

ISSUE BRIEF

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TRENDS IN EDUCATION RESEARCH

Quality in the Classroom: How Does Teach For America Measure Up?

by Paul Decker, Daniel Mayer, and Steven Glazerman

This brief is based on Mathematica's evaluation of Teach For America (TFA). TFA was founded in 1989 to address the educational inequities facing children in low-income schools by expanding the pool of high-quality teacher candidates available to these institutions. Mathematica's rigorous evaluation used scientific research principles to measure the impact that TFA elementary school teachers had, relative to non-TFA elementary teachers, on student learning. The research included two stages: a pilot study in Baltimore during the 2001–2002 school year and a full-scale evaluation in Chicago, Los Angeles, Houston, New Orleans, and the Mississippi Delta during the 2002–2003 school year. The sample included 17 schools, 100 classrooms, and nearly 2,000 students.

Sharpening the Focus on Teachers

Increasing the supply of high-quality teachers, particularly to low-income schools, ranks high on our country's list of educational concerns. TFA focuses on expanding the pool of teachers for our nation's most disadvantaged students by recruiting recent graduates from some of the country's most competitive colleges for two-year teaching commitments in urban and rural public schools. The program seeks out candidates with the potential to be effective in the classroom, even though they have not majored in education and do not have the same training expected of traditional teachers.

Because TFA has been expanding rapidly—due in part to its success in attracting applicants—critics have increasingly questioned its effectiveness. Between 2000 and 2003, the TFA applicant pool grew almost fourfold (from slightly over 4,000 to almost 16,000), and the number of new corps members nearly doubled (from close to 900 to almost 1,700). Since the program's inception in 1990, it has provided more than 10,000 teachers who have worked with more than 1.5 million children.

To estimate the impact of TFA teachers on student achievement, we designed our study to answer the following question: Do TFA teachers improve—or at least not harm—student outcomes, relative to what would have happened in their absence? To ensure that

TFA'S APPROACH TO TEACHER TRAINING

TFA training is limited in duration but intensive and rigorous. After acceptance into the program, recruits participate in a five-week summer institute that prepares them for placement in the classroom at the start of the school year. Their coursework covers teaching practice, classroom management, diversity, learning theory, literacy development, and leadership. Participants also spend four weeks of the institute in summer school classrooms as student teachers or team teachers. They meet regularly with subject- and grade-specific learning teams and attend evening workshops. Institute faculty evaluate progress through regular assessment and feedback. TFA reports that a typical recruit carries out a number of preliminary assignments before arrival at the institute and then spends an estimated 70 hours a week over the next five-week period on institute-related activities. For most recruits, professional development and training continue after placement in the classroom.

TFA and non-TFA (control group) teachers had essentially identical classes of students, students were randomly assigned to classrooms before the school year started. We then compared outcomes for students taught by TFA teachers with outcomes for students taught by other teachers in the same schools and at the same grades. The primary outcomes examined were based on math and reading scores from the Iowa Test of Basic Skills, administered at the beginning and end of the school year. We measured other outcomes by collecting data from school records and asking teachers to respond to a survey about classroom practices and environment.

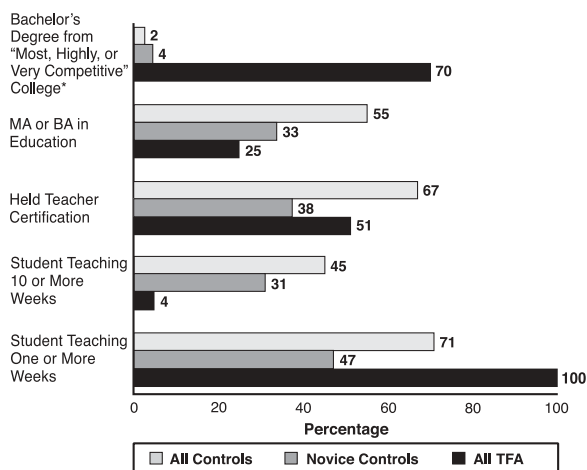
Teacher Findings at a Glance

- As expected, TFA teachers had strong academic backgrounds. Seventy percent graduated from colleges classified as either “most competitive,” “highly competitive,” or “very competitive” (Figure 1). The comparable figure for either all control group teachers or novice control group teachers—defined as those with three years or less of teaching experience—is under four percent.
- TFA teachers had less education-specific training than control group teachers, although, by the time of the survey, the differences between TFA and

