



**Tracking Completers from Touro's Graduate School of Education's
Teacher Education Program
Employed in the New York City Public Schools
Completers from 2015-16, 2016-17, and 2017-18**

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Overview and Purpose of the Study

There is a critical need for teacher preparation institutions to collect and use data to assess the efficacy of their programs and inform program improvement efforts. This need was underscored in a speech by former Education Secretary Arne Duncan at Teachers' College in October 2009. Duncan asserted "The bottom line is that we lack empirical evidence of what works in preparing teachers for an outcome-based education system. We don't know what, where, how, or when teacher education is most effective."

The importance of data-based inquiry to the design and re-design of teacher education is embodied in "the culture of evidence and data for educator preparation" that underlies the Council for the Accreditation of Educator Preparation (CAEP) Standards. Version 2.0 of the CAEP Evidence Guide (2015) cites the following definition of the 'culture of evidence' used by the regional accreditor, Western Association of Schools and Colleges: A habit of using evidence in assessment, decision making, planning, resource allocation, and other institutional processes that is embodied in the characteristics of an institution's actions and processes.¹

CAEP Standard 5 requires that the Education Program Provider maintains a quality assurance system comprised of valid data from multiple measures, including evidence of candidates' and completers' positive impact on P-12 student learning and development. Among the sources of evidence required for the quality assurance system are data on licensing, graduation, and hiring rates.

As part of its efforts to support data-based inquiry and decision-making and meet the CAEP standards for accreditation, the Dean's Office of the Touro College Graduate School of Education continues to conduct a study that tracks longitudinally the completers of its teacher education programs. The objectives of this research are to assess the success of Touro's graduates in entering the teaching profession, the types of schools in which they enter teaching, and their rates and patterns of retention and attrition. The results of this research are intended to be used for several purposes. First, to help faculty and administrators evaluate the success of Touro's teacher education programs in developing high quality teachers and administrators who are prepared to serve in inner-city schools. Second, to inform ongoing efforts to improve recruitment into the teacher education program by identifying sources of successful program applicants and the specific certification programs (majors) that are more and less successful in preparing graduates to enter and remain in the profession. Third, the data bolster Touro's evidence base in support of continuing accreditation of its teacher education program.

The research that is reported here focuses on the employment of Touro completers in the New York City Department of Education's (NYCDOE) schools. Studying the relationship between Touro and the NYCDOE is important for two reasons. First, NYCDOE

¹ The Western Association of Schools and Colleges. (2013). *2013 Handbook of Accreditation* (p. 47). Retrieved from <http://www.wascsenior.org/resources/handbook-accreditation-2013>

is both a major source of applicants to, and the largest employer of, completers from Touro's teacher education program. Second, NYCDOE maintains an extensive and reliable human resources database that stores historical data on all teachers and personnel employed in the public schools and can be linked to descriptive data on the schools, as well as data in Touro's student database. Linking data from these databases enables analyses that provide insight into the relationships between Touro's teacher education programs and graduates' success in the NYCDOE schools.

This is the fifth free-standing report to present findings from this research. Subsequent to the presentation of the first set of findings in Touro's Inquiry Brief for national accreditation, comprehensive findings were released in four stand-alone reports that described the employment patterns of Touro program completers for the classes of 2008 through 2017. A summary of the key findings from those reports follows:

- During the past decade, Touro has been one of the largest trainers and suppliers of educators to the New York City Public Schools (NYCPS) and, reciprocally, NYCPS has been the largest employer of Touro teacher education graduates.
- During the 10 years of completers that have been studied, the annual percentages of Touro graduates employed in New York City public schools tracked changes in the employment opportunities provided by the school system's annual hiring practices. After steady declines in the annual percentage of graduates hired from over 50% in 2008 to 32.0% in 2016, the employment rate increased to 41.4% for the class of 2017. The increase is partially attributable to a need for additional teachers to replace those who were retiring.
- During the period of study through 2014, the certification areas with the highest employment rates for Touro graduates were Bilingual/Bicultural Pupil Personnel Services, Instructional Technology, Mid-Childhood Education/Special Education (Grades 5 – 9), and Special Education. These certification areas were either shortage areas, hard-to-staff areas, or desirable specialties. Last year's report on program completers from 2014-15 through 2016-17 found that certification areas with the highest employment rates were TESOL Clinically Rich Intensive Teacher Institute (CR-ITI), which had 55 program completers with a total employment rate of 94.5%, and Special Education Generalist Grades 7-12, which had 303 completers and an employment rate of 73.3%. Six other program major areas had employment rates of at least 50%: Instructional Technology, with 90 completers and a 67.8% rate, the traditional TESOL major, with 242 completers and a 66.9% rate, Teaching Autistic and Multiple Disabilities, 15 completers and a 60% hiring rate, Teaching Literacy, 174 completers and a 56.9% rate, Mid Childhood Special Ed, 19 completers and a 52.6% rate, and Mathematics Education, 40 completers and a 50% hiring rate.
- Touro's Graduate School of Education has traditionally attracted large numbers of educators from the NYC public schools who were seeking to upgrade their credentials and deepen their teaching skills. Over the course of this research, we have seen a substantial shift in the balance between completers who were hired before versus upon or after Touro completion, a trend which was somewhat reversed for the completers of 2017. Over the near decade of study, the percentage of completers who were employed in the NYC public schools two or more years prior to program completion declined from nearly 75% to 59% for the completers of 2017. Despite the trend, the data indicate that

most Touro graduate program completers were NYC teachers who were studying to qualify for permanent status, upgrade their skills, or meet requirements for teaching in another license area, especially special and bilingual education.

- Consistent with previous reports, last year's report showed that the borough with the largest percentage of hires was Brooklyn, with 36.5% of the hires for the classes of 2015 – 17. The borough with the next highest percentages of hires was Queens with 22.3%. The percentage of hires in the Bronx has been increasing, rising to 16.3% for the class of 2017, while that for Staten Island has been decreasing, falling to 9.5%.
- The research has consistently shown that around 40% of each class' new hires were employed in elementary schools and nearly 20% in high schools.
- Touro has a strong presence among the faculties of public schools throughout New York City. Last year's report showed that Touro completers from the classes of 2015 through 2017 were hired in 802 schools, over one-half of the schools in the city system. Moreover, 343 schools hired more than one completer, with 69 of these schools having at least four and 40 having at least five.
- Touro completers hired in New York City public schools have had consistently high retention rates throughout the nine years of the study. The retention rates declined somewhat in last year's report to a three-year retention rate of 75.9% for the class of 2015. This rate is comparable to that for the NYC public school system overall.

The results presented in this report update the above findings for the classes of 2016 and 2017 and present the initial findings for the class of 2018, in the year following program completion.

Audience

The primary intended audience for this research is the teacher-education program faculty and administrators at Touro's Graduate School of Education. This audience can use the data to assess how well these programs are preparing teachers for successful employment in the NYC public schools, as well as serving beginning and provisional teachers who are seeking permanent status and/or advancement in the profession. The data can inform discussions at many venues concerning ways to improve the effectiveness of the programs. Another audience is the program reviewers and auditors at CAEP, who will use these data to help make decisions about continuing accreditation for Touro. In addition, the results will be shared with officials at the NYCDOE, especially the Division of Human Resources. These data will provide information about the induction and retention of beginning teachers from a large public university that contributes substantially to the teacher pipeline for New York City. The results can also be incorporated into presentations at national conferences on educational research.

