

The Long-Term Impacts of Teachers: Teacher Value-Added and Student Outcomes in Adulthood

Raj Chetty, John Friedman and Jonah Rockoff, 2011

Introduction

Are teachers' impacts on students' test scores (value-added) a good measure of teacher quality in the class room? Two major questions that will be addressed are whether Value-Added (VA) data provides unbiased data of the teachers' impact on positive student outcomes and whether or not VA teachers improve students' long-term outcomes?

Methods

2.5 Million Students and 18 million tests scores were used from a large urban school district in the United States. The data spanned years 1989-2009 and was selected from tax records in order to collect information such as college attendance, teenage births, earnings, student outcomes, household outcomes, retirement savings, and mother's age at child birth. This study only looks at the impact of VA teachers on grades 4 to 8.

Results

- Students assigned to high-VA teachers are more likely to attend college and attend high-ranked colleges
- Students assigned to high-VA teachers are more likely to earn higher salaries
- Students assigned to high-VA teachers are more likely to live in high SES neighborhoods
- Students assigned to high-VA teachers are less likely to have children as teenagers

Conclusion

Value-Added measures can have long-term impacts on student outcomes. On average, a one standard deviation improvement in teacher VA in a single grade raises earnings by about 1%. Each child would gain roughly \$25,000 in lifetime income from having this teacher instead of an average teacher.

Chetty, R., Friedman, J., Rockoff, J. (2011). *The Long-Term Impacts Of Teachers: Teacher Value-Added And Student Outcomes In Adulthood*. (Working Paper No. 17699). Cambridge, Ma: National Bureau of Economic Research.