



**Department of
Education**
Chancellor Richard A. Carranza

**Testimony of the NYC Department of Education
Before the NYC Council's Committees on Education and Higher Education**

June 25, 2019

Testimony of Tomás Hanna, Chief Human Capital Officer

Good afternoon Chairs Treyger and Barron, and Members of the Committees on Education and Higher Education. My name is Tomás Hanna, and I am the Chief Human Capital Officer at the New York City Department of Education (DOE). I am joined by Rod Bowen, Senior Executive Director of the Office of Teacher Development within the Division of the Chief Academic Officer. Thank you for the opportunity to testify today. We appreciate the opportunity to discuss the critically important issue of strengthening our teaching workforce in this venue.

Since this is my first time before the Council, I would like to share a little about my background. As an educator with more than 25 years of experience, I have had the pleasure of serving school communities in two large urban school districts, including New York City, since 2011. I have served in a variety of school-based roles such as teacher and principal, as a deputy and associate superintendent, and in senior leadership roles in central offices.

The quality and retention of our teachers are core components of Chancellor Carranza's priority to "develop people," and the city's Equity and Excellence for All agenda as a whole. We are deeply committed to supporting the growth and development of our teachers, from pre-service training to in-service professional learning, and we have made unprecedented investments and implemented a number of new initiatives. As a result, we have a holistic set of support systems for every teacher from before they enter the classroom through their entire career.

For example:

- We have increased peer-to-peer teacher support and transformed our educators' career ladder into a career lattice with nearly 2,000 new teacher leader positions in our schools;
- We have created new innovative pathways and strategies to increase teacher retention and strengthen resources in our historically underserved communities through the Bronx Plan, our Teaching Fellows program, and 80 new teacher preparation academies;
- We have developed new Teacher Development Facilitator positions in the United Federation of Teachers (UFT) contract, establishing leaders who provide ongoing support to teachers during their pre-service training;



**Department of
Education**

Chancellor Richard A. Carranza

- And through the NYC Men Teach initiative, we have increased the diversity of our teaching force—over 1,000 men of color have entered teaching pipelines since that effort started just three years ago.

As a result of these and other initiatives, overall teacher retention and new teacher retention across NYC public schools remain consistently higher than national averages. And in recognition of our investments in teacher leadership and professional development opportunities, in 2017 the National Council on Teacher Quality named the New York City of Department of Education as a *Great District for Great Teachers*.

While we are pleased by our progress, we know there is more work to do to ensure that all new teachers are well prepared and trained.

The DOE has a workforce of approximately 80,000 teachers, serving students from birth to grade 12 in district schools and NYC Early Education Centers. As a system, we welcome approximately 5,000 new teachers into our schools every school year.

All newly hired teachers in NYC public schools are prepared through schools of education, and we depend on the traditional pathways at institutions of higher education to prepare most of our new hires every year. We recruit from over 100 universities nationwide, and are more deeply involved with a smaller subset of primarily local institutions of higher education. Over 60 percent of our new hires graduated from—and received their pre-service teacher preparation at—New York State public and private universities. Over 30 percent of our new hires graduated from a university in the CUNY system.

Helping aspiring educators transition into our schools requires a strong partnership with the UFT, higher education institutes, and the New York State Department of Education (NYSED). Together we've strengthened student teacher preparation requirements, so that our newest educators are better prepared to enter and succeed in the field.

DOE has multiple touchpoints with these key partners, including quarterly steering committee meetings and monthly meetings with the UFT, institutions of higher education and NYSED.

I want to share several key steps we are taking with our partners to improve teacher preparation:

- 1. Increase the number of teacher candidates prepared to teach in our schools aligned to our subject area needs.**

We have engaged universities in a shared vision for teacher preparation called the Criteria for New Teacher Readiness. These are the skills and knowledge that we expect every New York City teacher to have prior to entering our classrooms. Through the DOE's grant-funded Teacher Preparation Transformation Center, we are collaborating with preparation programs at three universities—Lehman College, Brooklyn College and Touro College—around these criteria.



**Department of
Education**

Chancellor Richard A. Carranza

Part of this work is also building upon current initiatives to increase recruitment in hard-to-staff categories, such as teaching special education students and multilingual learners. We are proud that we've been able to work with our partners to create subsidized teaching programs in these areas, through the Subsidized Bilingual Extension Program and the Secondary Students with Disabilities Certification Program—in addition to the Teaching Fellows program and the Bronx Plan.