Research Questions (RQ)

The study uses a non-experimental, quantitative research design with extant data to address research questions about the distribution and status of Touro teacher education program completers in the New York City public schools, the types of schools in which they teach, and their retention rates. This report presents updated findings for the program completers of 2015-

16 (designated 2016)) and 2016-17 (2017), and first-time findings for completers of 2017-18 (the class of 2018), the most recent class of completers. Although findings for the class of 2016 were described in two earlier reports, they have been updated to reflect their employment status as of December 31, 2018 and are presented in this report to track longitudinal trends. The findings for the class of 2017 are updated from those presented in last year's report, and also reflect their employment status as of Dec. 31, 2018. The research questions addressed in this report are as follows:

- **RQ 1:** What were the numbers and percentages of each completing class that were employed in NYC public schools? How do these rates vary for completers grouped by certification area and campus location? How do these employment percentages compare to historical trends over recent years?
- **RQ 2:** How many completers were already working in the NYC public schools prior to graduating from the Touro teacher education program? What percentage began their employment in NYC schools after program completion?
- **RQ 3:** What were the locations and school levels of the schools in which the completers were first employed? Were there concentrations of completers working in specific schools and which schools were they?
- **RQ 4:** What were the retention rates of completers? Did these rates vary by year of graduation and Touro certification area program?

Methodology

Participants

The participants are students who completed Touro teacher education programs in the academic years 2015-16, 2016-17, and 2017-18. The Director of Research at Touro's School of Education compiled a list of all program completers from these years. After eliminating cases with missing information, duplicates, and completers from non-teacher education programs, the file of participants had 3,571 cases, distributed among the classes of completers as follows:

- Class of 2016 = 1,194
- Class of 2017 = 1,251
- Class of 2018 = 1,126

It should be noted that the above numbers of participants for the classes of 2016 and 2017 differ slightly from those in last year's report. The differences are mainly due to deletions of completers from program majors that are no longer offered at Touro's GSE during the most recent school year, 2017-18. These deletions are aimed at increasing the consistency of comparative analyses from year to year.

Data

The data for the study were (1) descriptive data on the program completers, as identified above, and extracted from the Touro student information system, and (2) employment data extracted by Human Resources Specialists from the NYCDOE Employee Information System (EIS). The descriptive data for each completer included:

- The social security numbers (last 5 digits) and birth dates, which were used for file matching.
- Program completion date, which was used to assign completers to a Completion Class.
- Campus attended (Manhattan, Brooklyn, or Bayshore), degree earned, and description of their major program.

The EIS data included the following data elements:

- Data on the first teaching assignments of program completers hired in NYC public schools, including initial license, school name and type (level), and effective date of initial employment;
- Data on their most recent teaching assignment, including school building name and type, license, and effective date; and
- Their current employment status as of December 31, 2018, including active status (Regular active, On Leave, Substitute or On Sabbatical, and Terminated from employment), current school location and type, job title, and number of years of active service.

Data Analysis

The analytic file used to address the RQs was built through a match/merge of the Touro completers and NYCDOE Human Resources (EIS) data files. First, the consultant, on behalf of the Touro Dean's Office, sent the Excel file of Touro graduates' social security numbers and birthdates (File 1) to NYCDOE over a secure data transfer site (FTP) for matching and merging to the EIS files. Then, NYCDOE transferred the matched/merged files back to the Dean's Office. The transferred files included all completers who matched the HR file and descriptive data on their teaching assignments. The consultant then match/merged these files to create the analytic file (File 2). All merges and data analyses were performed with SPSS, version 23.0 software.

The data analysis procedures used to address the research questions used descriptive statistics, including frequency distributions and cross-tabulations. In order to calculate the number of years between graduation and first employment in NYCDOE, the consultant computed a variable, "Years to Hire", by subtracting the year of graduation from the year of first employment. Negative values indicated that the graduate was already employed in an NYCDOE school prior to graduating Touro, usually as a provisional or substitute teacher.

Results

Description of the Participant Sample

This section describes the participants in the study sample in terms of age, campus location, and program majors. Table 1 shows the age of the study sample as of their date of program completion. The data are categorized into intervals ranging from 25 years or younger through 56 years or older. The modal interval for the three classes of completers was 26-30, with just under 40% of each class in this interval. For the three classes combined, around 75% were 35 years of age or less. The Class of 2018 had slightly fewer completers who were 25 or younger at the time of program completion than their counterparts from the Classes of 2016 and 2017, 16.2% for the former compared to 19.5% for the Class of 2016 and 19.3% for the Class of 2017. Conversely, the completers of 2018 had slightly more students in the interval 36-40 years, 11.0%, than the Classes of 2016 and 2017, 8.8% for both classes.

Table 1. Age distribution of Touro Teacher Education completers by year of completion

Age Interval	Statistic	Completion year			Total
		2016	2017	2018	
25 or under	N completers	233	241	182	656
	% within completion year	19.5%	19.3%	16.2%	18.4%
26 - 30	N completers	474	487	448	1409
	% within completion year	39.7%	39.0%	39.8%	39.5%
31 - 35	N completers	183	227	186	596
	% within completion year	15.3%	18.2%	16.5%	16.7%
36 - 40	N completers	105	110	124	339
	% within completion year	8.8%	8.8%	11.0%	9.5%
41 - 45	N completers	92	80	73	245
	% within completion year	7.7%	6.4%	6.5%	6.9%
46 - 50	N completers	42	34	47	123
	% within completion year	3.5%	2.7%	4.2%	3.4%
51 - 55	N completers	41	38	36	115
	% within completion year	3.4%	3.0%	3.2%	3.2%
56 or over	N completers	23	33	29	85
	% within completion year	1.9%	2.6%	2.6%	2.4%
Total	N completers	1193	1250	1125	3568
	% within completion year	100.0%	100.0%	100.0%	100.0%

Note: Age not available for 3 cases.

Table 2 shows the distribution of the completers by campus location. There was a shift in the relative percentages of students completing their studies at the three campuses in 2018 compared to the prior two classes. The percentage of completers from the Manhattan campus declined by around 6 percentage points, from 66% for 2016 and 2017 to 59.8% in 2018. Conversely, the percentage completing their studies at the Brooklyn campus increased by 6% percentage points, from 26% in 2016 and 2017 to 32.7% in 2018. The percentage completing at the Bayshore campus remained at 7.5%.

Table 2. Campus distribution of Touro Teacher Education Program completers by year of completion

Campus	Statistic	Year of Completion			Total
		2016	2017	2018	
Bayshore	N Completers	91	94	85	270
	% within Year	7.6%	7.5%	7.5%	7.6%
Brooklyn	N Completers	315	329	368	1012
	% within Year	26.4%	26.3%	32.7%	28.3%
Manhattan	N Completers	788	828	673	2289
	% within Year	66.0%	66.2%	59.8%	64.1%
Total	N Completers	1194	1251	1126	3571
	% within Year	100.0%	100.0%	100.0%	100.0%

Table 3 displays the program major areas of each class of completers while Table 4 shows the breakdown of program majors by campus for the combined sample. As seen in Table 3, the relative distribution of completers among the 17 program major areas displayed is consistent across the three classes. For all three classes, Childhood Education Teaching Students with Disabilities (Grades 1-6) and Early Childhood Ed Teaching Students with Disabilities (Birth-Grade 2) had by far the largest numbers of completers. For the three classes combined, these two area majors had a total of 2,293 completers (64% of the total participants), with the former having 33.6% and the latter 30.6%. The Teaching Students with Disabilities Generalist (Grades 7-12) had the next highest number of completers, n=321, followed by TESOL, n=273, and Teaching Literacy, n=179. There has been a steep drop in the numbers of completers for Bilingual Special Education Speech and Language Disabilities, declining from 82 in 2016, to 63 in 2017, and 31 in 2018. The TESOL-Clinically Rich Intensive Teacher Institute also shows a steep decline in completers, from 39 in 2016, to 14 in 2017, and only 2 in 2018, as this grant program phases out. As can be seen in Table 4 for the combined sample, the completers at the Bayshore and Brooklyn campuses were nearly all enrolled in the three largest area majors, Childhood Education Teaching Students with Disabilities (Grades 1-6), Early Childhood Ed Teaching Students with Disabilities (Birth-Grade 2), and Teaching Students with Disabilities Generalist (Grades 7-12) . Nearly all of the completers from the other major areas studied at the

Manhattan campus, with the exception of Special Ed-Early Childhood Ed and Special Ed-Childhood Ed, two legacy programs at the Brooklyn campus.