novice control teachers (those with two or fewer years of teaching experience at the start of the year) were modest. By the end of the study year, about 25 percent of TFA teachers had either a bachelor’s or a master’s degree in education, compared with 55 percent of control group teachers overall and 33 percent of novice teachers. Most TFA teachers who earned an education degree did so while they were teaching—only one TFA teacher had such a degree when starting in the classroom.

- By the end of the study year, over half the TFA teachers had regular or initial teacher certification. This figure is substantially below the comparable figure of 67 percent for the full control group, although above that for novice control teachers (38 percent).
- Before they started teaching, TFA teachers had less student teaching experience than many, but by no means all, control group teachers. Only 4 percent of TFA teachers had spent 10 or more weeks student teaching, compared with 45 percent of control teachers and 31 percent of novice control teachers. On the other hand, all TFA teachers had at least four weeks of student teaching experience (from TFA’s summer institute), while many control teachers and over half of novice control teachers had no student teaching experience at all.

Figure 1: Education and Teacher Training



Source: Teacher survey.

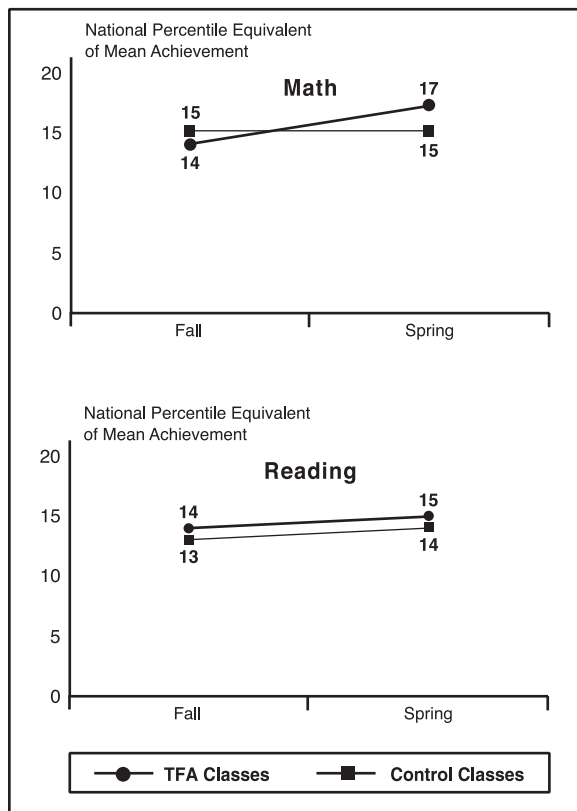
* Defined according to *Barron's Profiles of American Colleges*.

These findings show that TFA and control group teachers have very different backgrounds, but they also reveal diversity in control group teachers’ backgrounds and preparation. Many control teachers, particularly novice ones, did not enter teaching through a traditional route. Compared with a nationally representative sample, the control teachers in our study had substantially lower rates of certification and formal education training.

Student Findings at a Glance

- TFA teachers had a positive impact on their students’ math achievement—average math scores were significantly higher among TFA students than among control students (Figure 2). The average control student scored in the 15th percentile at the beginning of the study and remained in the 15th percentile at the end of the study year. In contrast, the average TFA student increased in rank from the 14th to the 17th percentile over the same period.

Figure 2: Fall-to-Spring Change in Achievement



Source: Based on scores from the Iowa Test of Basic Skills

After we control for student and classroom characteristics, the impact translates into 0.15 standard deviation, which is equivalent to the effect of one additional month of math instruction.