2. Expand clinical experiences to provide meaningful and genuine opportunities to practice skills with our students in our schools.

We are working with the National Center for Teacher Residencies and US Prep, two nationally renowned leaders in residency-based teacher preparation, to increase the amount of student teaching and clinical preparation candidates receive before entering the classroom. We had 500 pre-service teachers trained through a half-year residency this year, and are looking to strengthen and expand these efforts.

Additionally, in partnership with key stakeholders across the State, we successfully lobbied NYSED to change regulations to require prospective teachers to spend more time in DOE schools for student teaching prior to graduating from their programs. Those regulation changes significantly increased the required student teaching time to one semester from the previous requirement of 40 days.

3. Culturally Responsive-Sustaining Education

Chancellor Carranza is making culturally responsive-sustaining education a cornerstone of everything we do. Students must see themselves in the lessons we teach, and that is why we are expanding our culturally responsive-sustaining curriculum options and in-service trainings, as well as putting forward the first unified definition of Culturally Responsive-Sustaining Education in DOE history. In addition, we are working with our higher education partners to infuse more culturally responsive and implicit bias content into their curricula in order to better prepare their graduates to teach New York City public school students.

Before I turn it over to my colleague Rod Bowen, who will speak about the experiences of teachers after they are hired, I would like to again thank the New York City Council Committees on Education and Higher Education for the opportunity to speak today.

We appreciate your shared recognition of how important this work is: a single teacher can have an enormous impact on the lives of many students.

There is much more work to do, and together we have the momentum to build upon the progress we've made to advance Equity and Excellence for All New York City students.



**Department of
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Testimony of Rod Bowen, Senior Executive Director, Office of Teacher Development

Good afternoon Chair Treyger, Chair Barron, and Members of both the New York City Council Committee on Education and Higher Education. My name is Rod Bowen and I serve as the Senior Executive Director of the Office of Teacher Development, which is within our new Chief Academic Office, as part of the Division of Teaching and Learning. I come to this role having been a classroom teacher, the founding principal of an arts high school in the Bronx, and the leader of the Office of School Quality. The experience of seeing how our schools function from so many angles has been invaluable in shaping the work I lead.

Great teachers are the cornerstone of great schools, and I would like to discuss the strategies we use to support the growth and development of our teachers so they can better serve our 1.1 million students.

Our Chief Academic Office, led by Dr. Linda Chen, is leading essential work across the Divisions of Teaching and Learning, Multilingual Learners, and Specialized Instruction and Student Supports to provide all schools with the resources and professional learning necessary to create inclusive, rigorous instruction for every child, in a safe, welcoming, and affirming environment. As part of that mandate, the focus of the office that I lead is to support the growth and development of our teachers so that they can ultimately sustain a long-term and successful career in our schools.

Our professional development efforts are wide-ranging and available in many different forms to meet the needs of each district and school. Across the Department, including Academics and the Borough/Citywide Offices, teams organize large-scale opportunities for thousands of teachers to learn and share targeted content-specific classroom practices. Generally, these events are focused on the use and implementation of curricula and programs, and provide valuable learning for our teachers, as well as opportunities for them to continue to grow and develop.

In addition, we know that our newest teachers need ongoing, targeted support and development. That is why even before their first school year begins, new teachers are invited to three days of professional learning, which introduce them to the expectations of New York City schools along with the support systems and resources available to them. This fall, for the first time, this training will be required for all new teachers.

After teachers attend our New Teacher Week, they participate in our New Teacher Mentoring program. All new teachers receive a trained mentor upon entry into their school. This is important because research shows that when teachers receive close support from an experienced and talented mentor, they are more likely to be satisfied on the job as well as to teach long-term. Each year, we train 600 new teacher mentors, and there are now 3,500 mentors citywide.

In order to sustain the long-term growth of educators and drive school-wide improvement, teachers and schools leaders continue to come together for 80 minutes of rigorous, weekly



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Chancellor Richard A. Carranza

professional development – a key advancement in our 2014 contract with the United Federation of Teachers. During this time, school teams come together to engage in deep work around targeted professional learning, surfaced from the ground-up and focused on the needs and strengths of each school. Principals use this time to support the development of their teachers and the growth of their schools.