Table 3. Distribution of program majors for Touro Teacher Education program completers by year of completion

Program Major	Completion Year			Total
	2016	2017	2018	
Childhood Ed Tch Std W Dis Gr 1-6	383	429	388	1200
Tch Early Childhood Ed Std W Dis B-Gr2	327	399	367	1093
Tch SWD Generalist Gr 7-12	114	104	103	321
English to Speakers of Other Lang	91	92	90	273
Teaching Literacy	58	63	58	179
Blng Sp Ed Spch and Lang Dsblt	82	63	31	176
Instructional Technology	27	28	32	87
TESOL- CR-ITI *	39	14	2	55
Bilingual Spec Edu- ITI **	21	10	15	46
Mathematics Education	16	15	14	45
Bilingual Bicultural Edu- PPS	9	12	7	28
Bilingual General Education	14	3	3	20
Blng Spch and Lang Dsblts- ITI **	6	8	3	17
Biology Education-Grades 7-12	2	7	5	14
Special Ed-Early Childhood Ed	1	2	6	9
Special Education-Childhood Ed	1	2	1	4
Bilingual PPS- ITI **	3	0	1	4
Totals	1194	1251	1126	3571

* TESOL- CR-ITI is the TESOL Clinically Rich Intensive Teacher Institute

** Majors with ITI are Intensive Teacher Institutes

Note: Displayed in descending order of total numbers of completers

Table 4. Distribution of program majors for Touro Teacher Education program completers by campus location (Graduates of 2015-16, 2016-17, and 2017-18 combined)

Program Major	Campus			Total
	Bayshore	Brooklyn	Manhattan	
Chldhd Ed Tch Std W Dis Gr 1-6	147	333	720	1200
Tch Erl Chl Ed Std W Dis B-Gr2	53	525	515	1093
Tch SWD Generalist Gr 7-12	69	140	112	321
Engl to Speakers of Other Lang	1	0	272	273
Teaching Literacy	0	0	179	179
Blng SpEdu Spch and Lang Dsblt	0	1	175	176
Instructional Technology	0	1	86	87
TESOL- CR-ITI *	0	0	55	55
Bilingual Spec Edu- ITI **	0	1	45	46
Mathematics Education	0	0	45	45
Bilingual Bicultural Edu- PPS	0	0	28	28
Bilingual General Education	0	0	20	20
Blng Spch and Lang Dsblts- ITI **	0	0	17	17
Biology Education-Grades 7-12	0	0	14	14
Special Ed-Early Childhood Ed	0	8	1	9
Special Education-Childhood Ed	0	3	1	4
Bilingual PPS- ITI **	0	0	4	4
Totals	270	1012	2289	3571

* TESOL- CR-ITI is the TESOL Clinically Rich Intensive Teacher Institute

** Majors with ITI are Intensive Teacher Institutes

RQ 1. Employment of Touro Graduates in NYCDOE Schools

Yearly Employment Trends: The analyses that addressed research question 1 included all Touro teacher education completers from the three target years, with completers from January, June, and August collapsed under the respective classes of completers. Table 5 displays the number and percent of each class that were ever employed in the NYC public schools as of the pinpoint date of data collection, which was December 31, 2018. In total for the three classes combined, 38.3% of the 3,571 completers held or obtained teaching positions in the NYC public schools, excluding those hired in non-teaching positions, including administrators, guidance counselors, attendance teachers, social workers, and school psychologists. As can be seen in Table 5, the Class of 2018 had the lowest employment rate (33.7%) of the three classes studied this year. This is partly due to the short time between the completion date for this class and the

date of data collection, which was about six months. Based on past patterns, the employment rate for the Class of 2018 is expected to rise as completers have more time to search the job market. Continued research will determine whether the employment rate for the Class of 2018 will increase as completers are hired one, two, and more years after program completion.

Table 5. Number and percent of Touro Teacher Education completers that were employed in the NYC public schools by year of completion (as of Dec. 31, 2018)			
Year of Completion	N Completers	N Hired by the NYC Public Schools as Teachers *	% Hired by the NYC Public Schools as Teachers
2016	1194	510	42.7%
2017	1251	477	38.1%
2018	1126	379	33.7%
Total	3571	1366	38.3%

* Teachers on NYCDOE payroll as of Dec. 31, 2018

Note 1. These data include only completers who were hired as teachers by the NYC public schools. Completers hired in non-teaching positions, such as administrators and guidance counselors, are not included as hires.

Note 2. Data for 2016 and 2017 have been updated from the previous report, dated April 18, 2018. The updates include additional completers who were hired after the closing date for the previous report, completers who were hired but left the system before the reporting date, and updates and revisions to the NYCDOE Human Resources files.

Employment by Certification Area: Figure 1 graphically depicts the percent hired disaggregated by 15 program areas for the three-year completer sample combined, while Table 6 displays the specific numerical data in table format.² Both displays are in descending order of Percent Hired. For the three-year sample, the program area with the highest employment rate was Teaching English as a Second Language-Clinically Rich Intensive Teacher Institute (TESOL-CR-ITI), which had 54 (98.2%) of its 55 completers hired. The program area with the next highest hiring rate was Teaching Students with Disabilities Generalist (Grades 7-12), one of the larger programs with 321 completers, 228 (71.0%) of whom were hired. Three other program areas had hiring rates of 50% or higher: Instructional Technology, 59.8% for 52 completers, English to Speakers of Other Languages, 273 completers with 148 (54.2%) hired, and Teaching Literacy, with 88 (49.2%) of 179 completers hired. Two programs, Bilingual Cultural Education-Pupil Personnel Services and Bilingual Special Education Speech and Language Disabilities had low hiring rates (around 10%). A very small program, Bilingual Pupil Personnel Services-Intensive Teacher Institute, had none of its four completers hired in the NYC public schools.

² Two legacy programs, that only nine completers, Special Ed-Early Childhood Ed and Special Ed-Childhood Ed are not included in the data.

Fig. 1 % Hired by Program 2016-2018 Cobmined

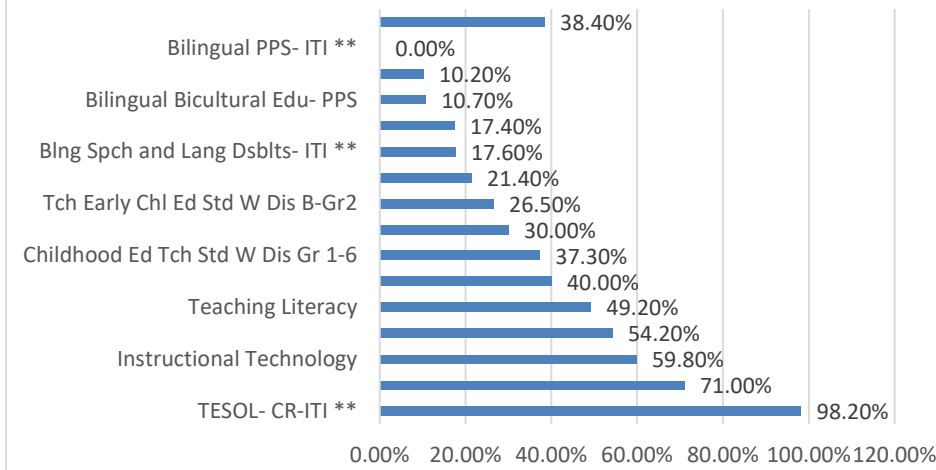


Table 6. Number and percent of Touro Teacher Education program completers hired by the NYC public schools disaggregated by program major (Classes of 2016, 2017, & 2018 combined)

