# Evaluation Matters

## Teach for America:
## *An Analysis of Placement and Impact, 2018-19*

### 1. What is the purpose of this report?

This report examines the patterns of placement of Teach for America (TFA) teachers and the achievement of the students they taught during the 2018-19 school year. The length of time current and former TFA teachers continue as employees of the District is also explored. TFA is an organization that recruits 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 TFA during their contractual commitment. TFA teachers receive the regular district salary and benefits, supplemented by a two-year Americorps Education Award that can be used to cover previous student loans, credentialing, or further education.

### 2. Which populations were targeted in this report?

All TFA teachers assigned to teach at participating schools within the M-DCPS are included in the participation section of this report. The analysis of impact was limited to teachers assigned to teach content addressed through state- and district- wide assessments; i.e., reading/English language arts (Grades 1 – 10), mathematics (Grades 1 – 10), science (Grades 5 and 8), civics (Grade 7), biology (Grade 10), and U.S. History (Grade 11). Any teachers who previously participated in the TFA program were excluded from the analysis. The comparison pool for the impact analysis was comprised of all non-TFA teachers assigned to teach students in the schools, subjects, and grades in which the TFA teachers were deployed; teachers' years of experience are not taken into account.

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

Data used in this analysis were obtained from archival test data, the student data-base system, rosters of TFA teachers provided by Human Capital management, and personnel records from the District's Data Warehouse. Analysis of the persistence of TFA teachers, or continued employment beyond the two contracted years of service, was limited to descriptive statistics. The placement of TFA teachers involved classifying each discrete course taught by all the teachers in schools with TFA teachers into categories based on the following criteria: school level (elementary, middle, and senior); content area (reading/English language arts, mathematics, science, and social studies); and curricula, subdivided into five levels based on difficulty and English proficiency: 1 (special education), 2 (intensive/basic/English for Speakers of Other Languages (ESOL) instruction, 3 (ESOL related/developing, I.e., courses taught with ESOL/ESE strategies), 4 (general education), and 5 (honors/gifted/advanced placement).

Table 1 depicts this rubric and lists the categories within each grade organization with the number of TFA teacher assignments in each subject area. Teachers with assignments in multiple categories would be counted in each group, which lists the categories within each grade organization with the number of TFA teacher assignments in each subject area. Teachers with assignments in multiple categories would be counted in each group.

**Table 1.  Number of Courses Taught by TFA Teachers, by Categories and Subject Area**

| | Subject Area | | | |
| --- | --- | --- | --- | --- |
| Category | Reading/English Language Arts | Mathematics | Science | Social Studies |
| **Elementary** | | | | |
| Special Education | 1 | 1 | 1 | 0 |
| Intensive/Basic/ ESOL | 29 | -- | -- | -- |
| ESOL Related/Developing | 26 | 14 | 16 | 20 |
| General Education | 29 | 15 | 19 | 26 |
| Gifted/Honors/AP | 8 | -- | -- | -- |
| Total | 93 | 30 | 36 | 46 |
| **Middle** | | | | |
| Special Education | -- | 1 | -- | -- |
| Intensive/Basic/ESOL | 7 | 5 | -- | -- |
| ESOL Related/Developing | 7 | 1 | -- | -- |
| General Education | 18 | 9 | 9 | 7 |
| Gifted/Honors/AP | 14 | 6 | 4 | 5 |
| Total | 46 | 22 | 13 | 12 |
| **Senior** | | | | |
| Special Education | -- | -- | -- | -- |
| Intensive/Basic/ESOL | 7 | 6 | -- | -- |
| ESOL Related/Developing | 2 | -- | -- | -- |
| General Education | 27 | 13 | 6 | 4 |
| Gifted/Honors/AP | 15 | 4 | 3 | 3 |
| Total | 51 | 23 | 9 | 7 |

*Note*. The category associated with a course is assumed to serve a distinct subpopulation of students. Teachers assigned to teach one or more different courses/sections are included in multiple groups.
ESOL - English for Speakers of Other Languages

**Reading/English language arts**: At the elementary level, TFA teachers' course assignments were equally divided between Intensive/Basic ESOL, and ESOL Related/Developing courses, and general education courses. At the secondary school level, TFA teachers' course assignments were mainly split between the general education and Gifted/Honors/AP levels.

