



Evaluation Matters

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Teach for America: *An Analysis of Placement and Impact, 2011-12*

1. What is the purpose of this report?

This report examines the placement of Teacher for America (TFA) teachers and examines their impact on the learning gains of their students during 2011-12. TFA is an organization that recruits and trains recent college graduates/professionals to teach for two years in selected communities. Admission is competitive. All members attend five-weeks of intensive preparatory training and receive ongoing support from the TFA Foundation during their internship. Teachers who do not hold certification in their assigned content areas receive alternative certification through coursework taken while completing the program. TFA teachers receive the regular district salary and benefits, supplemented by a voucher that can be used to cover previous student loans, credentialing, or further education.

2. Which populations were targeted in this report?

Sets of eligible TFA teachers were identified in 2011-12, which included all TFA teachers assigned to grades tested by the Florida Comprehensive Assessment Test (FCAT) in reading and mathematics. Separate comparison groups for reading and mathematics included all Non-TFA teachers assigned to FCAT tested grades, in schools with TFA teachers, who had course loads in which the majority of courses were the same as those taught by the TFA teachers.

3. How were the data for this report collected and analyzed?

Data used in this analysis were obtained from archival records supplemented by data from the student data-base system and student learning gains data computed by the Florida Department of Education (FLDOE). Analyses of the placement and persistence of TFA teachers was limited to descriptive statistics. The analysis of the impact of TFA teachers was conducted by comparing the proportion of TFA and Non-TFA teachers' students who made learning gains in core courses and gauging the statistical significance of any differences in the comparisons using chi-squared (χ^2) tests. Phi (ϕ) coefficients were used to classify the practical significance of any statistically significant comparisons found as .10 (weak), .30 (moderate), or .50 (strong), based on Cohen's (1988) classification.

4. At what school levels were Teach for America teachers placed?

TFA teachers were primarily assigned to M-DCPS senior high schools, but varied in terms of grade organization, subject area, and level of the courses. Table 1 lists the total number of schools with TFA teachers, the total number of TFA teachers in those schools, and the number and percent TFA teachers assigned to FCAT tested grades and subjects within each school type.

Table 1. Schools with Teach for America Teachers, 2011-12

	Schools	Teachers	FCAT	
	<i>N</i>	<i>N</i>	<i>n</i>	%
Elementary	7	27	9	33.3
K - 8	2	6	4	66.7
Middle	8	46	24	52.2
Senior	6	72	21	29.2
Total	23	151	58	38.4

Note. Percentages shown are within school type (row) and cannot be added together

- Over 150 TFA teachers were assigned to 23 schools during 2011-12; nearly half of those were assigned to senior high schools.
- Less than 40% of TFA teachers were assigned to grades and subjects tested by FCAT.

5. What types of courses were taught by the TFA teachers during 2011-12?

Tables 2 (reading) and 3 (mathematics) list the courses to which TFA teachers were assigned, by course group (first seven digits of course number) within school level: Elementary (Grades 3-5), Middle (Grades 6-8), and Senior (Grades 9-10); courses at K-8 centers are partitioned into elementary and middle grades. Counts are duplicated, as teachers may be assigned to teach multiple courses.

- Reading/Language Arts (see Table 2)
 - ◆ Elementary: TFA teachers' were primarily assigned to standard education courses.
 - 9.1% were comprised of ESOL related courses.
 - 78.2% were comprised of standard education courses.
 - 18.2% were comprised of advanced courses.
 - ◆ Middle: The TFA teachers' course assignments were concentrated among basic and standard education courses.
 - 41.6% were comprised of intensive/ESOL related courses.
 - 41.7% were comprised of standard education courses.
 - 16.7% were comprise of advanced courses.
 - ◆ Senior: The TFA teachers' course assignments were concentrated among basic and standard education courses.
 - 48.1% were comprised of intensive/ESOL related courses
 - 33.3% were comprised of standard education courses.
 - 18.5% were comprised of advanced courses.

Table 2. Teach for America Teachers' Reading/Language Arts Course Assignments, 2011-12

