

Current Knowledge About Value-Added Modeling

Over the past two decades, there have been many studies, articles, and commentaries regarding value-added modeling. The papers listed in this document are related to value-added modeling itself, how value-added modeling is used to measure teacher effectiveness, and how value-added modeling affects educational policies.

Introduction to Value-Added Modeling and SAS® EVAAS® Reporting

These papers provide general information about value-added modeling, as well as detailed information about the EVAAS approach.

SAS: [Comparisons Among Various Educational Assessment Value-Added Models](#) is an introduction to various value-added models, noting the advantages and disadvantages of each.

SAS: [Key Research Findings](#) summarizes key findings, research, and milestones by the EVAAS team over the past 30 years.

SAS: [Addressing Common Concerns about Value-Added Modeling](#) briefly addresses several common concerns and misconceptions of EVAAS value-added reports.

SAS: [Adjusting for Student Characteristics in Value-Added Models](#) uses both theoretical and empirical data to illustrate why some value-added models do not make adjustments for student characteristics.

SAS: [Summary of RAND Research on Value-Added Modeling](#) RAND has published many papers that focus on the technical aspects of value-added modeling. Because these papers are so technical and often lengthy, EVAAS compiled a summary of these papers.

The Washington Post: [Seven Misconceptions About Value-Added Measures](#) is an interview of Doug Harris by columnist Jay Mathews. This article addresses common concerns in a non-technical way.

Importance of Value-Added Modeling and Effective Teaching

These papers focus on the importance of value-added modeling and effective teaching, and they assess value-added modeling in the context of other means of evaluation or assessment.

The Brookings Institute: [Climate Change and Value-Added: New Evidence Requires New Thinking](#) was written by Tom Kane, and it makes the case that the relevant question for educators and policymakers is *how* to include growth measures in teacher evaluation rather than *whether* to include them.

The Brookings Institute: [Evaluating Teachers: The Important Role of Value-Added](#) was written by Steven Glazerman, Dan Goldhaber, Susanna Loeb, Stephen Raudenbush, Douglas Staiger and Grover Whitehurst. While acknowledging potential limitations of value-added modeling, they put these in context of other means of evaluation and address many common concerns.

Measures of Effective Teaching (MET) Project: [Ensuring Fair and Reliable Measures of Effective Teaching: Culminating Findings from the MET Project's Three-Year Study: Brief](#) was funded by the Bill and Melinda Gates Foundation, and this policy brief represents the study's final conclusions, particularly in relation to randomized assignment and composite teacher measures.

National Bureau of Economic Research (NBER): [*The Long-Term Impacts of Teachers: Teacher Value-Added and Student Outcomes in Adulthood*](#) was written by Raj Chetty, John N. Friedman, and Jonah E. Rockoff. It assesses long-term outcomes related to effective teaching.

Additional Technical Papers

These papers go into detail regarding the value-added models used in EVAAS reporting.

SAS: [*SAS EVAAS Statistical Models*](#) details the general statistical approaches to EVAAS models.

SAS: [*Do Teacher Effect Estimates Persist When Teachers Move to Schools with Different Socioeconomic Environments*](#) focuses on whether teacher effects persist when teachers move to schools with different socioeconomic environments (Source: Prepared for Performance Incentives: Their Growing Impact on American K-12 Education in Nashville, Tennessee on February 29, 2008.)

Knowledge Briefs

These papers present findings within the context of educational policy considerations.

National Center for Analysis of Longitudinal Data in Educational Research (CALDER): CALDER publishes many reports on value-added reporting. [*Portability of Teacher Effectiveness Across Schools*](#) which finds conclusions similar to those in the SAS paper on teacher mobility (listed above).

Carnegie Knowledge Network (CKN): CKN publishes many reports on value-added modeling, such as [*Do Value-Added Models Level the Playing Field; How Stable are Value-Added Estimates across Years, Subjects, and Student Groups; and How Do Value-Added Indicators Compare to Other Measures of Teacher Effectiveness?*](#)

Council of Chief State Schools Office (CCSSO): CCSSO provided a fairly non-technical introduction to a variety of value-added and growth models in its [*A Practitioner's Guide to Growth Models*](#).

Battelle for Kids: [*Selecting Growth Measures: A Guide for Education Leaders*](#) provides an overview of growth measures propelled by Race to the Top legislation in many states.

Policy Papers

Five Thirty Eight: [*The Science of Grading Teachers Gets High Marks*](#) discusses the growing body of research supporting the use of value-added as a valid indicator of teaching effectiveness, even without randomized experiments with student assignment.

Education Week: [*Doug Harris Crunches Critics in Value-Added Smackdown*](#) is a blog entry by Rick Harris, and it illustrates the passionate rhetoric used by both supporters and opponents of value-added modeling.

Chetty, Friedman, and Rockoff: [*Discussion of the American Statistical Association's Statement \(2014\) on Using Value-Added Models for Educational Assessment*](#) is a point-by-point response to frequent mischaracterizations of the initial statement on value-added analysis by the American Educational Research Association

WestEd: [*Options for Incorporating Student Academic Growth as One Measure of the Effectiveness of Teachers in Tested Grades and Subjects: A Report to the North Carolina Department of Public Instruction*](#) was prepared for the North Carolina Department of Public Instruction to assist in the selection of a statewide value-added model. As a result of its research, WestEd recommended EVAAS models for their statistical advantages as well as policy considerations.