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The first thing that we did was to look at the overall grades of all students, as the distribution appeared to be strange, I then removed any student who had an attendance rate of 0. Thus, we receive the graph that you see above. The distribution is normal with 92% falling within 2 iterations of the standard deviation. The following information pertains to the graph above.

Mean: 57.62

Median: 55.00

Std Dev: 16.14

Size: 357

1st Interval: (41.48, 73.76): 61.62%

2nd Interval: (25.34, 89.90): 92.72%

The next thing that we looked at was if the 2 schools had anything to do with the grades that students were receiving, tweaking our algorithm to look at only when the school name was “GP” and was it was not we got the following 2 graphs as output

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Mean: 53.93

Median: 50.00

Std Dev: 15.28

Size: 42

1st Interval: (38.65, 69.21): 71.43%

2nd Interval: (23.36, 84.50): 97.62%

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Mean: 58.11

Median: 55.00

Std Dev: 16.21

Size: 315

1st Interval: (41.90, 74.32): 61.27%

2nd Interval: (25.69, 90.53): 96.51%

Unfortunately there is not much that can be stated about these graphs due to the small sample size of MS students, It would make an unfair comparison to hold them up to the 315 GP students.

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Here we look at how many students take part in activities, it is nearly a 50 / 50 split

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Grades for Students w/ Activities

Mean: 58.56

Median: 55.00

Std Dev: 15.86

Size: 180

1st Interval: (42.70, 74.42): 63.89%

2nd Interval: (26.84, 90.28): 97.22%

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Grades for Students wo/ Activities

Mean: 56.67

Median: 55.00

Std Dev: 16.41

Size: 177

1st Interval: (40.26, 73.07): 59.32%

2nd Interval: (23.85, 89.48): 94.92%

Here we can see that students that do partake in an activity have slightly higher mean and looking the 1st interval even that remains higher. This seems to lend us to the trend that the higher scores are related to the activities that they partake in.

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Here we see the attendance chart from both schools, attendance seems to be weirdly staked against even numbers, there doesn’t really seem to any reason for this oddity, We can however check if the amount of absebces affects the general scoring.

To test this we split the numbers by those with fewer than 15 absenses and those with more than 15 absences.

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Mean: 58.54

Median: 55.00

Std Dev: 15.91

Size: 321

1st Interval: (42.62, 74.45): 62.62%

2nd Interval: (26.71, 90.36): 96.26%

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Mean: 50.15

Median: 50.00

Std Dev: 16.61

Size: 33

1st Interval: (33.55, 66.76): 75.76%

2nd Interval: (16.94, 83.36): 93.94%

In a move that shocked everyone, students who attend class tend to score slightly higher, however this comparison is not totally fair due to a lack of students who missed more than 15 days