**Mathematics**: General education courses comprised the majority of TFA teachers course assignments at the elementary and senior levels, whereas more than a quarter of TFA teachers' middle grades course assignments were comprised of Gifted/Honors/AP courses.

**Science/social studies**: ESOL Related/Developing and general education courses together formed the bulk of TFA teachers elementary level course assignments, whereas, general education and Gifted/Honors/AP courses together formed the bulk of TFA teachers' secondary level course assignments.

The analysis of the impact of TFA teachers involved a three-step process. First, each TFA teacher was matched to a teacher who was drawn from the comparison pool, based on grade, subject area, the number of students, the proportion of the teacher's course assignments in each of the five predefined categories, and mean student pretest scale score (Sekhon, 2011). Next, estimation procedures conducted separately for each subject area, grade, and test were used to create "expected scores," or the posttest scores the students were predicted to attain. Multi-level modeling was used to produce the expected scores for the students at each subject, grade, and test with students nested within classrooms nested within schools. The student-level variables in the model (i.e., pretest, gender, ethnic group, English language learner status, exceptional program participation status, and over-age relative to grade) were first fitted using best-subsets regression. Teacher-level intercepts, teacher-level pretest slopes, and school-level intercepts were included as random effects.  Expected scores that resulted were used to create "impact scores" (actual score minus expected score), which represented the amount of achievement that was attained over and above what was expected. The impact scores of students who were taught by multiple teachers within the same group (i.e., either TFA or non-TFA) were treated as if they were separate performance estimates and combined for a single weighted mean.  The impact scores of students who were taught by both TFA and non-TFA teachers or by former-TFA teachers were excluded.

Finally, the differences in the mean student impact scores of TFA and non-TFA teachers were then converted into standardized effect size statistics (d) and confidence intervals (CIs), which indicate the range of values within which the true value of d is expected to lie. To assess the relative performance of TFA and non-TFA teachers, and to control for the potential impact of teachers' course assignments, two comparisons were made: (a) TFA teachers vs. non-TFA teachers, matched on course content, number of students, student demographics, and baseline achievement; and (b) TFA teachers vs. all non-TFA teachers in the sample (not controlling for years of teaching experience).  The examination of the duration of TFA teachers' continued employment in the District beyond the TFA contractual period (i.e., retention), included both active and terminated employees. The analyses were limited to descriptive statistics.

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

The largest number of TFA teachers were assigned to M-DCPS senior high schools, but varied in terms of grade organization, subject area, and level of the courses. Table 2 lists the total number of TFA teachers in the sample schools, and the number of TFA teachers assigned to teach each subject area within each grade range.

**Table 2. Number of Teach for America Teachers, by Grade Organization and Subject, 2018-19**

| Grade Level | Number of Teachers | Multiple Subjects | Single Subject | | | |
|---|---|---|---|---|---|---|
| | | | Language Arts | Mathematics | Science | Social Studies |
| **Elementary (17 schools)** | | | | | | |
| PK-K | 6 | 6 | -- | -- | -- | -- |
| 1 – 5 | 40 | 27 | 13 | -- | -- | -- |
| **Middle (12 schools)** | | | | | | |
| 6 – 8 | 53 | 3 | 24 | 10 | 9 | 7 |
| **Senior (11 schools)** | | | | | | |
| 9-11 | 60 | 4 | 30 | 15 | 9 | 2 |
| 12 | 2 | -- | 1 | -- | -- | 1 |
| Total | 161 | 40 | 68 | 25 | 18 | 10 |

Where indicated, "Multiple Subjects" pertain to self-contained classrooms that cover both Reading/English Language Arts and Mathematics (levels K-5) or combination classrooms featuring either Reading/English Language Arts or Mathematics in combination with one or more other subject areas. "Single Subjects" refer to departmentalized instruction delivered by a subject area specialist.

