

REVIEW OF TRANSFER INCENTIVES FOR HIGH-PERFORMING TEACHERS

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January 2014

Summary of Review

The Teacher Transfer Incentive project was designed to establish whether excellent teachers in large districts would transfer to low-performing schools for an additional stipend, whether they would remain at those schools, and whether they would have a positive impact. Results of this extensive and well-executed study are not encouraging. Of 1,500 teachers actively encouraged to transfer, 5% actually did. While 90% of transfer teachers stayed the full two years required to collect their full stipend, only 60% planned to stay for a third year, the same rate as for teachers not receiving the incentive. Elementary school students seem to have benefitted modestly from these teachers, but middle school students appear not to have benefitted. The results suggest that a financial incentive would have to remain in place longer to continue high teacher retention rates, making the program much more expensive. The study was too short to draw conclusions about long-term impact, and the use of only test scores as an outcome measure further limits policy usefulness. Finally, a transfer policy that implies winners and losers raises ethical questions beyond the reach of this particular study.

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This is one of a series of Think Twice think tank reviews made possible in part by funding from the Great Lakes Center for Education Research and Practice. It is also available at http://greatlakescenter.org.

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I. Introduction: Study Purpose and Design

The purpose of the Teacher Transfer Incentive study (TTI), funded by the federal Department of Education and conducted by Mathematica Policy Research, was to address the concern that low-income schools have a larger percentage of "lower-performing" or "less-qualified" teachers than schools in more middle class areas.¹ Specifically, it tested whether high-performing teachers could be enticed by a \$20,000 stipend over two years to transfer to and remain at a lower performing school, and if so what the impact would be. Ten urban districts with at least 40 elementary schools each were included in the study. The project established the following criteria and definitions:

- High performing teachers were identified as those whose students performed in the top 20% on a district specific value-added measure using a standardized test.
- Vacancies were identified at elementary and middle level "target" schools performing in the bottom 20% on these tests, and high-performing teachers were encouraged to apply. If chosen, they received a \$20,000 stipend over two years regardless of their results.
- High-performing teachers already teaching in a target school when the project began were paid a \$10,000 bonus to remain there.
- Through a random selection process, the study identified control schools with similar demographics that also had vacancies. These vacancies were filled using the normal district process. Thus, "focal" teachers existed in both target and control schools.
- The study hypothesized that high-performing transferred teachers would remain effective with their own students and would also positively affect the teacher teams they joined. The teams of teachers working with focal teachers at the elementary level were defined as grade-level teams, and in middle schools as grade level by subject (math, ELA).
- The researchers set out to study (1) whether the stipend would encourage high performing teachers to move to lower-performing schools, (2) whether these teachers would have a positive impact on their students' test scores and on their

teacher teams, and (3) whether they would remain at the school once the stipend had been fully paid.

The project's base assumption is that better teachers will get better results on standardized tests wherever they teach. While the study compares individual teacher results, teacher team results and retention across similar schools, it does not consider other relevant school factors such as school leadership. Given the substantial cost of the project, the study does consider its cost-effectiveness.

II. Results of the Research

Teacher Transfers: To recruit teachers, TTI "relied on extensive outreach by the site managers . . . and conducted three main recruitment activities:" invitation letters, information sessions, and frequent contact with teacher candidates (p. 32). Most of the teachers offered the transfer incentive did not attend an information session (68%), nor did they apply to transfer (78%) (p. 35). Of the 1,514 eligible teachers identified, 22% applied for one of the target schools (p. 35). The overall ratio of eligible candidates to filled vacancies was 29:1 (p. 31). Ultimately, only 5% of eligible teachers actually transferred (p. 34). Candidates who applied were different from their peers who did not apply in significant ways. Among these, they were more likely to be one or more of the following: lower paid; African American; and unmarried, or married with children under 5 living with them. Additionally, they were more likely to be less satisfied with policies at their current school (p. 36).