As Tomás mentioned, teacher development goes hand-in-hand with our Equity and Excellence for All agenda—the Mayor and Chancellor’s plan to put all students on the path to college and meaningful careers. Teachers who are willing to step up and expand their classroom practices are central to this mission. For example, teachers are taking on training to teach new Advanced Placement and computer science courses, while helping to nurture a college-going culture at their schools. These 21st-century teaching skills are essential for putting all students on the path to success.

We are committed to continuous improvement. In particular, we are focused on strengthening our university partnerships, as well as the culturally responsive-sustaining pedagogy of every educator, so that they can leverage the knowledge of their students’ identities and diversity. These elements of our work will be essential to the long-term success of our students, our schools, and our communities.

Thank you for your partnership and for the opportunity to testify before you today. We will be happy to answer any questions you may have for us.



**THE CITY OF NEW YORK
OFFICE OF THE COMPTROLLER
SCOTT M. STRINGER**

**TESTIMONY OF
THE OFFICE OF NEW YORK CITY COMPTROLLER
SCOTT M. STRINGER**

**BEFORE THE
NEW YORK CITY COUNCIL COMMITTEE ON EDUCATION AND
COMMITTEE ON HIGHER EDUCATION
JOINT HEARING ON TEACHER PREPARATION AND TRAINING**

June 25, 2019

Thank you Chairs Treyger and Barron for holding today's hearing and for the opportunity to testify before you. My name is David Saltonstall, and I am the Associate Comptroller for Policy at the Office of New York City Comptroller Scott M. Stringer.

Yesterday, Comptroller Stringer issued a report examining an issue at the core of today's hearing: the persistent problem of high teacher turnover rates. The Comptroller's report provides new analysis of the scale and the scope of teacher turnover, showing the disproportionate impact of high turnover across school districts and academic subjects. Ultimately, the report reveals that a staggering 41 percent of all teachers hired in the 2012-13 school year left their posts within five years and nearly 20 percent of all public school teachers with less than five years of experience left the classroom in 2017-18 alone. In many local districts, teacher churn is even higher.

In response to the high rate of teacher turnover, Comptroller Stringer is calling on the City Department of Education (DOE) to establish a large-scale, paid, year-long residency program to vastly expand in-classroom experience for new teachers, and equip them with the classroom skills they need to teach in the country's largest school district and support New York City's 1.1 million schoolchildren.

Despite the vital importance of the quality teaching in our schools, fewer college students consider the teaching profession a viable career option. In New York State, individuals who completed teacher preparation programs dropped by 39 percent between 2010 and 2015. Several factors contribute to this decline, in particular the lack of supportive working conditions to encourage teachers to thrive throughout their careers. Many early career teachers enter the profession driven by eagerness to make a positive difference in the lives of children and youth, but upon entering schools, are faced with challenges that erode their enthusiasm. Lack of support, overcrowded classrooms, need for basic supplies, or few opportunities for meaningful collaboration are demoralizing for professionally trained, talented educators and can significantly impact a teacher's decision to leave the classroom.

There is a very real cost to high turnover. When teachers leave after one or two years, the investment in their recruitment, training, or professional development is lost and creates the need for ever-more recruitment, making it difficult to build a stable workforce. The national estimated cost of turnover in large urban districts is around \$20,000 per teacher. Moreover, high turnover is devastating to schools, eroding trust and morale among other teachers and imperiling school improvement efforts.

The deepest impact of high teacher turnover is felt by students, especially in schools with concentrated poverty where many students already face steep challenges to learning. A revolving door of inexperienced teachers is particularly damaging for the City's most vulnerable students. In New York City, schools with high concentrations of poverty often experience both higher percentages of new teachers, as well as higher rates of turnover, compounding other deep inequities in the system. In Community School District 12 in the Bronx, for example, about 18 percent of teachers have less than three years of experience, and turnover among new teachers is 31 percent.

To address the problems associated with teacher turnover in New York City, Comptroller Stringer is calling on the City and the Department of Education to invest in teacher training through a large-scale, paid teacher residency program that provides a full year of high-quality experiential training in classrooms prior to teacher certification. By ensuring pre-service teachers experience a full-year

classroom apprenticeship alongside a highly qualified mentor teacher, our City can give candidates the opportunity to identify the social and instructional challenges they will face as teachers and practice the skills they will need to address these challenges when leading a classroom of their own. When fully scaled, a teacher residency program would place 1,000 resident teachers in City schools each year, significantly improving the quality and stability of the teaching pipeline.