- Of the 170 TFA teachers slated to participate as of October 2018; 5 separated from the District; 4 had not yet been assigned to classes; and 161 teachers actually participated and were placed in 17 elementary schools, 12 middle schools, and 11 senior high schools.
- Of the 161 TFA teachers who actually participated, 95% (n=153) taught content that was directly tested on districtwide and statewide assessment programs.
- Of the 13 TFA teachers assigned to teach middle and senior level science courses, 53.8% (n=7) taught Grade 8 Science (tested by the Statewide Science Assessment), and 23.1% (n=3) taught Biology (tested by the Biology End-of-Course Assessment).
- Of the 9 TFA teachers assigned to teach middle and senior level social studies, 44.4% (n=4) taught Civics (tested by the Civics End-of-Course Assessment), and 22.2% (n=2) taught U.S. History (tested by the U.S. History End-Of-Course Assessment).

## 5. What was the impact of the TFA teachers on students' scores on state- and district- wide standardized assessments?

The analysis of the impact of TFA teachers involved a three-step process culminating in an examination of the difference between the expected and observed scores earned by TFA and non-TFA teachers' students. Results are provided for each subject, grade, and test outcome for two subsamples comprised of (a) TFA teachers vs. selected non-TFA teachers, matched on course content, number of students,

student demographics, and baseline achievement; and (b) TFA teachers vs. all non-TFA teachers in the sample. The sample for the impact analysis for each grade/subject/test was limited to those students whose teacher and course assignments in October 2018 and February 2019 were the same. Of the 153 TFA teachers deployed in both October and February, 22 were exclusively assigned to non-tested courses (e.g., Physics, Sixth Grade Science, World Geography, etc.), 5 were not assigned to any of the same courses in February, and 2 served exclusively as co-teachers. The remaining 124 TFA teachers were included in the analysis.

Tables 3, 4 and 5 (Reading/English Language Arts, Mathematics, and Science/Social Studies, respectively) provide summaries of the results for each individual analysis. For each grade level, the numbers of teachers and students in the TFA and comparison groups are given. Teachers who instruct students in multiple grade levels are represented in multiple comparisons. The tests used are also listed along with the effect size statistics and confidence intervals (CIs). The signs of each CI's upper and lower limits indicate how the performance of TFA teachers' students compared with that of the non-TFA teachers' students in each subject area. If both signs are positive, the TFA teachers' students' performance exceeded that of the non-TFA teachers' students. If both signs are negative, the TFA teachers' students' performance trailed that of the non-TFA teachers' students. Signs that differ indicate that the TFA teachers' students' performance did not significantly differ from that of the non-TFA teachers' students.