Course Group	Course Name	N	%
Elementary			
5010050EE	Reading-Elementary ESOL-Related	1	9.1
5010050E1	Reading-Elementary, Grade 3	4	36.4
5010050F1	Reading-Elementary, Grade 4	1	9.1
5010050E2	Reading-Elementary, Grade 3 - Gifted	1	9.1
5010050F2	Reading-Elementary, Grade 4 - Gifted	1	9.1
5010050G1	Reading-Elementary, Grade 5	3	27.3
Total	Total	11	100.0
Middle			
100001000	M/J Intensive Reading/Enrichment	4	33.3
100201000	M/J Language Arts 2 Through ESOL	1	8.3
100101000	M/J Language Arts 1	2	16.7
100104000	M/J Language Arts 2	2	16.7
100107000	M/J Language Arts 3	1	8.3
100108000	M/J Language Arts 3, Advanced	2	16.7
Total	Total	12	100.0
Senior			
100041000	Intensive Reading/Plus/Enrichment	7	25.9
100238000	Developmental Language Arts Through ESOL	4	14.8
100131000	English 1	4	14.8
100134000	English 2	3	11.1
100930000	Writing 1	1	3.7
100931000	Writing 2	1	3.7
100730000	Speech 1	2	7.4
100733000	Debate 1	2	7.4
100132000	English Honors 1	1	3.7
100932000	Creative Writing 1	1	3.7
100933000	Creative Writing 2	1	3.7
Total	Total	27	100.0

Note. Course groups are the first nine digits of the course number and are organized within course levels (as opposed to grade organizations) as follows: Elementary (Grades 3-5), Middle (Grades 6-8) and Senior (Grades 9-12). At the Elementary level, the last two digits of the course group indicate the grade level and difficulty level of the course. At the Middle and Senior level, the last two digits of the course group are padded with zeros.

Table 3. Teach for America Teachers' Mathematics Course Assignments, 2011-12

Course Group	Course Name	<i>n</i>	%
Middle			
12040000	M/J Intensive Mathematics	2	14.3
120732000	Integrated Mathematics 2	1	7.1
120733000	Integrated Mathematics 3	1	7.1
120501000	M/J Mathematics 1	1	7.1
120504000	M/J Mathematics 2	2	14.3
120502000	M/J Mathematics 1, Advanced	3	21.4
120505000	M/J Mathematics 2, Advanced	2	14.3
120507000	M/J Pre-Algebra	2	14.3
Total	Total	14	100.0
Senior			
120040000	Intensive Mathematics	3	17.6
120041000	Math for College Success	2	11.8
120031000	Algebra 1	1	5.9
120033000	Algebra 2	2	11.8
120631000	Geometry	3	17.6
120032000	Algebra 1 Honors	2	11.8
120034000	Algebra 2 Honors	2	11.8
120632000	Geometry Honors	1	5.9
129831000	Advanced Topics in Mathematics	1	5.9
Total	Total	17	100.0

Note. Course groups are the first nine digits of the course number and are organized within course levels (as opposed to grade organizations) as follows: Middle (Grades 6-8) and Senior (Grades 9-12). At the Middle and Senior level, the last two digits of the course group are padded with zeros.

- Mathematics (Table 3)
 - ◆ Elementary: None of the TFA teachers were assigned to mathematics courses
 - ◆ Middle: Half of the TFA course assignments were advanced courses, with the remainder split between basic and standard education courses.
 - 28.5% were comprised of integrated/intensive mathematics courses.
 - 21.4% were comprised of standard education courses.
 - 50.0% were comprised of advanced courses.
 - ◆ Senior: TFA teachers' course loads were nearly equally divided between basic, standard, and advanced courses.
 - 29.4% were comprised of intensive mathematics/mathematics for college success courses.
 - 35.3% were comprised of standard education courses.
 - 35.4% were comprised of advanced courses.

6. What was of the impact of the TFA teachers on students' learning gains?

The impact of TFA teachers on students' learning gains was examined by comparing the proportion of TFA and Non-TFA teachers' students who made learning gains and gauging the statistical significance of any differences found using chi-squared tests. Tables 4 (reading) and 5 (mathematics) list the total number of comparisons and the number and percentage of students who made gains when taught by TFA and Non-TFA teachers, followed by the results of chi-squared tests (χ^2) and phi coefficients (ϕ) used to gauge the statistical and practical significance of any differences found, for the 2011-12 school year, by grade within school type: 3-5 (elementary), 6-8 (middle), and 9-10 (senior). Results from any K-8 centers are partitioned into elementary and middle grades. Statistically significant differences are indicated by asterisks following the results of the chi-squared test. The direction and practical significance (size) of the statistically significant difference is given by the phi (ϕ) coefficient: Positive signs indicate that higher percentages of students made gains when taught by TFA teachers when compared to Non-TFA teachers. Negative signs indicate that lower percentages of students made gains when taught by TFA teachers when compared to Non-TFA teachers.

