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The recent development of multiple-measure systems of teacher evaluation has resulted in a wealth of new data about teacher effectiveness. As a result, education agencies have considerable information about the effectiveness of their current teachers and can use this information to implement a variety of strategies and policies. Ultimately, the goal of all of these policies and initiatives is to improve the overall effectiveness of the teaching workforce and increase the likelihood that students will have access to effective teachers. Our agencies have taken a variety of approaches to leveraging teacher effectiveness data for this purpose.

Problem Statement and Research Question

Agencies are collecting more comprehensive teacher effectiveness data than ever before, but the mere collection of the data will not inherently improve teacher effectiveness. **How can agencies leverage teacher effectiveness data to enact policies and strategic initiatives that improve students' access to effective teachers?**

Fellows



Tony Pratt (AF)
 Deputy Assistant Commissioner,
 Data and Research

Case Studies

Tennessee Department of Education

Mission/About Us: TDOE strives to expand students' access to effective teachers and leaders, families' access to good schools, educators' access to resources and best practices, and public access to information and data. TDOE serves nearly a million students across a diverse set of 140 districts.

Policy/Research Questions: What is the relationship between teacher effectiveness – as measured by Tennessee's multiple measure evaluation system – and teacher retention? Are there any promising strategies for improving retention rates of teachers earning the highest evaluation scores?

Project Scope: SDP fellows in the Office of Research and Policy produced a report **examining statewide trends in the relationship between retention and effectiveness** and outlining potential strategies for improving the retention of highly effective teachers. District reports will also be distributed as a supplement to this work.

Pittsburgh Public Schools, PA

Mission/About Us: PPS' vision is that all students will graduate from a two- or four-year college or receive a workforce certification. The district has four goals aimed at achieving that vision: 1) accelerate student achievement, 2) eliminate racial disparities in achievement, 3) develop a student-focused culture, and 4) become a district of first choice. PPS serves roughly 25,000 students across 54 schools, about 55% of whom are African-American and 70% low-income.

Policy/Research Question: How do we maximize the share of students receiving highly effective instruction, with particular focus on our highest-need students?

Project Scope: SDP fellows oversee the development of a series of analyses to better understand trends related to: 1) the movement of teachers across schools, 2) matching of students and teachers within schools, 3) predictors of teacher effectiveness, and 4) impact of teacher effectiveness on student outcomes. Using these analyses, SDP fellows are guiding policy conversations within the district aimed at identifying and facilitating policy changes to **maximize the positive impact of highly effective teachers** on PPS students.

Shelby County Schools, TN

Mission/About Us: SCS, the 14th largest school district in the nation, is committed to preparing all students for success in learning, leadership, and life. SCS currently educates approximately 145,000 students across Memphis and Shelby County.

Policy/Research Questions: What is the relationship between students' perceptions of classroom practices and students' academic outcomes? How can student survey results be used to inform instructional decisions?

Project Scope: Currently, the district is in its 3rd year of implementation of a new teacher evaluation system. The Tripod survey, which assesses students' perceptions of classroom practices, is a component of this evaluation system. This work will focus on survey implementation, the link to student outcomes, and the increased need to **support teachers using survey results**.

Teach For America

Mission/About Us: TFA is a non-profit organization that aims to expand educational opportunity by recruiting, training and fostering the leadership of recent college graduates and professionals to teach for two years in urban and rural public schools around the country.

Policy/Research Question: How early and with what confidence can we predict which corps members will struggle in their first year of teaching?

Project Scope: We plan to conduct analyses to determine the feasibility of **predicting future teacher efficacy at the time of hire based on cognitive and non-cognitive traits**. As states and districts are increasingly employing multiple measures in their evaluation systems, we plan to investigate multiple ways teachers struggle, and the intersection of these challenges. We are currently gathering data on student achievement growth, and using student surveys to look at measures of teacher-student relationships and classroom environment. Having data-driven predictions of teachers' future effectiveness and the ability to identify struggling teachers early is extremely valuable to the TFA staff that train and support teachers. This information will **allow for more targeted programming** and would raise the overall impact of the corps.