**Table 3. The Impact of Teach for America on Students' Test Scores in Reading/English Language Arts**

| | Matched on Course Assignments | | | | | | | | All Teachers in Schools with TFA Teachers | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of Participants | | | | Effect Size of the Difference | | | | Number of Participants | | | | Effect Size of the Difference | | |
| | TFA | | Non-TFA | | (TFA - Non-TFA) | | | | TFA | | Non-TFA | | (TFA - Non-TFA) | | |
| Grade | Teachers | Students | Teachers | Students | $CI_{Lower}$ | d | $CI_{upper}$ | Test | Teachers | Students | Teachers | Students | $CI_{Lower}$ | d | $CI_{upper}$ |
| **Elementary** | | | | | | | | | | | | | | | |
| 1 | 3 | 33 | 3 | 40 | -0.61 | -0.15 | 0.31 | SAT-10/Reading | 3 | 33 | 60 | 679 | -0.51 | -0.16 | 0.19 |
| 2 | 5 | 90 | 5 | 103 | -0.31 | -0.03 | 0.25 | SAT-10/Reading | 5 | 90 | 51 | 620 | -0.25 | -0.03 | 0.20 |
| 3 | 6 | 98 | 6 | 136 | -0.19 | 0.07 | 0.33 | FSA/ELA[a] | 6 | 98 | 53 | 536 | -0.14 | 0.08 | 0.29 |
| 4 | 5 | 124 | 5 | 143 | -0.36 | -0.12 | 0.12 | FSA/ELA | 7 | 140 | 50 | 559 | -0.29 | -0.10 | 0.08 |
| 5 | 5 | 131 | 5 | 119 | -0.11 | 0.14 | 0.39 | FSA/ELA | 5 | 131 | 44 | 528 | -0.17 | 0.02 | 0.21 |
| Total[b] | 24 | 476 | 24 | 541 | -0.12 | 0.00 | 0.13 | | 26 | 492 | 258 | 2,922 | -0.12 | -0.02 | 0.07 |
| **Middle** | | | | | | | | | | | | | | | |
| 6 | 8 | 225 | 8 | 206 | -0.19 | 0.00 | 0.19 | FSA/ELA | 11 | 234 | 75 | 1,330 | -0.08 | 0.06 | 0.20 |
| 7 | 5 | 165 | 5 | 144 | -0.44 | -0.21 | 0.01 | FSA/ELA | 8 | 172 | 89 | 1,592 | -0.26 | -0.11 | 0.05 |
| 8 | 4 | 165 | 4 | 158 | -0.22 | 0.00 | 0.22 | FSA/ELA | 6 | 174 | 63 | 1,164 | -0.14 | 0.02 | 0.18 |
| Total[b] | 17 | 555 | 17 | 508 | -0.18 | -0.06 | 0.06 | | 25 | 580 | 227 | 4,086 | -0.09 | 0.00 | 0.08 |
| **Senior** | | | | | | | | | | | | | | | |
| 9 | 8 | 337 | 8 | 561 | -0.21 | -0.08 | 0.06 | FSA/ELA | 12 | 349 | 76 | 1,917 | -0.14 | -0.02 | 0.09 |
| 10 | 7 | 340 | 7 | 387 | -0.10 | 0.05 | 0.19 | FSA/ELA | 14 | 354 | 83 | 2,012 | -0.08 | 0.03 | 0.15 |
| Total[b] | 15 | 677 | 15 | 948 | -0.12 | -0.02 | 0.08 | | 26 | 703 | 159 | 3,929 | -0.07 | 0.01 | 0.09 |

*Note*. The pretests used for this analysis were administered one year earlier at one test level lower than the posttest and are from the same assessment battery, unless otherwise indicated. SAT-10 refers to the Stanford Achievement Test, Tenth Edition. FSA/ELA refers to the Florida Standards Assessment/English Language Arts test.

[a]The pretest used for the FSA/ELA administered in third grade is the SAT-10/Reading Test. [b]Teacher counts are duplicated, as a given teacher may deliver instruction to students in multiple grade levels.

