



The Education Trust—West

Closing the gaps in opportunity and achievement, pre-k through college.

Learning Denied: The Case for Equitable Access to Effective Teaching in California’s Largest School District

Frequently Asked Questions

BACKGROUND AND IMPLICATIONS

1. Why did we do this study?

The mission of the Education Trust West is to expose opportunity and achievement gaps that separate students of color and low-income students from other youth, and identify and advocate for the strategies that will forever close those gaps. In LAUSD and districts throughout California and the U.S, there are wide achievement gaps between low-income, Latino, and African-American students and their more advantaged peers. In order to close those gaps, we must accelerate the performance of low-income students and students of color. Research makes it clear that teaching is the single most important within-school factor affecting student achievement. So with this study, we sought to determine the extent to which low-income students and students of color in the state’s largest school district have been taught by the district’s top teachers. We found—consistent with prior research—that effective teaching has a profound impact on student performance in LAUSD. We also found that students of color and low-income students have inequitable access to effective teachers, and that policies like “last in, first out” layoffs make this inequity even worse.

2. Where did the data for this report come from?

LAUSD provided us with raw, de-identified student and teacher data. We matched the data sets to one another and contracted an outside expert to construct the value-added model and provide us with the resulting ratings.

3. Did LAUSD partner with you on this research?

While LAUSD provided the raw data, it did not partner with us in either the analysis or writing of the report. We did offer the district opportunities to preview and comment on the findings.

4. What are the state and national implications of this work?

While our analysis is focused on teachers in LAUSD, access to effective teaching is an issue of national importance. Our findings from Los Angeles are consistent with other research on the topic (including studies on teachers in Tennessee, Florida, and North Carolina) and are likely representative of what is happening across California. Some of the issues highlighted in our research are statewide issues, such as the state law requiring “last in, first out” layoffs. In order to know for sure whether the trends highlighted in our report are similar in other California school districts, we would need comparable data from those districts. We think this is important information for parents, schools and districts to know, so we urge communities across California to demand more meaningful information on the performance, distribution, and layoff of their teachers.



METHODS

5. How did we measure teacher effectiveness in this study?

We used “value-added” analysis. Value-added is a statistical approach that estimates a teacher’s effectiveness by looking at how she has impacted her students’ test score performance. The approach separates out the influence of non-school factors, including family background, on student performance. Our value-added model compares students’ actual CST performance to the performance predicted by that student’s test scores in prior years. By controlling for previous test history, we are able to answer the question: “How did this individual teacher change the academic trajectory of his students, relative to what we would have otherwise expected?” This analysis does not penalize teachers whose students enter their classrooms far below grade level, as long as the students make progress consistent with other similar students. Similarly, the performance of initially high-achieving students in one teacher’s classroom is compared with the performance of other initially high achievers.

6. What do value-added results reveal about teacher performance?

Value added results do not reveal everything one might want to know about a teacher’s performance. When measuring teacher effectiveness, districts should consider how a teacher has affected student learning by looking at student achievement data. They should also consider how a teacher performs in the classroom using methods like classroom observations. Districts may even be interested in learning about how students and parents perceive teachers using surveys. Together, all this information offers a well-rounded sense of teacher effectiveness. But most evaluation systems don’t yet work this way, including in LAUSD. Until we have better information available, we have used student data and “value-added” modeling to *estimate* teacher effectiveness. Since many of these things tend to align with one another (for example, other research shows that teachers who do well when observed also tend to have a positive impact on student test score gains), we think this is a good proxy. (For more information on best practices in teacher evaluation, see the ETW website.)

7. How accurate are our value-added ratings of teachers?

We found that teachers’ value-added ratings tended to be quite stable from one year to the next. That’s not to say they were identical – but it was very unusual for a teacher to be high performing one year and then low performing the next. While teacher’s ratings do fluctuate a bit over time for a variety of reasons attributable both to the teacher and the model, these variations are small compared to the large differences we see between top and bottom quartile teachers. Further, our model was designed to reveal district-wide trends and patterns, not to evaluate individual teachers—which means that small fluctuations at the teacher level (inherent to any value-added analysis) are even less of an issue.