Table 4. Comparison of TFA and Non-TFA Teachers' Students' Learning Gains in Reading

Grade	TFA ^a			Non-TFA			Difference	
	N	n	%	N	n	%	χ^2	ϕ
Elementary								
4	27	21	77.8	170	116	68.2	1.00	.07
5	54	37	68.5	185	132	71.4	0.16	-.03
ALL	81	58	71.6	355	248	69.9	0.10	.02
Middle								
6	187	82	43.9	407	205	50.4	2.18	-.06
7	308	173	56.2	674	380	56.4	0.00	.00
8	273	178	65.2	856	542	63.3	0.32	.02
ALL	768	433	56.4	1,937	1,127	58.2	0.73	-.02
Senior								
9	456	278	61.0	1,470	867	59.0	0.57	.02
10	453	232	51.2	620	375	60.5	9.16**	-.09
ALL	909	510	56.1	2,090	1,242	59.4	2.88	-.03

Note. The gains displayed above are the Learning Gains defined by the Florida Department of Education for use in the state's school grading system. Chi-squared (χ^2) tests measure the difference in the proportion of the groups' students who made gains with, statistically significant differences indicated by asterisks (*). Phi (ϕ) coefficients are effect sizes that indicate the direction and practical significance of those differences, which have been classified as .10 (weak), .30 (moderate), and .50 (strong) by Cohen (1988). Positive coefficients favor the Teach for America (TFA) teachers, while negative coefficients favor the Non-TFA teachers.

^a Teach for America

** $p < .01$.

- Reading (Table 4)
 - ◆ The percentage of students who made gains was lower at the middle and senior high schools than at elementary schools for both TFA and Non-TFA teachers.
 - ◆ Only one of the seven valid by grade comparisons in Grades 4 - 10, 14.3%, was statistically significant. The difference, which favored the Non-TFA teachers, had a weak level of practical significance.

Table 5. Comparison of TFA and Non-TFA Teachers' Students' Learning Gains in Mathematics

Grade	TFA ^a			Non-TFA			Difference	
	N	Gain		N	Gain		χ^2	Φ
		N	%		n	%		
6	115	68	59.1	607	287	47.3	5.43*	-.09
7	371	245	66.0	633	418	66.0	0.00	.00
8	188	152	80.9	481	302	62.8	20.23**	.17
ALL	674	465	69.0	1,721	1,007	58.5	22.45**	.10

Note. The gains displayed above are the Learning Gains defined by the Florida Department of Education for use in the state's school grading system. Data were not available for students in grades 9 -10, because students in those grades do not take the FCAT. No TFA teachers were assigned to teach elementary mathematics. Chi-squared (χ^2) tests measure the difference in the proportion of the groups' students who made gains with, statistically significant differences indicated by asterisks (*). Phi (ϕ) coefficients are effect sizes that indicate the direction and practical significance of those differences, which have been classified as .10 (weak), .30 (moderate), and .50 (strong) by Cohen (1988). Positive signs in this analysis favor Teach for America (TFA) teachers, while negative signs favor Non-TFA teachers.

^a Teach for America

** $p < .01$.

- Mathematics (Table 5)
 - ◆ The percentage of students who made gains was lowest in the sixth grade for both TFA and Non-TFA teachers.
 - ◆ Two-thirds of the valid by grade comparisons, in Grades 6-8, were statistically significant. Of those, one favored the TFA teachers and one favored the Non-TFA teachers. The significant differences represented weak levels of practical significance.

7. How long to TFA teaches remain employed in the district after completing their commitment with the program?

The persistence of TFA teachers who continued teaching in the district beginning in the 2008-09 school year was gauged by matching their employee numbers to the 2011-12 course/scheduling file maintained on the data warehouse. Table 6 lists the total number of TFA teachers and the number and percent who were still teaching, grouped by their first year of post TFA service.

Table 6. Number and Percent of TFA Teachers Still Teaching in the District

First Post TFA Year	Total TFA	Teaching 2011-12	
		<i>n</i>	%
2011-12	54	10	18.5
2010-11	55	4	7.3
2009-10	42	4	9.5
ALL	151	18	11.9

- Of the 54 TFA teachers who entered their first year of post-TFA service in 2011-12, 18.5% continued teaching in the district.
- Of the 97 TFA teachers who entered their first year of post-TFA service in 2009-10 and 2010-11, around 8% continued teaching in the district.
- Of the TFA teachers who have fulfilled their obligations and for whom records were available, around one in nine was still teaching in the district at the end of 2011-12.

8. What were the principal conclusions of this report?

In reading, fewer than one-fifth of TFA teachers in FCAT-tested grades were assigned to teach advanced reading courses, while in mathematics, about half were. When the learning gains made by students of TFA teachers are compared with those made by students of their Non-TFA counterparts who were assigned to similar courses no consistent impact was found. The fact that the strongest gains were found for TFA teachers who taught eighth grade, of whom the majority were assigned to advanced courses, may suggest that TFA teachers are more effective in advanced course assignments. The vast majority of TFA teachers do not continue teaching in the district after completing their commitments with the program, with over 80% leaving at the end of their three year commitment.