Program Area *	N Completers	N Hired	% Hired
TESOL- CR-ITI **	55	54	98.2%
Tch SWD Generalist Gr 7-12	321	228	71.0%
Instructional Technology	87	52	59.8%
English to Speakers of Other Lang	273	148	54.2%
Teaching Literacy	179	88	49.2%
Mathematics Education	45	18	40.0%
Childhood Ed Tch Std W Dis Gr 1-6	1200	447	37.3%
Bilingual General Education	20	6	30.0%
Tch Early Chl Ed Std W Dis B-Gr2	1093	290	26.5%
Biology Education-Grades 7-12	14	3	21.4%
Bng Spch and Lang Dsblts- ITI **	17	3	17.6%
Bilingual Spec Edu- ITI **	46	8	17.4%
Bilingual Bicultural Edu- PPS	28	3	10.7%
Bng Sp Edu Spch and Lang Dsblt	176	18	10.2%
Bilingual PPS- ITI **	4	0	0.0%
Totals	3558	1366	38.4%

* Two discontinued program areas, Special Ed Childhood Ed & Special Ed. Early Childhood Ed, had no hires among their completers.

** TESOL- CR-ITI is the TESOL Clinically Rich Intensive Teacher Institute

Fig. 2 % Hired per Program for 2018 Completers

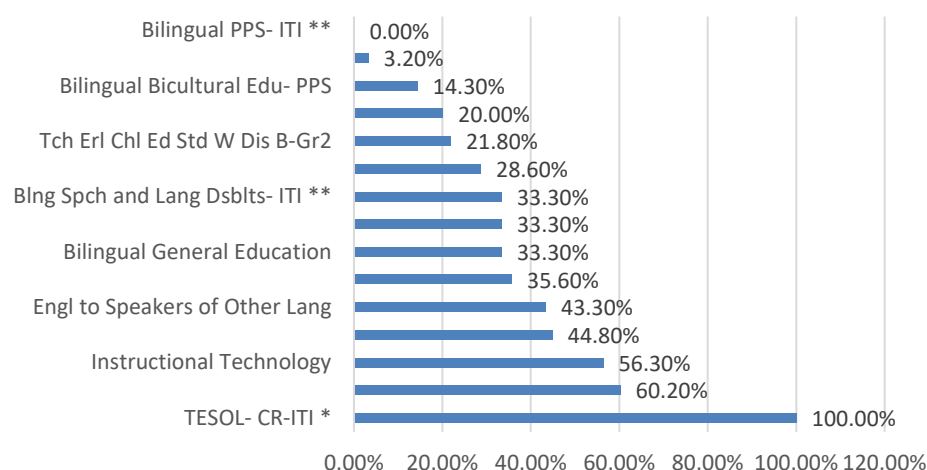


Table 7. Number and percent of Touro Teacher Education program completers hired by the NYC public schools disaggregated by program (Class of 2018 completers)

TESOL- CR-ITI *	2	2	100.0%
Tch SWD Generalist Gr 7-12	103	62	60.2%
Instructional Technology	32	18	56.3%
Teaching Literacy	58	26	44.8%
Engl to Speakers of Other Lang	90	39	43.3%
Chldhd Ed Tch Std W Dis Gr 1-6	388	138	35.6%
Bilingual General Education	3	1	33.3%
Bilingual Spec Edu- ITI **	15	5	33.3%
Blng Spch and Lang Dsblts- ITI **	3	1	33.3%
Mathematics Education	14	4	28.6%
Tch Erl Chl Ed Std W Dis B-Gr2	367	80	21.8%
Biology Education-Grades 7-12	5	1	20.0%
Bilingual Bicultural Edu- PPS	7	1	14.3%
Blng Sp Edu Spch and Lang Dsblt	31	1	3.2%
Bilingual PPS- ITI **	1	0	0.0%
Totals	1126	379	33.7%

* TESOL- CR-ITI is the TESOL Clinically Rich Intensive Teacher Institute

For the class of 2018 alone, Figure 2 and Table 7, the employment rates by program area are similar to those for the three-year sample. The TESOL-CR-ITI program had only two completers in 2018 and both were hired. Teaching Students with Disabilities Generalist (Grades 7-12) had 62 (60.2%) of its 103 2018 completers hired and Instructional Technology had 18 (56.3%) of its 32 completers hired.

Employment by Campus: Table 8 breaks down the employment data by campus for the three-year sample while Table 9 provides the same information for the Class of 2018. For the three-year sample, the Brooklyn campus had the highest hiring rate in the NYC public schools among the three campuses, 44.5%, followed by Manhattan at 36.2%. The Bayshore campus, which is located on Long Island, had the lowest, hiring rate at 32.6%. The campus employment rates for the Class of 2018 were all lower than those for the three-year sample and ranked in the same order.

Table 8. Number and percent of Touro Teacher Education program completers hired by the NYC public schools disaggregated by campus location (Classes of 2016, 2017, & 2018 combined)

Campus	N Completers	N Hired	% Hired
Bayshore	270	88	32.6%
Brooklyn	1012	450	44.5%
Manhattan	2289	828	36.2%
Total	3571	1366	38.3%

Table 9. Number and percent of Touro Teacher Education program completers hired by the NYC public schools disaggregated by campus location (Class of 2018 completers)

Campus	N Completers	N Hired	% Hired
Bayshore	85	23	27.1%
Brooklyn	368	135	36.7%
Manhattan	673	221	32.8%
Total	1126	379	33.7%

RQ 2. Years between Program Completion and First Hiring

As documented in previous reports on this research, the relationship between graduation from Touro's Graduate School of Education and employment in the NYCDOE schools is complex. Many students began working in the schools on a provisional or probationary license, with some as substitute or per diem substitutes. They enrolled at Touro seeking degrees required for permanent licenses or to meet requirements for teaching in other certification areas. Table 10 shows the number of years between program completion and the date of initial employment in the NYC public schools for this three-year study sample broken down by year of completion. As can be seen in Table 10, the percentage of completers who were already working in the NYC public schools more than 2 years prior to completion of their current program increased across the three classes from 26.3% for the Class of 2016, to 35.6% for the Class of 2017, and 42.5% for the Class of 2018. Combined with those who began working in the NYC public schools between and one and two years prior to program completion, the percentage hired before they completed the program rose from 49.2% for the Class of 2016 to 65.6% for the Class of 2017, and then fell back to 58.9% for the Class of 2018. Conversely, the percentage hired within one year before or after program completion decreased from 45.9% for the Class of 2016 to 34.4% for the Class of 2017, and then rose to 41.2% for the Class of 2018. These data continue to confirm that Touro provides training to upgrade the skills of existing teachers in the NYC public schools while filling the pipeline with new teachers in these same schools.