- TFA teachers had no impact on their students' reading achievement. Students in TFA and control classrooms experienced the same growth rate in reading achievement—an increase equivalent to one percentile.
- When we compared only novices in both the TFA and control groups, the impacts on math and reading achievement were the same or larger than those for all teachers in both groups. Compared with their novice counterparts, novice TFA teachers generated math test scores that were 0.26 standard deviation higher, on average. The impact on reading scores remained statistically insignificant.
- Impacts were similar, although slightly lower, when TFA teachers were compared with control teachers who had regular teaching certificates.

- TFA impacts were similar across different subgroups of students. For example, impacts were similar for boys and girls and for different racial/ethnic groups. They were also similar for students with different baseline achievement scores and for those in different grades.
- TFA teachers had no substantial impact on the probability that students were retained in grade or assigned to summer school.
- TFA teachers were more likely than control teachers to report problems with student disruptions and physical conflicts in their classrooms. Since these measures were based on teacher reports, the differences may reflect variations in TFA and control teachers' expectations and perceptions for student behavior, rather than actual differences between the classrooms.

Implications for the Future

Our findings have important implications for a variety of stakeholders working to improve educational opportunities for children in low-income communities, including TFA staff and funders, school districts, and state and federal policymakers interested in finding ways to attract and retain high-quality teachers.

From the perspective of a community or a school with the opportunity to hire TFA teachers, our findings suggest that the program offers an appealing pool of candidates. Because of TFA's positive impact on math scores, a school hiring TFA teachers can expect to increase its students' average math achievement—without lowering reading achievement. Furthermore, there is little risk that hiring TFA teachers will reduce achievement, either for the average student or most student subgroups. Finally, because TFA teachers are paid the same as other teachers, hiring them helps schools raise achievement without increasing direct costs (school districts typically contribute only \$1,500 per TFA teacher to offset recruiting). Other interventions that have been shown to increase achievement, such as class size reduction, involve substantial direct costs.

From the perspective of TFA and its funders, the study shows progress toward the program's primary objective of reducing inequities in education—TFA supplies low-income schools with academically talented teachers who contribute to students' academic achievement. Even though TFA teachers generally lack traditional teacher training, they produce higher student test scores than other teachers in their schools—not just other novice teachers or uncertified teachers, but also veterans and certified teachers.

Finally, our study provides important information to policymakers, particularly as districts and states struggle to meet federal requirements to staff classrooms with highly qualified teachers by the end of the 2005-2006 school year. Many control teachers were not certified or lacked formal training, highlighting the need to develop programs and policies that can attract good teachers to schools in the most disadvantaged communities. Our findings show that TFA is one such program.

For more information on this study, funded by the Smith Richardson Foundation, the William and Flora Hewlett Foundation, and the Carnegie Corporation, contact Paul Decker at (609) 275-2290, pdecker@mathematica-mpr.com. The full report is available at www.mathematica-mpr.com.

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For the analysis, control teachers included any teacher who had never been a TFA corps member. As a result, this group included traditionally certified, alternatively certified, and uncertified teachers—basically, any teacher who came from a source other than TFA. TFA teachers included any teacher who entered teaching through the program—both current TFA corps members who were in their first two years of teaching, as well as a small number of former TFA corps members who were still teaching in the schools in our study.

We conducted two types of comparisons. First, we compared classes taught by TFA teachers with classes taught by all control teachers. This group included both novice and veteran control teachers. In this comparison, the average number of years of teaching experience was far higher for the control teachers than for the TFA teachers. To control for these differences in teaching experience, we conducted a second comparison based only on classes taught by novice TFA teachers and novice control teachers.

Our estimates reflect the full impact of the TFA program and include both the recruitment effect of TFA on the type of teachers who enter the profession in low-income communities as well as the effect of TFA training on program participants. Both effects may in turn influence student outcomes and are integral to the TFA program. Our study was not designed to disentangle their separate influences.

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