Teacher Retention: Teacher retention was measured in the fall of year two, and in the spring of year two as an estimate for fall of year three (p. 37). Retention of focal teachers in the treatment group after the project's first year was the highest of any group at 93% (only half of the stipend had been distributed). The focal teachers in the control group (no stipend) also had a high retention rate of just under 90%. By the time the program ended and all stipends had been distributed, however, retention numbers converged with all groups at 60% or less (p. 70).

Impact on Students: Elementary students in the focal teachers' classes improved by small but statistically significant percentages in both years of the project and for both ELA and math. In the first year, they gained 0.18 of a standard deviation for reading and 0.10 for math, equivalent to increases of 7 and 4 percentile points respectively (p. 59). These numbers grew in the second year to 0.22 (math) and 0.25 (reading)—all statistically significant at the .05 level. In the second year, students in the teacher teams which the focal teachers had joined also registered higher test scores at significant, though lower, levels: 0.08 math, 0.07 reading (p. 59).

Middle school students did not do as well. Although the focal teachers' students showed a slight gain, it never rose to the level of significance. The only statistically significant result at this level was a decline in year two reading scores at -0.06 of a standard deviation.

Students in the teacher teams of the focal teachers lost more often than they gained in both reading and math at -0.02 (p. 60).

Cost Effectiveness: The report concludes that "in at least some settings TTI had positive impacts on test scores, and after the two-year study period when the payments ended, the treatment group teachers had not all left, but returned to their schools in year three at rates that were similar to their control group counterparts." This raised the question of whether the impacts were "large and meaningful enough" to offset their costs. (p. xxxviii). By comparing TTI to Class-Size Reduction (CSR), the study finds some benefit for TTI at the elementary level, where gains were seen. Estimating the cost per standard deviation of CSR at \$5134 per student, the study finds that TTI would be cheaper than CSR for each team of students by anywhere from \$13,154 to \$40,043 (if increased student achievement is projected). (The TTI number is *per team* rather than per student; the study puts the perteam cost at \$36,382.) Middle schools did not show a significant benefit and are not included in this analysis (p. 78).

III. Study Rationale and Policy Significance

The hypothesis being explored in this large-scale experiment is that "high-quality" teachers can be attracted to high-needs schools by cash payments, and that this will improve achievement. A small but positive effect was found at the elementary level, and transferred teachers stayed at the same rate in their new schools as other teachers. The elementary results are modestly positive and statistically significant. The question is, are they meaningful?

IV. The Report's Use of Research Literature

It is not clear whether the research team proposed this study or whether it was in response to a USDOE Request for Proposals. The study views teachers as independent actors not subject to other factors, a viewpoint that has led to many unsuccessful performance pay initiatives.² TTI does not cite research that compares the teacher-quality disparity with other factors affecting achievement, such as school leadership or culture, nor does it offer comparative research on possible interventions other than class-size reduction. Rather it assumes that addressing this disparity will improve achievement, regardless of other school factors.

Unequal Access to High-Performing Teachers: The report adopts the currently popular notion that individual teachers are the key to changing student results, and that low-income schools and students suffer from unequal access to the best teachers. The report distinguishes between the research defining teacher quality based on characteristics such as years of experience or licensure—"proxies for teacher effectiveness"—and more current research that relies on student growth for that definition (p. 1).

Value-Added Measures and Standardized Tests: The report also references recent studies using a value-added approach on standardized test scores to gauge student success and teacher effectiveness. However, it does not address critiques of value-added approaches or the use of standardized tests for these purposes. This is a significant gap. Approaches that reward narrowing the curriculum, test prep over deeper inquiry, and other such measures—even elimination of recess—can negatively affect students in lowincome or under-performing schools.³

Incentives for Teachers: Although a question in this study is whether "good" teachers can be enticed to change schools based on a two-year bonus and then remain in place, most cited references appear to explore the absence of "qualified" teachers and teacher transfers rather than the combination of factors that might influence teacher effectiveness in a transfer.

Class-Size Reduction (CSR) and Other Interventions: The report compares TTI to Class-Size Reduction (CSR) for cost-effectiveness because, as the authors note, data are available (p. 73). Studies of class size are referenced, but other intervention methods, such as approaches to turning schools around, are not. Using class-size reduction as the sole comparison may be inappropriate and misleading, as CSR may incur substantial staffing and capital costs.

