

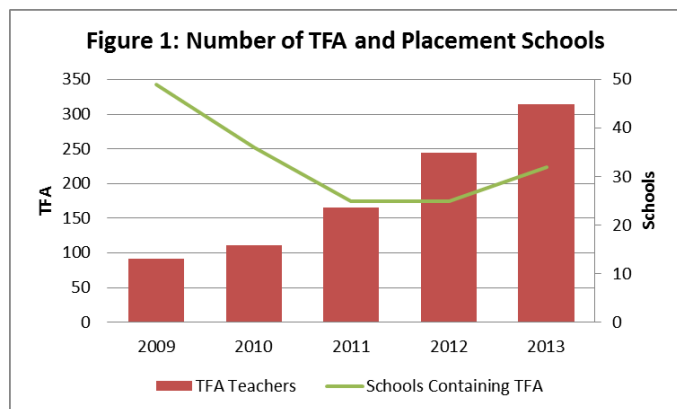


Examining Spillover Effects from Teach For America Corps Members in Miami-Dade County Public Schools

Michael Hansen, Ben Backes, Victoria Brady, Zeyu Xu
CALDER Center at the American Institutes for Research
Executive Summary

Background: Teach For America (TFA) is an alternative certification program that has demonstrated success in placing intensively selected recent college graduates and mid-career professionals into classrooms serving high-need students. Yet, little is known about the program's impact beyond the classrooms of individual corps members. TFA's recent placement strategy in the Miami-Dade County Public Schools (M-DCPS), where large numbers of TFA corps members are placed as clusters into a targeted set of disadvantaged schools, provides a unique research opportunity to evaluate the impact of the TFA program on broader school performance.

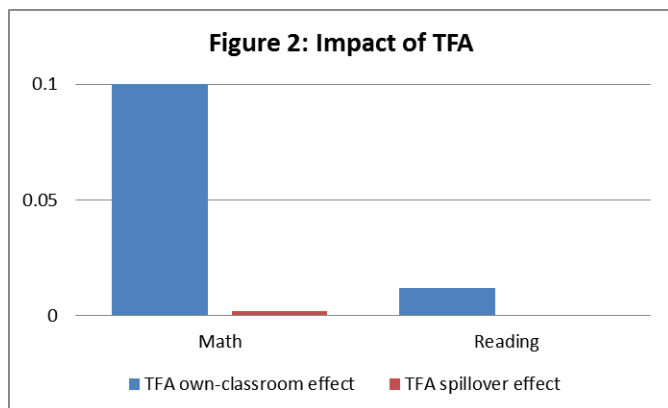
TFA Clustering in M-DCPS: The clustering strategy dramatically increased the concentrations of TFA corps members in select schools by simultaneously narrowing the number of schools eligible for placement and increasing the size of the active TFA corps. The changes in placement schools and corps members are shown in Figure 1. In 2009, the year immediately preceding the clustering strategy, there was an average of slightly less than two TFA corps members in each school where TFA corps members were placed.



In the years following, the number of placement schools dropped by about one third, and the number of TFA corps members in the district more than tripled, resulting in an average of about 10 corps members per placement school.

Research Question: How does the density of TFA-affiliated teachers within a school affect the performance of both TFA and non-TFA teachers, as measured by the test scores of their students? With its clustering strategy, TFA corps members might affect the performance of the school in at least two distinct ways: through a *composition effect* and a *spillover effect*. The *composition effect* measures the effectiveness of teachers in their own classrooms — if TFA corps members are more effective than the teachers they replace, then the school improves simply as a mechanical result of getting better teachers. On the other hand, the *spillover effect* measures the extent to which an influx of TFA corps members affects other teachers' performance; for example, by promoting more content-rich instruction or improvements in the school culture.

Data: We use detailed student-level administrative data that cover M-DCPS students linked to their teachers for five school years (2008-09 through 2012-13). M-DCPS is the largest school district in Florida and the fourth largest in the United States. The district has large minority and disadvantaged student populations, typical of regions TFA has historically targeted; about 60% of its students are Hispanic, 30% black, and 10% white, and over 60% of students qualify for free or reduced price lunch. The student-level longitudinal data we use in the analysis contain reading and math scores on the Florida Comprehensive Achievement Test (FCAT).



Key Findings: Our main findings are shown in Figure 2. Many of the schools chosen to participate in the cluster strategy experienced large gains in math achievement, though no improvement in reading. These gains were driven in part by the *composition effect* of having larger numbers of effective TFA corps members. In particular, we find that students taught by TFA corps members scored about 1/10 of a standard deviation higher in math. This is equivalent to over three months of additional schooling, relative to the typical

learning these students experience. The TFA effect on reading test scores is positive, but not statistically significant. On the other hand, we do not find any evidence that the clustering strategy led to any *spillover effect* on school-wide performance in either math or reading.

Implications: TFA's presence in the district, and particularly in the most disadvantaged schools, has substantially increased. Thus, the composition effect alone — where vacancies in high-need schools are filled with effective TFA corps members in math — has led to TFA making a difference on student math outcomes in the district. Furthermore, we do not find any evidence that the large increase in the number of TFA placements in recent years was associated with a reduction in TFA effectiveness, suggesting that TFA has the potential to scale up its presence without diluting the talent pool of its corps members.

Our results provide no evidence of spillover on student test scores in the short term. In other words, there is no reason to expect that the extra student gains for TFA corps members under the clustering strategy would be any different than the gains that could result from an alternate placement strategy where corps members were more evenly distributed across schools. However, by focusing these placement efforts in some of the most disadvantaged, low-performing schools in the district, rather than spreading corps members broadly across many schools, the clustering strategy has accelerated growth in schools that are in greatest need, and within-district achievement gaps are reduced as a result.