Table 10. Number and percent of Touro teacher education program completers hired by NYCDOE before and after the year of their program completion by year of completion

Years between hiring and program completion	Statistic	Year of Completion			Total
		2016	2017	2018	
More than 2 years before completion	N Completers	134	170	161	465
	% within Year	26.3%	35.6%	42.5%	34.0%
1-2 years before completion	N Completers	117	143	62	322
	% within Year	22.9%	30.0%	16.4%	23.6%
Within 1 year before or after completion	N Completers	234	164	156	554
	% within Year	45.9%	34.4%	41.2%	40.6%
1-2 years after completion	N Completers	25	0	0	25
	% within Year	4.9%	0.0%	0.0%	1.8%
Total	N Completers	510	477	379	1366
	% within Year	100.0%	100.0%	100.0%	100.0%

RQ 3. Completers' Schools of Initial Employment

Distributions of Boroughs and Levels of Schools of First Employment: Table 11 shows the borough distribution of the completers' first school of hire for each class of completers. The borough distributions were similar for all three classes. The borough with the largest percentage of new hires was Brooklyn, with 37.3% of the hires for the three classes

combined. The next highest percentage of hires was Queens with 26.4% for the three classes combined. The only noteworthy inter-class variations in distributions was an increase in the percentage hired in Staten Island for the Class of 2018 (15.9%) from the Class of 2017 (11.7%) and the Class of 2016 (13.8%) and a concomitant decrease in the percentage hired in Manhattan to 9.0% for 2018 from 11.9% and 11.2% for the Classes of 2017 and 2016, respectively.

Table 12 displays the borough distributions for the schools of initial hiring disaggregated by campus location for the three classes combined. Completers from the Brooklyn campus were employed mainly in Brooklyn and Staten Island schools, 56.0% in the former and 37.1% in the latter. The initial schools of Manhattan campus completers were concentrated in Queens and Brooklyn, 35.8% for the former and 29.2% for the latter. More than half (57.5%) of Bayshore completers were employed in Queens' schools, the borough closest in proximity to the campus.

Table 13 displays the distributions of types of schools of initial hires for each of the three classes. Around 45% of each class' new hires were employed in elementary schools with around 14% each employed in high schools, junior high/intermediate/middle schools (collectively middle schools), and K-8 schools. The percentage employed in middle schools increased to 16.4% for the Class of 2018 compared to around 13% for the Classes of 2016 and 2017.

Table 11. Borough distribution of initial hiring schools for Touro Teacher Education program completers by year of program completion

Borough of First Hire	Statistic	Year of Completion			Total
		2016	2017	2018	
Manhattan	N Completers	57	57	34	148
	% within Grad Year	11.2%	11.9%	9.0%	10.9%
Bronx	N Completers	56	61	43	160
	% within Grad Year	11.0%	12.8%	11.4%	11.7%
Brooklyn	N Completers	186	183	140	509
	% within Grad Year	36.6%	38.4%	37.0%	37.3%
Queens	N Completers	139	120	101	360
	% within Grad Year	27.4%	25.2%	26.7%	26.4%
Staten Island	N Completers	70	56	60	186
	% within Grad Year	13.8%	11.7%	15.9%	13.6%
Total	N Completers	508	477	378	1363
	% within Grad Year	100.0%	100.0%	100.0%	100.0%

Table 12. Borough distribution of initial hiring schools for Touro Teacher Education program completers by campus location (Classes of 2016, 2017, & 2018 combined)

Borough of First Hire	Statistic	Campus			Total
		Bayshore	Brooklyn	Manhattan	
Manhattan	N Completers	9	11	128	148
	% within Grad Year	10.3%	2.4%	15.5%	10.9%
Bronx	N Completers	12	6	142	160
	% within Grad Year	13.8%	1.3%	17.2%	11.7%
Brooklyn	N Completers	16	252	241	509
	% within Grad Year	18.4%	56.0%	29.2%	37.3%
Queens	N Completers	50	14	296	360
	% within Grad Year	57.5%	3.1%	35.8%	26.4%
Staten Island	N Completers	0	167	19	186
	% within Grad Year	0.0%	37.1%	2.3%	13.6%
Total	N Completers	87	450	826	1363
	% within Grad Year	100.0%	100.0%	100.0%	100.0%

Table 13. Distribution of types of schools in which Touro Teacher Education program completers were first employed disaggregated by year of completion

School Type	Statistic	Completion Year			Total
		2016	2017	2018	
CENTRAL, DISTRICT, & REGIONAL HEADQUARTERS	N completers	4	3	2	9
	% within year	0.2%	0.2%	0.8%	0.4%
DISTRICT PRE-K CENTER	N completers	9	8	5	22
	% within year	1.8%	1.7%	1.3%	1.6%
EARLY CHILDHOOD	N completers	2	2	1	5
	% within year	0.2%	0.4%	0.3%	0.3%
ELEMENTARY	N completers	231	216	171	618
	% within year	45.3%	45.3%	45.1%	45.2%
HIGH SCHOOL	N completers	78	64	48	190
	% within year	15.3%	13.4%	12.7%	13.9%
JUNIOR HIGH-INTERMEDIATE-MIDDLE	N completers	67	63	62	192
	% within year	13.1%	13.2%	16.4%	14.1%
K-12 ALL GRADES	N completers	31	35	19	85
	% within year	6.1%	7.3%	5.0%	6.2%
K-8	N completers	80	61	55	196
	% within year	15.7%	12.8%	14.5%	14.3%
SECONDARY SCHOOL (7-12)	N completers	7	25	14	46
	% within year	1.4%	5.2%	3.7%	3.4%
Total	N completers	509	477	377	1363
	% within year	100.0%	100.0%	100.0%	100.0%

Note. Data are missing for 3 completers

Concentration of Employment in NYCDOE Schools: Previous graduate tracking reports found that Touro graduates were ubiquitous in the NYCDOE schools, with the graduates from the classes of 2008 – 2017 serving in two thirds of the 1,582 NYCDOE public schools. The reports also found a subset of schools with high concentrations of graduates. This report looks at similar data for completers for the three classes of 2016, 2017, and 2018. Table 14 displays data on the numbers of NYC Public Schools hiring Touro completers from the three classes combined, including the concentration of these completers in certain schools. As can be seen in the table, of the 1,582 NYC public schools,³ Touro completers from the three classes were initially hired in 703 schools, 44.4% of the schools in the city system. This percentage is lower than observed in last year’s report but still shows that this group of Touro completers were employed in more than two of every five schools. In addition to the breadth of their presence in NYC public schools, there continue to be schools with high concentrations of completers. A total of 319 schools hired more than one completer from the three classes to their faculty, with 79 of these schools having at least four and 41 having at least five. A disproportionately high number of the high-concentration schools are in Staten Island and Brooklyn. (The appendix has a list of the high-concentration schools.) These data point to the continuation of a strong relationship between the NYC public schools and Touro.

Table 14. Numbers of NYC Public Schools hiring Touro completers and the numbers of completers hired by these schools (Completers for 2016, 2017, & 2018 combined)

Schools with Touro Completers	N/%
Total NYC Public Schools	1,582
Touro completers hired *	1357
Number of schools hiring Touro completers	703
% of schools hiring Touro completers	44.4%
Schools hiring more than 1 Touro completer	319
Schools hiring at least 4 Touro completers	79
Schools hiring at least 5 Touro completers	41

* Excludes completers hired in Central Headquarters and District Offices

RQ 4. Completers’ Retention

Retention: Table 15 displays the employment status (current payroll status) of the Touro completers who were employed in the NYC public schools as of Dec. 31, 2018 for each of the three years of the study. The status categories are: *Still Employed*, a single category subsuming teachers serving in regular teaching positions, on leave, on sabbatical, or serving as a substitute teacher; teachers on *Leave Without Pay*; and a category for those who have been *Terminated* from the payroll, signifying that they left the NYC school system. Overall, of all graduates from each class of completers who were hired by the NYC public schools, more than 80% of each class were *Still Employed* and on the regular payroll as of Dec. 31, 2018. The highest *Still*

³ Number of schools is based on NYCDOE statistical data for 2016-17.

Employed rate was observed for the Class of 2017 (86.2%) and the lowest for the Class of 2018 (80.5%). For the three classes combined, 14.5% had been *Terminated* from the payroll. These retention rates are in line with the 80-85% observed in earlier reports, and higher than the overall 76% observed in last year's report. However, in order to understand the retention/attrition picture, one has to drill down into the complex history of Touro completers.