V. Review of the Report's Methods

As might be expected from a large study conducted by a well-known research organization, the report is thorough within its limitations. But, as described below, these limitations are significant. The full report addresses additional components of the study, such as the extensive surveying of target teachers on the effectiveness of recruiting methods. These additional study components do not affect the report's central findings, but they may be of some use to other researchers.

VI. Review of the Validity of the Findings and Conclusions

While thorough within its scope and conceptual limitations, the report is ultimately inadequate to its purposes, in that it doesn't show student progress or teacher retention beyond two years, doesn't consider the impact of school and classroom conditions (particularly in later years), and equates teacher effectiveness and student success exclusively with test scores.

• Teacher retention is projected in the spring of the project's second year as a gauge of what the third year will look like. As the third year is the first year in which focal teachers actually receive no stipend, the inability to check actual retention in the third year and beyond is troubling.

- Despite the broad scope of the project across 10 large districts, there are only two years of achievement data—barely enough to draw any useful conclusions. Statistical significance may be easy to achieve given the large scope of the experiment, but practical significance requires a longer look. Two-year results at the elementary level show improvement each year, but these results are insufficient to show that improvement will continue (particularly since the intervention did not show improvement at the middle school level).
- The comparison of TTI to CSR is comparing incomparables; while the report is careful to identify its limitations, it may be misleading given the large expenses often associated with class-size reduction. For example, it reports that the TTI program is \$13,000 less expensive than CSR, then asserts that it could be \$40,000 cheaper if the effects continue. The short scope of the study and the failure to find positive results at the middle school level make such cost savings projections too conjectural and unsupported.
- The core assumption of the study is that teacher effectiveness is an independent variable—one that travels with the teacher and applies regardless of the conditions. Research and practice do not support this conclusion. A broader analysis across different factors known to influence student achievement could have provided a more useful comparison. Factors such as a school's culture and the effectiveness of its leadership may have influenced the success of teachers in the study, but because these factors were not considered, we don't know what impact they may have had. In my own experience with inner city schools, some great successes are developed by new leaders working with faculty members previously responsible for poor results.

VII. Usefulness of the Report for Guidance of Policy and Practice

Based on the study's limitations (as noted above), the modest student gains found only in elementary schools, attrition in transfers, practical and ethical considerations, cost, and the question of replicability, the study offers little for public policy consideration.

Limited Results: Given the low return for the work and expense involved, this program does not recommend itself as a viable option for widespread use. Had the study gone on longer; had more teachers transferred; had the elementary student results been sustained; had the test score changes been of a more meaningful size; and had we learned that teachers stayed more than a few years in their target schools, TTI might offer a more viable approach. But two data points do not represent a trend, and the failure to achieve any positive results at the middle school level suggest that other factors or approaches need to be considered.

Going to Scale—A Zero-Sum Game: TTI makes no attempt to improve teaching broadly, but rather focuses on re-assigning the limited number of "good" teachers. It's a

zero-sum strategy in which some students and schools lose for others to benefit. Moving good teachers from some students to serve others raises discomforting ethical and political concerns and risks a parent backlash. As a performance pay strategy, it's generally easier to entice people to perform tasks that are clear (changing schools) than those that aren't (improving test scores). When 78% of teachers don't consider moving after heavy recruitment and the offer of a \$20,000 stipend, and when only 5% actually transfer, this project is unlikely to go to scale.

Cost Effectiveness: If a district can identify enough highly effective teachers, the study suggests that some will move to lower-performing schools. If they move, it predicts modest but positive results overall. While it is appropriate to focus resources where they are most needed, pursuing a strategy that doesn't attempt to build improvement among any of its teachers is not one that is likely to succeed.

Other Options, Other Factors: There is significant research showing the limitations of standardized testing, particularly as we move into the era of the Common Core. There is also substantial research demonstrating the influence of school factors such as leadership and school culture on teacher and student success. TTI's failure to consider factors such as these is a striking flaw, though it is not unusual in studies of "the teacher quality gap." Until a study of teacher transfers addresses the additional school factors that affect student achievement, we will not know how these different factors interrelate.