**Table 4. The Impact of Teach for America on Students Test Scores in Mathematics**

| | Matched on Course Assignments | | | | | | | | All Teachers in Schools with TFA Teachers | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of Participants | | | | Effect Size of the Difference | | | | Number of Participants | | | | Effect Size of the Difference | | |
| | TFA | | Non-TFA | | (TFA - Non-TFA) | | | | TFA | | Non-TFA | | (TFA - Non-TFA) | | |
| Grade | Teachers | Students | Teachers | Students | CI$_{Lower}$ | d | CI$_{upper}$ | Test | Teachers | Students | Teachers | Students | CI$_{Lower}$ | d | CI$_{upper}$ |
| **Elementary** | | | | | | | | | | | | | | | |
| 1 | 3 | 48 | 3 | 57 | -0.46 | -0.07 | 0.31 | SAT-10/Math | 3 | 48 | 47 | 713 | -0.34 | -0.05 | 0.24 |
| 2 | 1 | 13 | 1 | 11 | -0.53 | 0.28 | 1.08 | SAT-10/Math | 1 | 13 | 44 | 743 | -0.42 | 0.13 | 0.68 |
| 3 | 2 | 47 | 2 | 45 | -0.41 | 0.00 | 0.40 | FSA/Math[a] | 2 | 47 | 39 | 601 | -0.28 | 0.02 | 0.31 |
| 4 | 3 | 87 | 3 | 108 | -0.22 | 0.06 | 0.35 | FSA/Math | 4 | 95 | 35 | 745 | -0.22 | -0.01 | 0.21 |
| 5 | 5 | 174 | 5 | 173 | -0.23 | -0.02 | 0.19 | FSA/Math | 5 | 174 | 31 | 631 | -0.17 | 0.00 | 0.17 |
| Total[b] | 14 | 369 | 14 | 394 | -0.14 | 0.00 | 0.14 | | 15 | 377 | 196 | 3,433 | -0.11 | 0.00 | 0.10 |
| **Middle** | | | | | | | | | | | | | | | |
| 6 | 7 | 197 | 7 | 287 | -0.20 | -0.02 | 0.16 | FSA/Math | 7 | 197 | 36 | 1,524 | -0.19 | -0.04 | 0.11 |
| 7 | 3 | 159 | 3 | 157 | -0.20 | 0.02 | 0.24 | FSA/Math | 4 | 161 | 56 | 1,611 | -0.13 | 0.04 | 0.20 |
| 8 | 3 | 53 | 3 | 43 | -0.42 | -0.01 | 0.39 | FSA/Math | 5 | 57 | 49 | 1,195 | -0.28 | -0.01 | 0.25 |
| 8 | 2 | 33 | 2 | 30 | -0.71 | -0.22 | 0.28 | Algebra1[c] | 2 | 33 | 16 | 481 | -0.45 | -0.10 | 0.26 |
| Total[b] | 15 | 442 | 15 | 517 | -0.15 | -0.02 | 0.11 | | 18 | 448 | 157 | 4,811 | -0.11 | -0.01 | 0.08 |
| **Senior** | | | | | | | | | | | | | | | |
| 9 | 3 | 157 | 3 | 152 | -0.31 | -0.09 | 0.13 | Algebra1[c] | 3 | 157 | 40 | 1,744 | -0.21 | -0.05 | 0.12 |
| 9 | 1 | 30 | 1 | 38 | -0.84 | -0.36 | 0.12 | Geometry[d] | 4 | 34 | 21 | 464 | -0.53 | -0.18 | 0.16 |
| 10 | 6 | 276 | 6 | 317 | -0.08 | 0.08 | 0.24 | Geometry[d] | 7 | 277 | 40 | 1,460 | -0.10 | 0.03 | 0.16 |
| Total[b] | 10 | 463 | 10 | 507 | -0.13 | 0.00 | 0.12 | | 14 | 468 | 101 | 3,668 | -0.11 | -0.01 | 0.08 |

Note. The pretests used for this analysis were administered one year earlier at one test level lower than the posttest and are from the same assessment battery, unless otherwise indicated. SAT-10 refers to the Stanford Achievement Test, Tenth Edition. FSA/Math refers to the Florida Standards Assessment/Mathematics test. Algebra1 and Geometry refer to those specific End of Course Assessments.

[a]The pretest used for the FSA/Math test administered in third grade is the SAT-10/Math test. [b]Teacher counts are duplicated, as a given teacher may deliver instruction to students in multiple grade levels. [c]The pretest used for the Algebra1 End of Course Assessment is the FSA/Math test administered one year prior and at one level lower than the posttest. [d]The pretest used for the Geometry End of Course Assessment is the FSA/Math test administered two years prior and at two levels lower than the posttest.

