noting that only one school has a Per Student Budget between $2,100 and $2,8000 which could explain why it doesn’t have increased passing rates compared to the $1,400 to $2,100 group, which has several schools within it, but has higher average scores in both subjects. With more schools within the greater budget range we could possibly see even higher results as more data would be included in the averages.

# Larger Schools Perform Worse on Tests

As shown in the table below which has been grouped based on the total number of students attending the school. The larger the school the less success it shows on testing. For clarification a school considered small if it has less than 1,000 total students, medium if it has between 1,000 and 3,000 students, and large from 3,000 to 5,000 students.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| School Size | Average Math Score | Average Reading Score | Average Math Pass Rate | Average Reading Pass Rate | Average Overall Pass Rate |
|
| **Small** | 83.82 | 83.93 | 93.55% | 96.10% | 94.82% |
| **Medium** | 81.18 | 82.93 | 84.65% | 91.32% | 87.98% |
| **Larger** | 77.06 | 80.92 | 66.47 | 81.06% | 73.76% |

Figure 2: School Success Rate Based on Total Students

As shown in Figure 2 as we increase the number of students that a school has the success rate also drops quite considerably. This is likely due to both a decrease in individual help for students as well as stretched resources budgetarily.

# Charter Schools Outperform District Schools

As shown below whether a school is running as a district school or a charter school has an impact on its overall performance.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| School Type | Average Math Score | Average Reading Score | Average Math Pass Rate | Average Reading Pass Rate | Average Overall Pass Rate |
|
| **Charter** | 83.47 | 83.90 | 93.62% | 96.59% | 95.10% |
| **District** | 76.96 | 80.97 | 66.55% | 80.80% | 73.67% |

Figure 3: School Success Rate Based on School Type

Figure 3 provides us with data indicating that our charter schools are outperforming our district schools.

# Conclusions

Each figure has highlighted the best score for each category and the best performing category. Synthesizing all the data together we can see that our charter schools perform the best most likely because they are our smaller and better funded schools. This likely has to do with more personalized instruction and interaction with students combined with more and better resources for them to utilize.