Table 15. Payroll (employment) status of Touro Teacher Education program completers who were hired by NYCDOE schools disaggregated by year of completion

Payroll Status *	Statistic	Completion Year			Total
		2016	2017	2018	
Terminated	N Completers	70	63	65	198
	% within Year	13.7%	13.2%	17.2%	14.5%
Leave Without Pay	N Completers	15	3	9	27
	% within Year	2.9%	0.6%	2.4%	2.0%
Still Employed as Regular or Substitute	N Completers	425	411	305	1141
	% within Year	83.3%	86.2%	80.5%	83.5%
Total	N Completers	510	477	379	1366
	% within Year	100.0%	100.0%	100.0%	100.0%

As shown earlier in this report and previous reports on this research, completers were varied in the time between graduation and when they were first hired, with a large percentage having been employed in the NYC public schools prior to program completion. Table 16 drills down into the complexities of this relationship by disaggregating the payroll status categories for each of the three classes of completers by the years between graduation and first hiring. As can be seen in this table, the percentage of hired completers who were *Still Employed as Regular or Substitute Teacher*, which is the retention rate, was much higher for completers who were hired **1-2 years before** and **within one year before or after** program completion than for those hired **more than 2 years before** program completion. This was true for all three classes. For the three classes combined, completers **hired within one year before or after** program completion had a retention rate of 88.6% compared to a retention rate of 74% for those **hired 2 or more years before** program completion. The retention rate for completers **hired 1 to 2 years before** completion was 88.5%. Conversely, the attrition rates (*Terminated*) for completers **hired within one year before or after** program completion and for those **hired 1 to 2 years before** completion, both 9.6%, were comparable to the NYC system-wide attrition rate for first-year teachers of 8.2%, which was reported in an analysis by the United Federation of Teachers (UFT) in a 2015 paper posted on the organization's website.⁴ The attrition rate of 23.9% for completers **hired two or more years before** program completion is lower than the 37.4% 5-year system-wide attrition rate reported in the UFT document. Nevertheless, the higher attrition rate for completers who were hired well before their Touro studies were completed begs for deeper analysis and study aimed at understanding the dynamics that underlie this finding.

⁴ <http://www.uft.org/files/attachments/attrition-report-dec-2015.pdf>

Table 16. Payroll (employment) status of Touro Teacher Education program completers who were hired by NYCDOE schools disaggregated by years between hiring and program completion and year of completion

Completion Year	Payroll Status *	Statistic	Years between first hiring and program completion			Total
			More than 2 years before completion	1-2 years before completion	Within 1 year of completion	
2016	Terminated	N completers	25	17	25	67
		% within years to hire	18.7%	14.5%	10.7%	13.8%
	Leave without pay	N completers	4	4	6	14
		% within years to hire	3.0%	3.4%	2.6%	2.9%
	Still Employed as Regular or Sub	N completers	105	96	203	404
		% within years to hire	78.4%	82.1%	86.8%	83.3%
2017	Terminated	N completers	40	8	15	63
		% within years to hire	23.5%	5.6%	9.1%	13.2%
	Leave without pay	N completers	2	1	0	3
		% within years to hire	1.2%	0.7%	0.0%	0.6%
	Still Employed as Regular or Sub	N completers	128	134	149	411
		% within years to hire	75.3%	93.7%	89.0%	86.2%
2018	Terminated	N completers	46	6	13	65
		% within years to hire	28.6%	9.7%	8.3%	17.2%
	Leave without pay	N completers	4	1	4	9
		% within years to hire	2.5%	1.6%	2.6%	2.4%
	Still Employed as Regular or Sub	N completers	111	55	139	305
		% within years to hire	68.9%	88.7%	89.1%	80.5%
Total	Terminated	N completers	111	31	53	195
		% within years to hire	23.9%	9.6%	9.6%	14.5%
	Leave without pay	N completers	10	6	10	26
		% within years to hire	2.2%	1.9%	1.8%	1.9%
	Still Employed as Regular or Sub	N completers	344	285	491	1120
		% within years to hire	74.0%	88.5%	88.6%	83.5%

* Payroll status as of Dec. 3, 2018

Note: Excludes 25 completers from Class of 2016 that were hired 1-2 years after program completion.

Retention by certification area: Table 17 displays the retention status outcomes for the combined three-year sample as of Dec. 31, 2018 disaggregated by 14 program areas that had completers hired by NYCDOE. Six program areas had retention (*Still Employed*) rates near or above 90% and five others in the mid to low 80% range. Three of the smaller programs (only three completers each) had retention rates of 100%. The high-retention programs with more substantial numbers of completers were Bilingual Special Ed Speech and Language Disabilities (88.9% of 18 hired completers Still Employed), TESOL-CR-ITI (a retention rate of 88.9% for its 54 completers), and Mathematics Education (a retention rate of 88.9% for 18 completers). The

program with the largest number of hired completers, Childhood Ed Teaching Students with Disabilities (Grades 1-6), had a retention rate of 86.4% for its 447 completers employed in the NYC public schools. Teaching Literacy and Bilingual Special Ed-ITI had lower retention rates of 68.2% and 62.5%, respectively.

Table 17. Payroll (retention/attrition) status of Touro Teacher Education completers disaggregated by program major (classes of 2016, 2017, & 2018 combined)

Program Area	Statistic	Payroll Status*			Total	
		Terminated	Leave	Still Employed		
Biology Education-Grades 7-12	N Completers	0	0	3	3	
	% within Major	0.0%	0.0%	100.0%	100.0%	
Blng Spch and Lang Dsblts- ITI **	N Completers	0	0	3	3	
	% within Major	0.0%	0.0%	100.0%	100.0%	
Bilingual Bicultural Edu- PPS	N Completers	0	0	3	3	
	% within Major	0.0%	0.0%	100.0%	100.0%	
Blng Sp Ed Spch and Lang Dsblt	N Completers	2	0	16	18	
	% within Major	11.1%	0.0%	88.9%	100.0%	
TESOL- CR-ITI **	N Completers	5	1	48	54	
	% within Major	9.3%	1.9%	88.9%	100.0%	
Mathematics Education	N Completers	1	1	16	18	
	% within Major	5.6%	5.6%	88.9%	100.0%	
Chldhd Ed Tch Std W Dis Gr 1-6	N Completers	52	9	386	447	
	% within Major	11.6%	2.0%	86.4%	100.0%	
Tch Erl Chl Ed Std W Dis B-Gr2	N Completers	42	5	243	290	
	% within Major	14.5%	1.7%	83.8%	100.0%	
Tch SWD Generalist Gr 7-12	N Completers	32	5	191	228	
	% within Major	14.0%	2.2%	83.8%	100.0%	
Bilingual General Education	N Completers	1	0	5	6	
	% within Major	16.7%	0.0%	83.3%	100.0%	
Engl to Speakers of Other Lang	N Completers	24	3	121	148	
	% within Major	16.2%	2.0%	81.8%	100.0%	
Instructional Technology	N Completers	11	1	40	52	
	% within Major	21.2%	1.9%	76.9%	100.0%	
Teaching Literacy	N Completers	26	1	61	88	
	% within Major	29.5%	1.1%	68.2%	100.0%	
Bilingual Spec Edu- ITI **	N Completers	2	1	5	8	
	% within Major	25.0%	12.5%	62.5%	100.0%	
Total	N Completers	198	27	1141	1366	
	% within Major	14.5%	2.0%	83.5%	100.0%	