Specifically, Comptroller Stringer recommends that the City:

- Establish a large-scale teacher residency with capacity to eventually include all teachers currently in the New York City Teaching Fellows preparation program, in order to meet annual staffing needs.
- Ensure participants spend a full year working in classrooms under and alongside a single, accomplished mentor;
- Provide a stipend to cover residents' living expenses during the residency year;
- Reflect a strong collaboration between the school district and institutions of higher education;
- Focus on quality by ensuring that adequate time and funding are available so that each school that hosts a cohort of residents would spend a year in a centrally-coordinated partnership development phase with the approved teacher preparation provider;
- Develop and support effective mentor teachers so that they have the skills and resources necessary to fully integrate residents into the daily routines of their classrooms; and,
- Partner with higher education institutions around the City, including CUNY, SUNY, and independent colleges and universities. DOE must convene leaders of higher education early in the planning process to ensure their programs are designed to meet district quality goals.

At full scale, the Comptroller's Office estimates that a large-scale residency would have an annual cost of about \$40 million, but we anticipate that over time, the City would regain some of the initial investment through cost savings from improved teacher retention. With increased retention, the need to recruit, hire and train new teachers will decrease, and the savings can be funneled back into the residency program. There may be additional savings from redistributing instructional tasks within schools where residents are placed, including substitute teaching, tutoring, or leading afterschool instructional activities.

Providing teacher candidates an affordable pathway to high-quality preparation is key to improving teacher retention. Such an important investment in a world-class professional teaching workforce can be expected to benefit students, teachers, schools, and the City we live in for generations to come.

Thank you again for the opportunity to testify today and for your attention to this matter. The Office of the Comptroller looks forward to working together to implement this system and provide the best education to all of our children. I am happy to answer any question you may have.



NEW YORK CITY COMPTROLLER
SCOTT M. STRINGER

Bureau of Policy and Research



June 2019

Teacher Residencies: Supporting the Next Generation of Teachers and Students



Contents

Executive Summary	4
Introduction: Today’s Teaching Profession	9
New York City: A System Marked by Churn.....	13
Alternative Certification Programs.....	24
Models of Success.....	28
Recommendation: Time to Expand Teacher Residencies in New York City	34
Endnotes.....	41

Executive Summary

Within a school, there is no more important influence on student learning and achievement than having high quality teachers – the gatekeepers of knowledge who light the path not just toward reading, writing and arithmetic, but to colleges, careers and beyond. A strong educator is the single most important in-school factor for improving academic outcomes of students. Like any profession, teaching also requires practice and professional development to build effective skills and expertise. Research increasingly shows that how teachers are prepared directly influences how long they remain in the profession and that real world, on-the-ground preparation exposes teacher candidates to the specific strengths, challenges, and vulnerabilities they will encounter in classrooms.¹

Unfortunately, far too many teachers across America enter the classroom without adequate time to develop the skills needed to succeed – a problem that is especially acute in New York City, where it is all too common for teachers to have as little as two weeks of classroom training before taking on the myriad responsibilities of running their own classroom. The unfortunate result is that despite the richness of New York City schools, approximately 20 percent of new teachers -- a number far higher than the rest of New York State -- leave their classrooms each year either to work in another school or district, or to leave the profession all together. This annual exodus exacts not just an enormous fiscal toll on the system, but more importantly an educational one on our students.²

Teachers leave their classrooms for many reasons, often due to difficult working conditions. Overcrowded classrooms, lack of support from school or district leadership, or a desire to work in a more collaborative environment are often cited as reasons why teachers leave their school, or the profession. Improving preparation for teachers before they enter the classroom is one area that can affect teacher retention. While other systemic problems related to working conditions will continue to need appropriate mitigation, preparing new teachers well and paving the way for their success is an essential first step in stemming the tide of teacher turnover.

This report, by New York City Comptroller Scott M. Stringer, provides a detailed examination of teacher retention in New York City and reveals how it impacts differing boroughs and school districts, including those most impacted by poverty. It also makes the case for greatly expanding a proven model for improving teacher retention – namely a year-long, paid teacher residency program designed to give new teachers the training and mentorship they need to succeed in the classroom.³ By ensuring pre-service teachers can

experience a rigorous full-year classroom apprenticeship alongside a mentor teacher, candidates can practice the skills they will need to address the social and instructional challenges they will face when leading a classroom of their own.

