The Effect of School Funding on Standardized Test Scores

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Context

In the modern world, there is an emphasis on quality education and its effects on success. As a result, because schools have an important role in intellectual development, they often look for ways to improve the education offered to students.
Purpose

Does school funding affect the quality of education that students receive?

This study examines multiple data sets, with the purpose of discovering whether more school funding increases students’ test scores.
Previous Research

➢ Mixed perspectives
  ○ Increased funding helps schools provide better education
    ■ A 10% increase in per pupil spending for 12 years of public school can lead to:
      ● 0.31 more years of education
      ● 7% higher wages
      ● 3.2% reduction in adult poverty
    ■ However, these effects depend on how the schools spend their funding
      ● The Coleman Report and subsequent studies suggest that funding is unrelated to student achievement
Data Set 1

Average Total SAT Scores
Why this data set?

➢ The SAT is one of the most common standardized tests
➢ This test assesses math, reading, and writing skills; the most common subjects taught in school
School District Funding VS. Average Student Total SAT Score

Source: US Census Data
Analysis

- A minor increase on school district funding can impact SAT score, but the correlations found were insignificant.
- For every $1 dollar in district spending, there is a 0.00465 increase in SAT score.

$215 ≈ +1

For every $215 more in spending, there is about an 1 point increase in Average SAT Scores (From Graph Data)
Data Set 2

Average Total ACT Scores
Why this data set?

➢ The ACT is another one of the most common standardized tests
 ➢ This test assesses math, reading, writing, and science skills; some of the most common subjects taught in school
School District Funding VS. Average Student ACT Score

Source: US Census Data
Analysis

- School district funding has virtually no effect on ACT scores
  - As shown by the graph, the trendline is nearly horizontal, and the data is scattered
  - Therefore, no significant correlation was found
Data Set 3

Participation On Standardized Tests
Why this data set?
➢ The participation rate on standardized tests can determine if funding deters taking these tests
➢ This is the participation percentage rate on standardized tests by state compared to total per pupil spending by state
Analysis

- Higher funding for each student in a state level increase the participation on the SAT, while less funding for each student increase the percentage that use the ACT.
- Participation rates are not detrimental since most states use the other test.
  - Alabama has 4% in the SATs but 100% in the ACTs.
Conclusion

- From our study, we found that students’ standardized test scores do not have a strong correlation with district funding
  - Funding does not significantly affect ACT
  - The correlation between the funding and actual SAT scores is low
Conclusion (cont.)

- Additionally, student participation in the SAT and ACT do not have strong correlations with state per pupil spending.

- Overall, while district funding may not influence students’ performance, this may depend on where the funding is spent.
References


References (cont.)


Thank you!

Any questions?
The Effect of School Funding on Standardized Test Scores

How does district school funding affect a student's experience with standardized tests?

Average Total SAT Scores

There is a minor increase in SAT scores from district school funding at which for every dollar extra there is $0.00465$ increase in average total SAT scores.

Average Total ACT Scores

School district funding has virtually no effect on ACT scores as seen from the almost horizontal trendline.

Participation Rates On Test

Participation rates are not detrimental to scores most states use the one or the other test for their students. This generally helps to keep all students be tested rather than avoiding them.

Conclusion

District funding may not influence students' performance, the effectiveness of funding may depend on where it spent and more factors at a local scale.