**Table 5. The Impact of Teach for America on Students Test Scores in Science/Social Studies**

| | Matched on Course Assignments | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of Participants | | | | Effect Size of the Difference | | | | Number of Participants | | | | Effect Size of the Difference | | |
| | TFA | | Non-TFA | | (TFA - Non-TFA) | | | | TFA | | Non-TFA | | (TFA - Non-TFA) | | |
| Grade | Teachers | Students | Teachers | Students | $CI_{Lower}$ | d | $CI_{upper}$ | Test | Teachers | Students | Teachers | Students | $CI_{Lower}$ | d | $CI_{upper}$ |
| | | | | | | | | **Science** | | | | | | | |
| 5 | 5 | 183 | 5 | 184 | -0.22 | -0.02 | 0.19 | FCAT/Science | 5 | 183 | 24 | 653 | -0.16 | 0.00 | 0.17 |
| 8 | 5 | 280 | 5 | 214 | -0.21 | -0.03 | 0.15 | FCAT/Science | 5 | 280 | 43 | 1,522 | -0.17 | -0.05 | 0.08 |
| 10 | 3 | 121 | 3 | 142 | -0.27 | -0.03 | 0.21 | Biology[a] | 3 | 121 | 36 | 2,202 | -0.24 | -0.05 | 0.13 |
| Total[b] | 13 | 584 | 13 | 540 | -0.14 | -0.03 | 0.09 | | 13 | 584 | 103 | 4,377 | -0.12 | -0.03 | 0.05 |
| | | | | | | | | **Social Studies** | | | | | | | |
| 7 | 3 | 198 | 3 | 266 | -0.21 | -0.03 | 0.16 | Civics[a] | 4 | 199 | 41 | 1,784 | -0.16 | -0.01 | 0.14 |
| 11 | 2 | 247 | 2 | 220 | -0.20 | -0.02 | 0.17 | U.S. History[a] | 2 | 247 | 34 | 2,556 | -0.12 | 0.01 | 0.14 |
| Total[b] | 5 | 445 | 5 | 486 | -0.15 | -0.02 | 0.11 | | 6 | 446 | 75 | 4,340 | -0.10 | 0.00 | 0.10 |

*Note*. The Florida Standards Assessment/English Language Arts test administered one year earlier at one test level lower than the posttest served as the pretest for each of these analyses.

[a]End of Course Assessment.  [b]Teacher counts are duplicated, as a given teacher may deliver instruction to students in multiple grade levels.

**English Language Arts/Reading** (Table 3, page 6) presents the results of the grade by grade comparisons in reading/ELA across two test batteries, which were used to compare the performance of TFA teachers and their students to that of non-TFA teachers. Two comparisons were made: (a) matched pairs, where 56 TFA teachers and their 1,708 students were compared to 56 non-TFA teachers and their 1,997 students; and (b) an overall comparison, where 77 TFA teachers and their 1,775 students were compared to 644 non-TFA teachers and their 10,937 students in the sample schools. No significant differences between TFA teachers' and non-TFA teachers' students' results were found at any grade in either set of comparisons.

**Mathematics** (Table 4, page 7) presents the results of the grade by grade comparisons in mathematics across four test batteries. Again, the performance of TFA teachers and their students was compared to that of non-TFA teachers and their students. Two comparisons were made: (a) matched pairs, where 39 TFA teachers and their 1,274 students were compared to 39 non-TFA teachers and their 1,418 students; and (b) an overall comparison, where 47 TFA teachers and their 1,293 students were compared to all 454 non-TFA teachers and their 11,912 students. No significant differences between TFA teachers' and non-TFA teachers' students' results were found.

**Science/Social Studies** (Table 5, page 8) presents the results of the grade by grade comparisons in science/social studies, across four test batteries. Once again, the performance of TFA teachers and their students was compared to that of non-TFA teachers and their students. Two comparisons were made: (a) matched pairs, where 18 TFA teachers and their 1,029 students were compared matched to 18 non-TFA students and their 1,026 students; and (b) an overall comparison, where 19 TFA teachers and their 1,030 students were compared to all 178 non-TFA teachers and their 8,717 students. Again, no significant differences between TFA teachers' and non-TFA teachers' students' results were found.

## 6. How long do TFA teachers remain employed in the District after completing their commitment to the program (teacher tenure)?

The extent to which TFA teachers continued teaching in the District beyond their contractual period, beginning in the 2010-11 school year, was gauged through personnel records stored in the District's data warehouse. Table 6 lists the total number of TFA teachers and the number and percent who are teaching, grouped by their first year of post TFA service. Table 7 lists the number of years former TFA teachers who separated from the District remained employed before doing so.

