

# Is Teacher Effectiveness Fully Portable? Evidence from the Random Assignment of Transfer Incentives

Matthew A. Kraft, John P. Papay, Jessalynn James, Manuel Monti-Nussbaum

*Can strong teachers be equally effective in any school? A new study finds that when high-performing teachers transferred from higher-achieving schools to lower-achieving ones, their measured effectiveness declined.*

For years, many school improvement strategies have relied on a straightforward assumption: if we can just get our highest-performing teachers into our highest-need classrooms, student achievement gains will follow. This theory treats teacher effectiveness as a fixed, portable asset- like a laptop that works the same regardless of where it is plugged in. As a result, many policies have focused on redistributing strong teachers, at times offering financial incentives to encourage high-performing educators to transfer to lower-performing or hard-to-staff schools. These and other policies during the "Race to the Top" era in the early 2010s implicitly assumed teacher effectiveness was independent of the context in which teachers work, the support they receive, and the students they teach.

This study challenges the assumption that teacher effectiveness remains fixed across all school settings. By reanalyzing data from a large-scale experiment that offered highly-effective teachers \$20,000 (\$30,000 in 2025 dollars) to transfer to low-achieving schools, the researchers examine a critical question: Can an effective teacher be dropped into any classroom and produce the same results, or does their success depend on other factors? The study shows that simply shifting teachers across schools is not enough and emphasizes the importance of building school conditions that help teachers succeed.

## STUDY AND METHODS

### **The Background: The Talent Transfer Initiative**

In 2009, the Talent Transfer Initiative (TTI) was launched across 10 large school districts in seven states to address achievement gaps in elementary and middle school math and ELA. The program identified specific subject-grade vacancies in low-achieving schools and randomly assigned those vacancies to either a treatment condition—where the school could offer a \$20,000 bonus to a high-performing teacher (top 20% in the district) to transfer and remain for two years—or a control condition, where the vacancy was filled through the district’s usual hiring process. The original TTI study found that offering these randomized incentive opportunities successfully induced effective teachers to move to low-achieving schools and led to increases in student achievement in the treatment schools.

### **The New Study**

While the original study showed the program (TTI) worked as a whole to raise student test scores, it didn’t actually prove that the teachers remained equally effective after moving. To examine this question, this new study uses the existing data from the TTI study, which created two distinct groups for the new researchers to compare:

- **Incentivized-transfer teachers:** These were high-performing teachers who accepted a \$20,000 stipend to fill a treatment team vacancy and move to a low-achieving school.
- **Control vacancy-filling teachers:** This group consisted of teachers who filled similar control vacancies in low-achieving schools that were not offered the transfer incentive. These teachers chose their schools through traditional interviews and applications. Unlike the treatment group, 62% of filled vacancies were internal school moves, 24% by teachers transferring from other schools, and 14% by novice teachers. This group serves as a proxy for who the school would have hired if the bonus program didn't exist.

### **The Analysis: Measuring the Change**

Using value-added estimates, which isolate a teacher’s specific impact on student test scores, the researchers used two related approaches to estimate how teacher performance changed after transferring schools:

- **Predictive Validity Tests:** The researchers tested how well a teacher's past performance predicted their actual performance in the new "receiving" school. If effectiveness were a fixed trait, a teacher’s past performance would be a near-perfect predictor of their future performance.
- **Difference-in-Differences (DiD) Model:** The researchers compared changes in performance for the incentivized-transfer teachers (the treatment group) with those for teachers who filled similar vacancies but did not receive the transfer incentive (the comparison group). By subtracting the second difference from the first, the researchers can isolate the causal effect of transferring to a very different school context (via the incentive) on teacher effectiveness.

