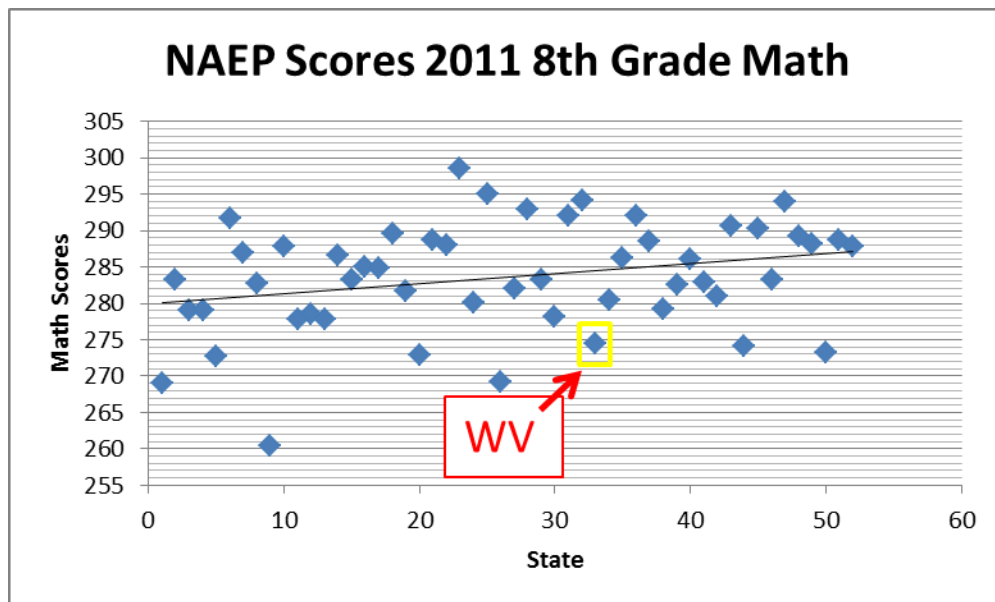


## Results

The following data, represented as a scatter plot, is the NAEP scores collected for 8<sup>th</sup> grade math students in the United States for 2011. As depicted in the Plot 1, West Virginia is in the bottom quarter of the results (273.26) scoring below the average NAEP score (283.57). The results are problematic for WV because there are only 5 states scoring lower and 46 states scoring higher.

Plot 1: *The NAEP Scores for 8<sup>th</sup> grade math students in 2011*



A paired t-Test was conducted to compare the 2011 8<sup>th</sup> grade math scores for males and females. There was not a significant difference in the scores for males ( $M = 284.00$ ,  $SD = 60.77$ ) and females ( $M = 283.14$ ,  $SD = 55.20$ ) conditions;  $t(102) = 1.66$ ,  $p = 0.28$ . These results suggest there is not a difference in the 2011 8<sup>th</sup> grade math scores for males and females therefore the

null hypothesis is accepted.

Table 1: *The NAEP Scores for 8<sup>th</sup> grade male and female math students in 2011*

NAEP Scores 2011 8th Grade Math			
Gender	Mean		Standard Deviation
Male	284.0 0		60.77
Female	283.1 4		55.20
t(102) = 1.66 , p = 0.28			

## References

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