**Employment Status**

- Of the 626 TFA teachers who entered their first year of post-TFA service from 2010-11 through 2016-17, 7.2% remain actively employed in the M-DCPS, and 92.8% (n=581) terminated their employment.
- Of the 74 TFA teachers who entered their first year of post-TFA service (3rd year of teaching) during 2017-18, 25.7% (n=19) remain actively employed in the M-DCPS, and 74.3% (n=55) terminated their employment.
- Of the 70 TFA teachers who entered their first year of post-TFA service in 2018-19, 40.0% (n=28) remain actively employed in the M-DCPS, and 60.0% (n=42) terminated their employment.

**Table 6. Employment Status of TFA Teachers in the M-DCPS**

| | | Employment Status | | | |
| | | Active[a] | | Separated | |
| First Post TFA Year | Total | n | % | n | % |
|---|---|---|---|---|---|
| 2010-11 to 2016-17 | 626 | 45 | 7.2 | 581 | 92.8 |
| 2017-18 (15-16 cohort) | 74 | 19 | 25.7 | 55 | 74.3 |
| 2018-19 (16-17 cohort) | 70 | 28 | 40.0 | 42 | 60.0 |
| Total | 770 | 92 | 11.9 | 678 | 88.1 |

*Note*. TFA Teachers still actively assigned in fulfillment of their commitment during the 2018-19 school year (n=170), are not included in the above table. TFA teachers who withdrew from service at any time prior to fulfilling their two-year commitment (n=86) or at the end of their commitment (n=133) are excluded.
[a]Includes all job categories.

**Length of Service**

- Of the 678 TFA teachers who entered their first year of post-TFA (3rd year of teaching) since 2010-11 and subsequently terminated their employment, 38.6% (n=262) remained employed in the District for one year, while 33.6% (n=228) remained employed for two years.
- 4.6% (n=31) of those TFA teachers remained employed in the M-DCPS for five or more years.

**Table 7. Length of Service of TFA Teachers Separated from Service in the M-DCPS, 2010-11 through 2018-19**

| Years of Post-TFA Service | n | % |
|---|---|---|
| 0 (2nd year of teaching)[a] | 25 | 3.7 |
| 1 (3rd year of teaching) | 262 | 38.6 |
| 2 (4th year of teaching) | 228 | 33.6 |
| 3 (5th year of teaching) | 83 | 12.2 |
| 4 (6th year of teaching) | 49 | 7.2 |
| 5 or more (7th year of teaching or more) | 31 | 4.6 |
| Total | 678 | 100.0 |

[a]Teachers with 0 years of Post-TFA service separated from the district prior to completing a full year of Post-TFA employment.

## 7. What were the principal conclusions of this report?

The reading/English language arts course assignments of Elementary TFA-teachers were equally divided between Intensive/Basic ESOL, and ESOL Related/Developing courses, and general education courses;

whereas, at the secondary school level, TFA teachers' course assignments were mainly split between the general education and Gifted/Honors/AP levels.  In mathematics, general education courses comprised the majority of TFA teachers course assignments at the elementary and senior levels; whereas more than a quarter of TFA teachers' middle grades course assignments were comprised of Gifted/Honors/AP courses.  Nearly 95% of the TFA teachers placed in the schools were assigned to teach grade levels and content areas tested via districtwide and statewide assessment programs.

Two separate comparisons of the students' impact scores failed to show any significant differences at any grade-level or subject area.  Moreover, the size and direction of the differences were unaffected by teachers' assignments. Finally, an examination of the duration of employment of TFA teachers showed that most separate from service one to two years after completing their commitments to the program.

## References

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Hillsdale, NJ: Lawrence Erlbaum & Associates.

Sekhon, J.S. (2011) Multivariate, and Propensity Score Matching Software with Automated Balance Optimization: The Matching Package for R. *Journal of Statistical Software, 42*(7), 1-52. Retrieved, July 14, 2009, from http://sekhon.berkeley.edu/papers/MatchingJSS.pdf