There is no question that bold action is needed to confront the scope of the problem in New York City, where data compiled by the Comptroller's Office found that:

- The City struggles to retain its newest teachers. In fact, **41 percent of all teachers hired in the 2012-13 school year left the system within five years.** Specifically, of the 4,600 teachers hired in the 2012-13 school year 1,882 teachers, had left the system by 2017-18, roughly equal to the total number of teachers working in Cleveland, Ohio.⁴
- **On average, turnover rates across all public schools in New York City are about 15 percent.** This compares with annual teacher turnover rates of 11 percent in New York State. Among City teachers with fewer than five years of experience, annual turnover is just under 20 percent.⁵
- In some local districts, teacher churn is much higher than the citywide average. Turnover among new teachers in Community School District 12 in the Bronx, for instance, is 31 percent.
- **The Bronx and Manhattan both have turnover among teachers with fewer than five years of experience of 22 percent**
- To keep up with the constant demand to fill classrooms, the City is continually recruiting and hiring new educators. **Approximately one third of teachers in the City have fewer than five years of experience.**⁶
- **The revolving door of inexperienced teachers is particularly damaging for the City's most vulnerable students.** Data shows that schools in neighborhoods with high concentrations of poverty often experience both higher percentages of new, inexperienced teachers, as well as higher rates of turnover, compounding other deep inequities in the system.
- The educational impact of all this turnover is particularly profound when viewed through the prism of teacher specialties. **New York City has teacher shortages in fifteen subject areas,** including: Math, Science, English as a Second Language, Art and Music Education, World Languages, Special Education, Language Arts, Health and Physical Fitness.⁷

- In addition, despite the diversity of New York City’s student body– which is 41 percent Hispanic, 26 percent African-American, 16 percent Asian and 15 percent white – approximately 60 percent of New York City teachers are white.⁸

To address the problems associated with teacher turnover, the Comptroller’s Office recommends that the City and the Department of Education invest in teacher training through a **large-scale, paid teacher residency program that provides a full year of high-quality experiential training in classrooms prior to teacher certification**. When fully scaled, a teacher residency program would place 1,000 resident teachers in City schools each year, significantly improving the quality and stability of the teaching pipeline. A teacher residency program of this scale would represent the largest in the U.S. and send a signal that bold investment in education is required to support quality instruction in all classrooms.

Similar programs already exist in Boston, Denver, and Washington D.C., and several successful pilot programs in New York City serve as a model for the nation. In Boston, for example, teachers trained in the residency program have a 20 percent higher retention rate than graduates of traditional university preparation programs. The Urban Teacher Residency (UTR) pilot in New York City has shown much stronger retention in the Title I schools where it places residents. A recent evaluation found that UTR-trained teachers had lower attrition by half when compared to other New York City Department of Education high school teachers.⁹

Specifically, the Comptroller recommends that the City:

- **Establish a large-scale teacher residency** with capacity to eventually include all teachers currently in the New York City Teaching Fellows preparation program, in order to meet a high proportion of annual classroom staffing needs.
- **Follow best practices from model teacher residencies around the U.S. and globally that:**
 - **Ensure participants work under and alongside a single, accomplished mentor;**
 - Are a year-long commitment;
 - Provide a stipend to cover residents’ living expenses during the residency year;
 - Reflect a strong collaboration between the school district and institutions of higher education.