* Payroll status as of Dec. 31, 2018

** ITI is Intensive Teacher Institute and CR is Clinically Rich

Note: Displayed in descending order of % Still Employed

Summary and Conclusions

This is the fifth free-standing report of findings from a study that tracks the employment and retention of Touro Graduate School of Education's Teacher Education program completers employed in the New York City public schools. The study uses a non-experimental, quantitative research design with extant data to address research questions about the numbers and percentages of program completers (graduates) who are employed in the NYC public schools, the types of schools in which they teach, when they began teaching, and their retention in these schools and the school system. The participants were completers of the teacher education program from the three classes of 2016, 2017, and 2018, and the data for the study were employee data extracted from the NYCDOE Employee Information System (EIS). The major findings are as follows:

- **In total for the three classes combined, 38.3% of the 3,571 completers held or obtained teaching positions in the NYC public schools, as of December 31, 2018.** The employment rate for the Class of 2018 was 33.7%, which was lower than the rate of 41.4% reported last year for the Class of 2017, but in line with employment rates for earlier classes six months after program completion. The employment rate for the Class of 2018 is expected to rise as its completers spend more time in the job market.
- **For the three-year sample, the program area with the highest employment rate was Teaching English as a Second Language-Clinically Rich Intensive Teacher Institute (TESOL-CR-ITI), which had 54 (98.2%) of their 55 completers hired. The program area with the next highest hiring rate was Teaching Students with Disabilities Generalist (Grades7-12), one of the larger programs with 321 completers, 228 (71.0%) of whom were hired.** Three other program areas had hiring rates of 50% or higher: Instructional Technology, 59.8% for 52 completers, English to Speakers of Other Languages, 273 completers with 148 (54.2%) hired, and Teaching Literacy, with 88 (49.2%) of 179 completers hired
- **For the three-year sample, the Brooklyn campus had the highest hiring rate in the NYC public schools of the three campuses, 44.5%, followed by Manhattan at 36.2%.** The Bayshore campus, which is located on Long Island, had the lowest hiring rate at 32.6%. The campus employment rates for the Class of 2018 were all lower than those for the three-year sample and ranked in the same order.
- **Completers from the Brooklyn campus were employed mainly in Brooklyn and Staten Island schools, 56.0% in the former and 37.1% in the latter. The initial hiring schools of Manhattan campus completers were concentrated in Queens and Brooklyn, 35.8% for the former and 29.2% for the latter. More than half (57.5%) of Bayshore completers were employed in Queens' schools, the borough closest in proximity to the campus.**
- **As observed in previous reports of this research, many completers were already working in the schools when they enrolled at Touro, seeking degrees required for permanent licenses or to meet requirements for teaching in other certification areas.** The percentage of graduates hired before they completed the program rose from 49.2% for the Class of 2016 to 65.6% for the Class of 2017, and then fell back to 58.9% for the Class of 2018. Conversely, the percentage hired within one year before or after program

completion decreased from 45.9% for the Class of 2016 to 34.4% for the Class of 2017, and then rose to 41.2% for the Class of 2018. These data continue to confirm that Touro provides training to upgrade the skills of existing teachers in the NYC public schools while also filling the pipeline with new teachers in these same schools.

- **The borough with the largest percentage of new hires was Brooklyn, with 37.3% of the new hires for the three classes combined.** The next highest percentage of hires was Queens with 26.4%. The only noteworthy inter-class variations in distributions was an increase in the percentage hired in Staten Island for the Class of 2018 (15.9%) compared to the Class of 2017 (11.7%) and the Class of 2016 (13.8%), and a concomitant decrease in the percentage hired in Manhattan to 9.0% for 2018 from 11.9% and 11.2% for the Classes of 2017 and 2016, respectively.
- **Completers from the Brooklyn campus were employed mainly in Brooklyn and Staten Island schools, 56.0% in the former and 37.1% in the latter. The initial schools of Manhattan campus completers were concentrated in Queens and Brooklyn, 35.8% for the former and 29.2% for the latter. More than half (57.5%) of Bayshore completers were employed in Queens schools, the borough closest in proximity to the campus.**
- **Around 45% of each class' new hires were employed in elementary schools with around 14% each employed in high schools, junior high/intermediate/middle schools (collectively middle schools), and K-8 schools**
- **Touro completers from the three classes were initially hired in 703 schools, 44.4% of the 1,582 schools in the city system.** A total of 319 schools hired more than one completer from the three classes to their faculty, with 79 of these schools having at least four, and 41 having at least five.
- **Overall, of all graduates from each class of completers who were hired by the NYC public schools, more than 80% of each class were Still Employed as of Dec. 31, 2018, while 14.5% had been terminated from the payroll.** The highest Still Employed rate was observed for the Class of 2017 (86.2%) and the lowest for the Class of 2018 (80.5%). These retention rates are in line with the 80-85% observed in earlier reports, and higher than the overall 76% observed in last year's report.
- **For the three classes combined, completers hired within one year before or after program completion had a retention rate of 88.6% compared to a retention rate of 74% for those hired 2 or more years before program completion. The retention rate for completers hired 1 to 2 years before completion was 88.5%. %.** Conversely, the attrition rates (*Terminated*) for completers hired within one year of graduation and for those hired 1 to 2 years before completion, 9.6%, were comparable to the NYC system-wide attrition rate for first-year teachers of 8.2%. The attrition rate of 23.9% for completers hired two or more years before program completion, although similar to system-wide rates for teachers with 3 – 5 years of experience, begs for deeper analysis and study aimed at understanding the dynamics that underlie this finding.
- **Six program areas had retention (*Still Employed*) rates near or above 90% and five others in the mid to low 80% range.** The high-retention programs with substantial numbers of completers were Bilingual Special Ed Speech and Language Disabilities (88.9% of 18 hired completers Still Employed), TESOL-CR-ITI (a retention rate of 88.9% for its 54 completers), and Mathematics Education (a retention rate of 88.9% for 18 completers). The program with the largest number of hired completers, Childhood Ed

Teaching Students with Disabilities (Grades 1-6), had a retention rate of 86.4% for its 447 completers employed in the NYC public schools.

The conclusion of this report is that Touro's Graduate School of Education continues to be a major provider of teachers to the pipeline filling the classes of New York City public schools. Large numbers of completers serve in a large number and percentage of NYC public schools, with completers for the classes of 2016, 2017, and 2018 staffing the faculties of more than two out of five of NYC's public schools and large concentrations of completers working in certain schools. In addition, the retention rate for completers working in NYC public schools is comparable to that for the full population of teachers. Nevertheless, given the complex relationship between Touro and the NYC public schools, with Touro serving as both provider of new teachers and the trainer of existing teachers, faculty discussion of these findings and continued tracking and research on Touro Teacher Education program completers is essential.

Appendix

NYC public schools with at least four Touro Teacher Education program completers hired as their first school of employment (Classes of 2016, 2017, and 2018 combined (data as of Dec. 31.2018)