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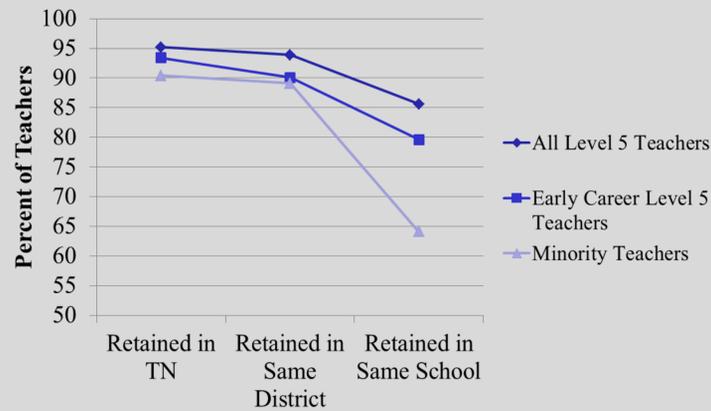


Casey White (DF)
 Director, Strategy

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Results and Impact

Tennessee Department of Education



Retention Rates of Level 5 Teachers

Figure 1.

As part of the analysis of the relationship between retention and effectiveness in Tennessee, we found that **early career teachers earning the highest rating – Level 5 – on Tennessee’s multiple measure teacher evaluation model were less likely than other Level 5 teachers to remain in the same school, in the same district, or in Tennessee.** The same general pattern was evident for minority (non-white) teachers, who were especially likely to switch schools within the same district.

Other key findings:

- Teachers who earned higher evaluation scores tend to be retained at slightly higher rates than teachers who earned lower scores, although the differences in these rates at the state level are relatively small.
- There is substantial variation across districts in overall retention rates, retention rates of highly effective teachers, and the degree to which the most effective teachers are retained at a higher rate than less effective teachers.
- School conditions such as effective time use and functional teacher evaluation were significantly related to retention rates of highly effective teachers. As a result, strategies aimed at improving these factors have the potential to improve the retention of highly effective teachers.

Next steps: TDOE will use a publicly-released white paper and district-level reports to **start conversations with districts about strategies for retaining their most effective teachers.**

Pittsburgh Public Schools

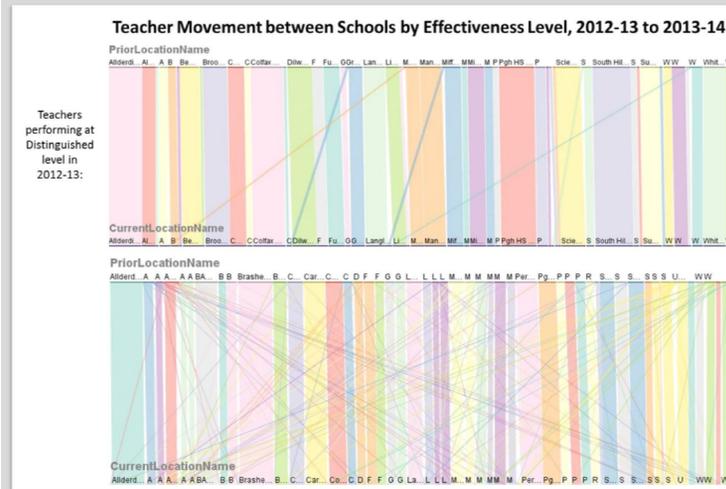


Figure 2.

This graphic tells the **story of movement across Pittsburgh schools given a teacher’s performance level.** It shows that teachers performing at the highest level (*Distinguished*) are much less likely to transfer schools than their peers performing at the bottom levels (*Needs Improvement* and *Failing*). Within each row, lines crossing the vertical bars represent teachers who transferred schools between the two years.

Other key findings:

- The teacher characteristic we have found to be most closely associated with high performance is National Board of Professional Teaching Standards certification.
- Teachers who performed at the lowest levels are much more likely to have experienced a grade level/subject area assignment change in the previous year than their peers who performed at higher levels.
- Teachers performing at the *Distinguished* level have the best chance of moving students into proficiency and beyond on the Pennsylvania System of School Assessment (PSSA) exams. Students with a teacher performing at the *Distinguished* level were twice as likely to move from *Basic* to *Proficient* than students with teachers performing at the *Failing* level.

Next steps: These analyses have **changed the conversation in Pittsburgh, and have created an information base** upon which we can examine decisions geared toward better serving students and better supporting teachers. PPS is engaged in ongoing conversations with teachers, administrators, and the Pittsburgh Federation of Teachers to identify policy changes would result in an increase in the share of students receiving highly effective instruction.