- **Leverage the partnership between DOE and institutions of higher education in the City to provide residents with reduced tuition.** Ideally, this means inviting leaders of higher education institutions early into the planning process to ensure their programs commit to supporting DOE through a strategy of school-based residencies.
- **Phase in implementation gradually**, so that the New York City Teaching Fellows program can continue to fill classroom vacancies quickly, while also training a subset of teachers through a year-long in-classroom apprenticeship under the mentorship of a highly qualified teacher. **The City could expect to regain some of the initial investment in a large-scale teacher residency program through cost savings from improved teacher retention.** Some costs could be repurposed as well, such as funding for substitute teaching or tutoring, as some instructional tasks are shifted to residents.
- **Focus on quality by ensuring that adequate time and funding are available** so that each school that hosts a cohort of residents would spend a year in a centrally-coordinated partnership development phase with the approved teacher preparation provider. This time would be spent identifying and planning recruitment needs, aligning curriculum with school and district needs, planning how to incorporate coursework into residents' classroom experience, and establishing a partnership that emphasizes continuous improvement.
- **Develop and support effective mentor teachers** so that they have the skills and resources necessary to fully integrate residents into the daily routines of their classrooms. For example, mentor teachers will need to be familiar with adult learning patterns and have the necessary tools to provide instructional coaching and effective feedback to residents. Mentors will need to be well aware of the sequence of coursework being completed by residents so it can be practiced appropriately in the classroom. Providing opportunities for mentoring can serve to expand the teacher leadership/career pathway program launched in New York City in 2013-14, which has been shown to help retain experienced teachers as well as improve their instructional practice.¹⁰

At full scale, the Comptroller's Office estimates that a large scale residency would have an annual cost of about \$40 million. This does not, however, take into account potential savings from redistributing some instructional tasks within schools where residents are placed, including substitute teaching, tutoring, or leading afterschool instructional activities. Such an important investment in a world-class professional teaching workforce can be expected to benefit students, teachers, schools, and the City we live in for generations to come.

With a robust teacher residency program, New York City can prepare teachers for the real challenges of working in schools while reducing teacher turnover and its associated costs. Most importantly, when teachers are well-prepared, students are more likely to succeed. In a City with such huge disparities across schools, having a consistent pipeline of highly qualified and well-prepared teachers will help bring equity to the largest school system in the nation.

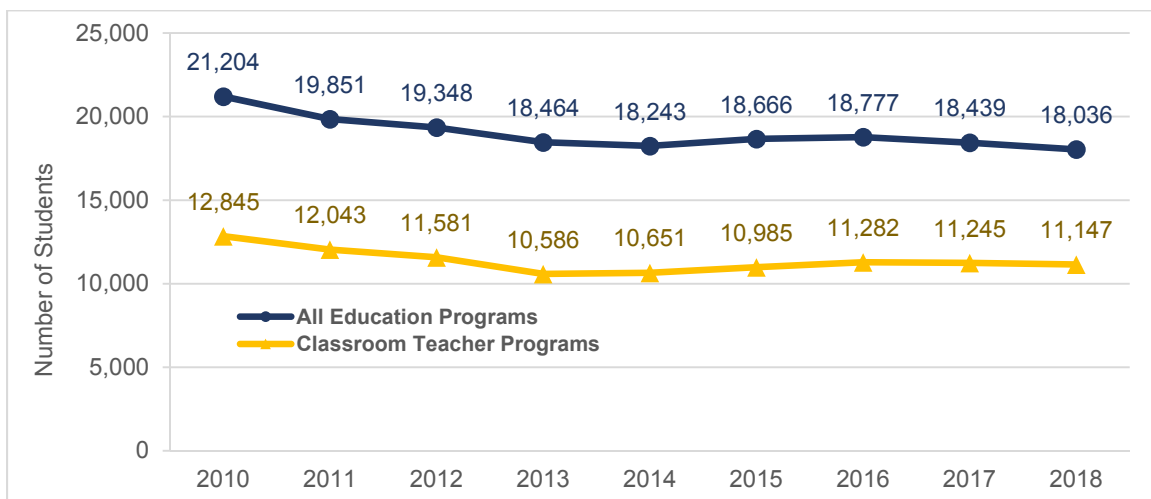


Introduction: Today's Teaching Profession

The teaching profession in the U.S. today is at a crossroads. Across the country, teachers have been laboring under stagnant wages and slashed budgets. At the same time, the need to attract talented teachers to the profession has never been greater. Research increasingly illustrates the positive role teachers play in driving academic gains, particularly for low-income students. A strong educator is the single most important in-school factor in improving academic outcomes for students, with deep implications in everything from literacy to college completion.¹¹

Despite the importance of the teaching profession to a vibrant society, fewer college students consider the teaching profession a viable career option. Recent analysis of U.S. Department of Education data by the Rockefeller Institute reveals that individuals completing teacher preparation programs in New York State dropped by 39 percent between 2010 and 2015. In the 2015-16 school year, 14,716 people completed teacher preparation in New York State, down from 24,135 in 2010.¹² These trends are mirrored within the City University of New York, with enrollment and completion of education programs on the decline. Total fall enrollment in classroom teacher programs at CUNY was 11,147 in 2018, down from 12,845 in 2010, a 13 percent decrease (see figure 1). Similarly, CUNY's training programs are also graduating fewer teachers, with 2,193 graduates in 2017, down from 3,198 in 2010.¹³