Code	School	Boro	School Name	School Type	N Hired
K105	K105	Brooklyn	P.S. 105 THE BLYTHEBOURNE	ELEMENTARY	13
K186	R373	Staten Island	P.S. R373	K-8	13
K771	KP20	Brooklyn	PRE-K CENTER DISTRICT 20	DISTRICT PRE-K CENTER	10
R460	R069	Staten Island	P.S. 069 DANIEL D. TOMPKINS	ELEMENTARY	9
R721	R440	Staten Island	NEW DORP HIGH SCHOOL	HIGH SCHOOL	9
K231	K771	Brooklyn	P.S. K771	K-12 ALL GRADES	9
K239	R025	Staten Island	SOUTH RICHMOND HIGH SCHOOL I.S./P.S. 25	K-12 ALL GRADES	9
Q009	Q211	Queens	ELM TREE ELEMENTARY SCHOOL	ELEMENTARY	8
R029	R455	Staten Island	TOTTENVILLE HIGH SCHOOL	HIGH SCHOOL	8
R069	Q061	Queens	I.S. 061 LEONARDO DA VINCI	JHS-INTERMED-MIDDLE	8
R455	R721	Staten Island	THE RICHARD H. HUNGERFORD SCHOOL	SECONDARY SCHOOL	8
K303	Q019	Queens	P.S. 019 MARINO JEANTET	ELEMENTARY	7
KP20	Q110	Queens	P.S. 110	ELEMENTARY	7
R373	R060	Staten Island	P.S. 060 ALICE AUSTEN	ELEMENTARY	7
K369	Q480	Queens	JOHN ADAMS HIGH SCHOOL	HIGH SCHOOL	7
M575	R460	Staten Island	SUSAN E. WAGNER HIGH SCHOOL	HIGH SCHOOL	7
Q019	K228	Brooklyn	I.S. 228 DAVID A. BOODY	JHS-INTERMED-MIDDLE	7
Q061	K231	Brooklyn	P.S. K231	K-8	7
Q480	K186	Brooklyn	P.S. 186 DR. IRVING A GLADSTONE	ELEMENTARY	6
R007	K748	Brooklyn	P.S. 748 BROOKLYN SCHOOL FOR GLOBAL SCHOLARS	ELEMENTARY	6
R054	Q034	Queens	P.S. 034 JOHN HARVARD	ELEMENTARY	6
R440	R013	Staten Island	P.S. 013 M. L. LINDEMAYER	ELEMENTARY	6
K094	R029	Staten Island	P.S. 029 BARDWELL	ELEMENTARY	6
K097	M575	Manhattan	MANHATTAN COMPREHENSIVE NIGHT AND DAY HIGH SCHOOL	HIGH SCHOOL	6
K153	R007	Staten Island	I.S. 007 ELIAS BERNSTEIN	JHS-INTERMED-MIDDLE	6
K215	K369	Brooklyn	P.S. K369 - COY L. COX SCHOOL	K-12 ALL GRADES	6
K228	R037	Staten Island	THE DAVID MARQUIS SCHOOL OF THE ARTS	K-12 ALL GRADES	6
K278	K094	Brooklyn	P.S. 094 THE HENRY LONGFELLOW	ELEMENTARY	5

K505	K134	Brooklyn	P.S. K134	ELEMENTARY	5
M094	K257	Brooklyn	P.S. 257 JOHN F. HYLAN	ELEMENTARY	5
Q042	M051	Manhattan	P.S. 051 ELIAS HOWE	ELEMENTARY	5
Q110	Q143	Queens	P.S. 143 LOUIS ARMSTRONG	ELEMENTARY	5
Q233	R078	Staten Island	P.S. 78	ELEMENTARY	5
Q425	K505	Brooklyn	FRANKLIN DELANO ROOSEVELT HIGH SCHOOL	HIGH SCHOOL	5
R013	R024	Staten Island	I.S. 024 MYRA S. BARNES	JHS-INTERMED-MIDDLE	5
R025	Q233	Queens	P.S. Q233	K-12 ALL GRADES	5
R049	X010	Bronx	P.S. X010	K-12 ALL GRADES	5
R051	K109	Brooklyn	P.S. 109	K-8	5
R072	K396	Brooklyn	P.S. K396	K-8	5
R080	M347	Manhattan	THE 47 AMERICAN SIGN LANGUAGE & ENGLISH LOWER SCHO	K-8	5
K001	Q009	Queens	P.S. 009	K-8	5
K036	K001	Brooklyn	P.S. 001 THE BERGEN	ELEMENTARY	4
K108	K023	Brooklyn	P.S. 023 CARTER G. WOODSON	ELEMENTARY	4
K134	K032	Brooklyn	P.S. 032 SAMUEL MILLS SPROLE	ELEMENTARY	4
K141	K115	Brooklyn	P.S. 115 DANIEL MUCATEL SCHOOL	ELEMENTARY	4
K169	K169	Brooklyn	P.S. 169 SUNSET PARK	ELEMENTARY	4
K172	K172	Brooklyn	P.S. 172 BEACON SCHOOL OF EXCELLENCE	ELEMENTARY	4
K192	K188	Brooklyn	P.S. 188 MICHAEL E. BERDY	ELEMENTARY	4
K225	K254	Brooklyn	P.S. 254 DAG HAMMARSKJOLD	ELEMENTARY	4
K254	K264	Brooklyn	P.S. 264 BAY RIDGE ELEMENTARY SCHOOL FOR THE ARTS	ELEMENTARY	4
K255	K310	Brooklyn	THE SCHOOL FOR FUTURE LEADERS	ELEMENTARY	4
K259	K506	Brooklyn	P.S. 506: THE SCHOOL OF JOURNALISM & TECHNOLOGY	ELEMENTARY	4
K264	M145	Manhattan	P.S. 145 THE BLOOMINGDALE SCHOOL	ELEMENTARY	4
K288	Q058	Queens	P.S. 58 - THE SCHOOL OF HEROES	ELEMENTARY	4
K396	R023	Staten Island	P.S. 023 RICHMONDTOWN	ELEMENTARY	4
K506	R054	Staten Island	P.S. 054 CHARLES W. LENG	ELEMENTARY	4
K721	X018	Bronx	P.S. 018 JOHN PETER ZENGER	ELEMENTARY	4
K748	X049	Bronx	P.S. 049 WILLIS AVENUE	ELEMENTARY	4
M347	Q425	Queens	JOHN BOWNE HIGH SCHOOL	HIGH SCHOOL	4
Q058	Q430	Queens	FRANCIS LEWIS HIGH SCHOOL	HIGH SCHOOL	4
Q143	Q600	Queens	QUEENS TECHNICAL HIGH SCHOOL	HIGH SCHOOL	4
QP24	R600	Staten Island	RALPH R. MCKEE CAREER AND TECHNICAL EDUCATION HIGH	HIGH SCHOOL	4
R024	K259	Brooklyn	J.H.S. 259 WILLIAM MCKINLEY	JHS-INTERMED-MIDDLE	4
R060	K303	Brooklyn	I.S. 303 HERBERT S. EISENBERG	JHS-INTERMED-MIDDLE	4
R075	Q125	Queens	I.S. 125 THOM J. MCCANN WOODSIDE	JHS-INTERMED-MIDDLE	4

R078	Q217	Queens	J.H.S. 217 ROBERT A. VAN WYCK	JHS-INTERMED-MIDDLE	4
R600	R049	Staten Island	I.S. 49 BERTA A. DREYFUS	JHS-INTERMED-MIDDLE	4
X049	R051	Staten Island	I.S. 051 EDWIN MARKHAM	JHS-INTERMED-MIDDLE	4
X126	R075	Staten Island	I.S. 075 FRANK D. PAULO	JHS-INTERMED-MIDDLE	4
K007	K141	Brooklyn	P.S. K141	K-12 ALL GRADES	4
K014	Q277	Queens	THE RIVERVIEW SCHOOL	K-12 ALL GRADES	4
K015	K066	Brooklyn	P.S. 66	K-8	4
K023	K163	Brooklyn	P.S. 163 BATH BEACH	K-8	4
K032	K206	Brooklyn	P.S. 206 JOSEPH F LAMB	K-8	4
K038	K225	Brooklyn	P.S. K225 - THE EILEEN E. ZAGLIN	K-8	4
K062	M206	Manhattan	P.S. 206 JOSE CELSO BARBOSA	K-8	4
K066	Q049	Queens	P.S. 049 DOROTHY BONAWIT KOLE	K-8	4
K071	Q119	Queens	I.S. 119 THE GLENDALE	K-8	4
K098	Q127	Queens	P.S. 127 AEROSPACE SCIENCE MAGNET SCHOOL	K-8	4