Although the study was well-executed and thorough, the report acknowledges that the results provide little support for the concept of teacher transfer. In addition, the study was undercut by design limitations, possibly dictated by a USDOE request for proposals, that prevented it from considering long-term impact or the influence of other school factors noted above. Ultimately, the limited results in this report suggest that public officials should look elsewhere for methods to improve student achievement.

Notes and References

- 1 Glazerman, S., Protik, A., Teh, B., Bruch, J., & Max, J. (2013). *Transfer Incentives for High-Performing Teachers: Final Results from a Multisite Randomized Experiment*. Washington, DC: Institute of Education Services, U.S. Department of Education Retrieved December 6, 2013, from http://ies.ed.gov/ncee/pubs/20144003/pdf/20144003.pdf.
- 2 Gratz, D.B. (2009). The Peril and Promise of Performance Pay. Lanham, MD: Rowman and Littlefield;

Springer, M.R., ed. (2009). Performance Incentives. Washington DC: Brookings Institution Press.

3 Ravitch, D. (2010). The Death and Life of the Great American School System. New York: Basic Books;

Nichols, S.O. & Berliner, D.C. (2007). Collateral Damage. Cambridge, MA: Harvard Education Press;

Wolk, R.A. (2011). Wasting Minds. Arlington, VA: ASCD.

4 Rothstein, R. (2004). *Class and Schools*. New York: Economic Policy Institute and Teachers College, Columbia University;

Marzano R.J., Waters, T., & McNulty, B.A. (2005). School Leadership that Works. Alexandria VA: ASCD and Aurora, CO: McREL.

5 The Murkland Elementary School in Lowell, Mass., provides an example of this kind of change. After being labeled one of the state's 36 under-performing (Level IV) schools in 2010, with new leadership it undertook an improvement strategy that focused on assessing both its achievement and the factors within the school that led to that achievement. Teachers were allowed to transfer out, but none were removed initially. The following year, Murkland showed the greatest gains of any school in the state, reaching its three-year goals in the first year. These first-year gains were brought about by a faculty of whom more than half had previously been responsible for the poor student results. As a provider of technical assistance to this process, I can attest to the power of strong leadership, using an analysis of school results and the conditions under which those results were achieved, to lead entire schools to do better, not just some teachers.

See also:

underperforming-level-1;

Lannan, K. (2013, Sept. 19). Teamwork fueled Murkland's turnaround from underperforming to a Level 1 school in Lowell. *Lowell Sun*. Retrieved January 24, 2014, from http://www.lowellsun.com/news/ci_24129344/teamwork-fueled-murklands-turnaround-from-

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http://www.lowellsun.com/todaysheadlines/ci_21920992/national-union-chief-murkland-schools-success-breathtaking;

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6 Wagner, T. (2002). Making the Grade: Reinventing America's Schools. New York: RoutledgeFalmer;

Reeves, D. B. (2009). Leading Change in Your School. Alexandria, VA: ASCD.

7 Sanders, W.L., Wright, S.P., Langevin, W.E. (2009). The performance of highly effective teachers in different school environments. In M.G. Springer, Ed. *Performance Incentives*. Washington DC: Brookings Institution Press.

This study compares teacher effectiveness before and after transfers and finds that teachers are much more likely to remain at the same level of effectiveness than might be attributed to chance. Like TTI, it does not attempt to identify other factors that might have contributed to teacher effectiveness at different schools.

DOCUMENT REVIEWED: Transfer Incentives for High-

Performing Teachers: Final Results

from a Multisite Randomized

Experiment

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Department of Education, Institute of

Education Services

DOCUMENT RELEASE DATE: November 2013

REVIEW DATE: January 28, 2014

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SUGGESTED CITATION:

Gratz, D.B. (2014). Review of "Transfer Incentives for High-Performing Teachers." Boulder, CO: National Education Policy Center. Retrieved [date] from http://nepc.colorado.edu/thinktank/review-transfer-incentives.