Value-Added Research Summary
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Steven Glazerman, Dan Goldhaber, Susanna Loeb, Stephen Raudenbush, Douglas Staiger and Grover J. "Russ" Whitehurst. Evaluating Teachers: The Important Role of Value-Added (2010). Describes the important role that VAM can play when one of multiple measures in an evaluation system. Key points include that a system that errs on the side of protecting teachers from misclassification may not be in students' best interests; that value-added scores for individual teachers are as reliable as performance assessments used in other industries for high-stakes decisions; and that omitting value-added scores typically lowers the reliability of personnel decisions about teachers. For instance, teacher value-added scores are about as stable as "the volume of home sales for realtors; returns on investment funds; productivity of field-service personnel for utility companies; output of sewing machine operators; and baseball batting averages."

Raj Chetty, John Friedman & Jonah Rockoff. Discussion of the American Statistical Association’s Statement (2014) on Using Value-Added Models for Educational Assessment (2014). This is a rational, balanced response to the ASA cautionary statement on value-added, and is fairly accessible. They tackle the ASA concerns point by point, and go to great pains to link to actual research to show that many of the concerns raised by the ASA have been largely - and satisfactorily - addressed.

Raj Chetty, John Friedman & Jonah Rockoff. The Long-term Impacts of Teachers: Teacher Value-Added and Student Outcomes in Adulthood (2011). This study found that the benefits of having even a single strong teacher persist throughout a student's academic career and throughout their lives. Students with even one top teacher are less likely to have children as teenagers, and are more likely to attend college, live in more affluent areas, earn a higher salary, and save more for retirement. Based on analysis of 20 years of data on 2.5 million students in grades 3-8, including 18 million tests, and tax records on parent characteristics and adult outcomes. Here is a New York Times summary of the article.

Goldhaber, D. Exploring the Potential of Value-Added Performance Measures to Affect the Quality of the Teacher Workforce (2014). This is a balanced look at what the effects might be of using value-added models in teacher evaluation. It exposes the uncertainty on all sides, and debunks narratives that value-added models are clearly fit or clearly unfit for this purpose. Goldhaber also notes the need to balance protections for teachers from inaccurate ratings with protection for students from ineffective teachers. Two excerpts make a strong case that while value-added models are imperfect, so are all attempts to measure teacher quality:

> While the quantification of misclassification under value added surely raises some red flags, it is important to note that other measures of teacher performance also have the same general validity and reliability problems (Harris, 2011). Classroom observations, for instance, are universally used in making judgments about teacher performance, and they too have significant measurement issues (Cohen & Goldhaber, in press).

The conclusion summarizes the issue succinctly:

> So where does this leave us in thinking about value-added policy? The answer to this question likely depends on one’s view of the workforce and current human capital policies. Most school systems currently use teachers’ licensure, degree, and experience levels to determine employment eligibility, compensation, and tenure, and generally, teachers are evaluated using classroom observations. Using value added, or any other means of judging teachers, ought to be compared to the use of these credentials and processes, not judged in isolation. Given this, one’s view of value added, or other alternatives to the current systems that govern teacher human capital, is likely to be shaped by perceptions of how well today’s systems are working. If one believes they are working reasonably well, taking a chance on fundamental change to teacher human capital systems is likely not worth the risk. But there are certainly arguments that today’s systems are not working well and we need to shake things up.

A comparison of differing teacher evaluation measures: value-added scores and principal observation ratings. A study at 30 schools of nearly 300 teachers found that principals may be biased against certain types of teachers with high value-added scores, including “lone wolves” who are less engaged with peers and the school community outside of their classroom, and those who do not seek out professional development activities – even if they are still achieving strong results.


This paper argues that there is very little disagreement on the statistical properties of VAM - but a policy position depends on a lot more than the statistical validity of VAM as a measure. Corcoran argues for a limited role for value-added, while Goldhaber is more optimistic about the value of VAM in teacher evaluations.

Non-academic


This is their defense of value-added scores as a component of teacher evaluation models, in the Times' installment of “Room for Debate.” On this page there are accompanying letters from other supporters of value-added as well as from its detractors. Not scholarly research, but short summaries of the talking points around this issue.