## KEY FINDINGS

- 1 For teachers who move into a high-poverty, low-achieving context they aren't used to, their past performance is a weak predictor of their actual impact.**
  - When the researchers looked at "standard hires" (the comparison group), they found a coefficient of 0.92, which was not significantly different from a perfect prediction coefficient of 1.
  - However, for the high-performing "talent transfer" teachers, that coefficient decreased to 0.42. This suggests that a high-performing teacher isn't just "good" in a vacuum; they are "good" because their specific skills match the specific needs of their environment.
- 2 After transferring, the incentivized-transfer teachers experienced a decline in their effectiveness.**
  - On average, their value-added dropped by about 0.12 student standard deviations in the first year after transferring. This drop is equivalent to moving a teacher from the 85th percentile of effectiveness down to the 66th percentile.
- 3 Effectiveness declines for incentivized-transfer teachers appear to be driven by changes in students, school contexts, and teacher-school fit.**
  - **Teaching different types of students:** The students in the "receiving" schools had significantly different backgrounds than those the incentivized-transfer teachers were used to: they generally had lower test scores, came from lower-income families, and were more likely to be Black or Hispanic. These teachers likely had less experience working with the specific needs and backgrounds of students in high-poverty schools.
  - **Change in school contexts:** Incentivized-transfer teachers reported a decline in school-wide support and environment quality. For instance, their satisfaction with student discipline decreased from 81% to 52% after moving. While all new hires faced the same challenging conditions in their new schools, the transfer teachers felt the impact more acutely because they came from environments that were much more conducive to effective teaching.
  - **Teacher-school fit:** Teachers in the comparison group (who chose their schools through traditional interviews and applications) showed almost no drop in effectiveness. The authors interpret this as evidence that standard hiring practices allow for "mutual sorting." Teachers naturally look for schools where they feel they will be a good fit, and principals look for teachers whose skills match the school's needs. Because the \$20,000 incentive bypassed this natural "matching" process, the incentivized teachers ended up in positions where their match quality was lower.
- 4 The effectiveness of incentivized-transfer teachers improved in the second year but did not fully return to pre-transfer levels.**
  - A "sizable portion" of the initial decline in effectiveness remained, suggesting that while some of the struggle was temporary (adjusting to a new school), some of it was a longer-lasting result of the more challenging environment.

- 5 Despite the decline in effectiveness for the individual incentivized-transfer teachers, the incentive program still successfully raised overall student achievement in the first year.**
- Because the transferring teachers were originally in the top 20% of their districts, even with their performance drop, they still maintained a performance level that generally exceeded that of the novice or average teachers who typically fill vacancies in hard-to-staff schools.
  - This means that incentive programs can improve student achievement, but not as much as predicted if effectiveness were fully transferable.

## POLICY AND PRACTICE IMPLICATIONS

- 1 Teacher effectiveness is not a fixed trait; it is heavily influenced by the school context and student population. Recruiting high-performing teachers to struggling schools can help, but transfers alone are unlikely to close achievement gaps.**
- Many policies assume high-performing teachers can be moved to any school and remain equally effective. In this study, “incentivized-transfer” teachers still tend to outperform the teachers schools would otherwise hire. However, their effectiveness declines when they move to very different school environments, meaning transfers alone are unlikely to produce the full improvement policymakers might expect.
- 2 Teachers transferring to very different school contexts likely need additional support to be effective.**
- Teachers moving to schools serving students with different academic needs or backgrounds may temporarily lose student-specific knowledge and instructional strategies that helped them succeed in their previous context. Schools and districts may need to provide targeted professional learning, coaching, and time so teachers can adjust their instruction to new settings and student populations.
- 3 Improving school working conditions may be just as important as redistributing teachers.**
- The study suggests that school environments – including factors such as resources, student support, and school climate – substantially influence teacher effectiveness. Policies that only focus on redistributing teachers without addressing working conditions may limit the effectiveness of those teachers once they arrive.
- 4 Hiring practices designed to ensure a good fit between a teacher’s skills and the school’s needs may be more important than a teacher’s past value-added scores from a different context, since “match quality” is a likely driver of performance.**

## FULL WORKING PAPER

This report is based on the EdWorkingPaper “*Is Teacher Effectiveness Fully Portable? Evidence from the Random Assignment of Transfer Incentives*,” published in February 2026. The full research paper can be found here: <https://edworkingpapers.com/ai26-1405>.

The [EdWorkingPapers Policy & Practice Series](#) is designed to bridge the gap between academic research and real-world decision-making. Each installment summarizes a newly released EdWorkingPaper and highlights the most actionable insights for policymakers and education leaders. *This summary was written by Christina Claiborne.*