8. Are there limitations to this analysis?

Yes. Value-added is based on one set of standardized tests, so it does not tell us everything we might want to know about teacher performance or student learning. But it’s a start. Test data is only available for some grades and subjects, so we could only look at ELA and math



performance, and we had data mostly for grades 3-8. As a result, non-tested grades and subjects were not included. Our data also did not allow us to account for situations where multiple teachers share students in a “team teaching” approach, or where students might have received additional instruction from someone other than their primary teacher. And there were other factors we could not control for, including the fact that neither teachers nor students are randomly assigned to their schools or classrooms.

RESULTS

9. Can you fully account for the effect of a teacher’s school or students on her performance? Isn’t it true that teachers are going to perform better in “easier” schools?

While the characteristics of a school may affect teacher performance to some extent, the impact does not appear to be as large as the differences between high and low value added teachers. Because students and teachers are not randomly assigned to schools, it is impossible to fully disentangle school effects from teacher effects. We ran various analyses to control for some of these observable traits, like the demographics of students in the school as a whole, and we found that including these school-level factors did not significantly change our value-added estimates. In fact, the two sets of estimates correlated almost perfectly. Nevertheless, there are other things we could not control for, like the quality of the principal or student “peer effects.” Still, we found that when teachers moved between different types of schools, their value-added ratings did not significantly change in most cases. In the one case where we did see a difference (when ELA teachers moved from a lowest to a highest poverty school), those few teachers in experienced a decline in effectiveness equal to about one month of instruction – a small amount relative to the six-month difference we saw between top and bottom-quartile teachers.

10. Where do you see the biggest differences between teachers?

Differences between top and bottom-quartile teachers were more pronounced in ELA than in math. We also saw—especially in ELA—large differences between teachers in high-poverty and teachers in low-poverty schools, and between teachers in schools serving significant large numbers of African-American and Latino students and schools serving small numbers of those students. We did not see large differences based on the grade level(s) taught.

PREVIOUS WORK IN THIS AREA

11. How are your value-added model and findings different from what *The Los Angeles Times* or LAUSD have published?

Our research is not focused on yielding ratings for individual teachers (unlike *The Times* and LAUSD), but is instead focused on district-wide trends. The models used by *The Times* and LAUSD are similar to ours, but they control for slightly different variables. All three control for students’ prior year performance in ELA and math. Like *The Times*, we use a two-stage model that looks at both a teacher’s current year performance and a teacher’s variability over time.



LAUSD also includes student demographic controls when calculating its version of value-added, which it calls “Academic Growth over Time.” We constructed our model both with and without student demographic data and found that the results correlated highly. In value-added modeling, there is always a balance between controlling for too little (allowing other factors to affect the results) and controlling for too much (washing out any observable variability). Our approach is one commonly used by other researchers, and we have confidence in our methodology and the resulting estimates. Several studies have been published showing that the choice of model can affect the resulting ratings, but not by much.

12. *The Times* said that teacher effectiveness doesn’t vary by neighborhood, but you say it does. Why the difference?

The analysis that informed this was by Richard Buddin, whose approach was quite different from ours. He compared high-API schools to low-API schools, because “high proportions of low-income and at-risk populations are concentrated in many low-performing schools.” He found that teachers at high-API schools had slightly higher value-added scores than teachers at low-API schools, but not by much (based on his data, we calculate the difference as approximately 2-3 weeks of learning). Our analysis, on the other hand, compared students qualifying for free or reduced-price meals to those not qualifying. We also compared the district’s highest poverty schools to its lowest poverty schools. At both the student and school levels, we found differences in teacher effectiveness, with low-income students less likely to be taught by the most effective teachers, and the highest poverty schools staffed by less effective teachers. We think our approach makes sense, because we focus specifically on the highest-need students and schools rather than using API as a substitute.

IMPLICATIONS FOR PARENTS AND EDUCATORS

13. Why is this information important to parents?

We believe that this information is vital to parents and communities working to improve their schools. We also believe that parents and communities have a fundamental interest in removing barriers to improving teaching effectiveness and ensuring access to effective teaching. This type of report could be conducted in school districts throughout California and the nation.

14. Why is this information important to educators?

This information on teaching effectiveness and distribution is vital to education leaders and local educators engaged in district and school improvement efforts. Districts and the state focus considerable resources on school improvement, particularly in the state’s highest need schools. District and school leaders should be able to measure the effectiveness of their workforce and address inequities in access with the goal of closing opportunity and achievement gaps for low-income students and students of color.