Shelby County Schools

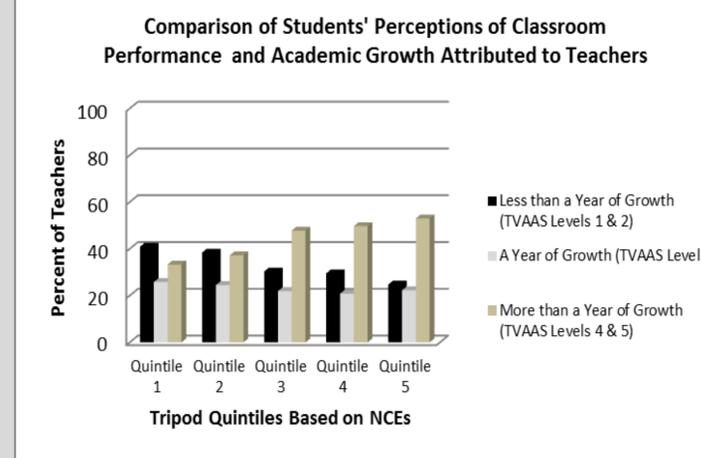


Figure 3.

When utilizing multiple measure evaluation models, each component should depict the same story. For teachers in Shelby County, Tripod scores were most closely aligned to growth scores for the highest performing teachers (Tripod Quintile 5 and TVAAS Level 5). Scores are the least aligned for teachers with average Tripod ratings.

Other key findings:

- An examination of elementary Tripod results revealed significant correlations that were consistent with those discovered during the Measures of Effective Teaching study (MET Project, 2012). **The extents to which teachers maintain control of their classrooms and challenge their students were most highly correlated with student achievement.**
- Results from the Tripod surveys of secondary students corroborate the findings from the MET study, which showed significant positive correlations of similar magnitudes between Tripod scores and value-added scores and the strongest overall correlations with value-added scores in mathematics.

Next steps: We will examine Tripod data and value-added data from the current year to see if the trends remain constant over time. We will also explore strategies for supporting teachers in improving instructional practices as evidenced by Tripod data.

Teach for America

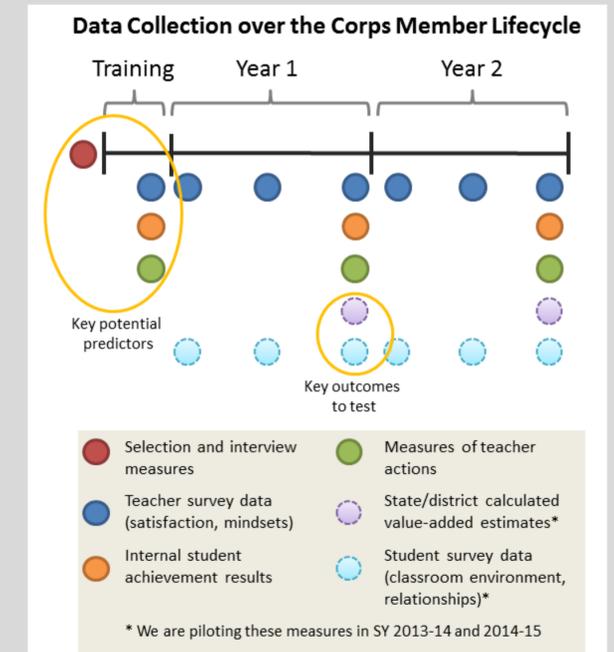


Figure 4. Data Collection over the Corps Member Lifecycle

Researchers have struggled to identify factors present at the time of hire which can function as strong predictors of later teacher effectiveness (Rockoff et al. 2011). We hope to extend this literature by **testing the predictive nature of extensive cognitive and non-cognitive measures – gathered throughout selection, training, and the early school year – against multiple key outcome measures.** Such measures may include teacher impact and classroom environment. TFA currently collects a wide variety of measures for management, improvement and reporting purposes, and is piloting processes for collecting additional measures such as student surveys.

Next steps: TFA is piloting processes for collecting key outcome measures in the 2013-14 and 2014-15 school years. We hope to do preliminary analyses as soon as fall 2014.