Figure 1: Total Fall Enrollment in CUNY Education Programs



Source: CUNY Institutional Research Database (IRDB)

Indeed, as American teachers increasingly head to state capitols to give voice to the inequitable pay and limited opportunities for professional advancement, it is little wonder that the profession struggles to attract newcomers.

The first and most obvious factor in this nationwide decline is that salaries that are significantly lower than for similarly educated professionals. A 2018 report from the Economic Policy Institute found that total wages and benefits for teachers have stagnated relative to other comparably educated workers, and in no state in the U.S. do teachers earn a wage that is comparable with other college graduates.¹⁴

In addition to low pay, the profession also lacks supportive working conditions to encourage teachers to thrive throughout their careers. Many early career teachers enter the profession driven by eagerness to make a positive difference in the lives of children and youth, but upon entering schools, are faced with challenges that can quickly erode their enthusiasm. Lack of support, overcrowded classrooms, facilities problems, need for basic supplies, or few opportunities for meaningful collaboration or decision-making are demoralizing for professionally trained, talented educators and can significantly impact a teacher's decision to leave the classroom.¹⁵ According to results from the national Teacher Follow-up Survey (TFS), the most frequently cited reason teachers quit after their first year on the job is dissatisfaction with working conditions.¹⁶ As with any profession, providing a clear career pathway and incentives to develop and improve ensures that the most talented are encouraged and rewarded for their efforts.

Given the declining interest in the teaching profession, it is crucial to target investments towards retaining those who make the choice to become teachers. Providing teacher candidates an affordable pathway to high-quality preparation is key to improving teacher retention. Researchers have found that teachers with little or no preparation leave at rates two to three times as high as those who have had comprehensive preparation.¹⁷ Nations with the highest student achievement ratings have aggressive career ladders for teachers, with school structures that expect – and support – teachers to perfect their teaching practice through formal mentoring and coaching. In these arrangements, mentor teachers work alongside pre-service and early-career teachers and benefit from increases in compensation, responsibility, and autonomy in their career. Early career teachers who are paired with a mentor gain both personal insight and constructive feedback from experienced teachers.¹⁸

Impacts of Teacher Turnover

High teacher turnover has a deep impact on municipal education budgets. According to research by the Learning Policy Institute, teacher turnover, particularly in dense, urban

districts, can cost a school district as much as \$20,000 per teacher.¹⁹ This includes the cost of recruiting new teachers, and providing on-boarding training and professional development. When a teacher leaves after one or two years, this investment is effectively lost and creates the need for ever-more recruitment, making it difficult for school systems to build a stable workforce.

Perhaps the deepest impact of high teacher turnover is felt by students, especially in schools with concentrated poverty where many students already face steep challenges to learning. A study published in 2013 observed academic outcomes of 850,000 New York City fourth and fifth grade students over eight years.²⁰ The study considered the average effect of teacher turnover on student achievement and found that in grades with the highest levels of turnover, students scored lower on standardized tests in both math and English language arts, with particularly strong effects on struggling students. Turnover was also found to have a deeply negative impact on other teachers who remained in a school. Diminished trust and eroded morale are prevalent in schools with high teacher turnover, important environmental factors that also contribute to student achievement.²¹

Teachers who work in high poverty districts are most at risk for leaving the profession before five years – nationwide, teachers in such schools with high concentrations of students of color have 70 percent higher turnover rates than average.²² These schools tend to be chronically under-resourced and are often difficult working environments that lead to high turnover. In some cases, such schools are geographically isolated making it difficult to recruit and retain a stable workforce. High need schools especially face a revolving door of new teachers, straining the ranks of established teachers who remain in the school and imperiling school improvement efforts. Teachers of color, who are in high demand in districts across the nation, disproportionately teach in such schools and have lower teacher retention rates than white teachers.²³

Retention, not Recruitment, to Blame

While enthusiasm for the teaching profession has suffered recently, teacher shortages facing many states and cities across the U.S. are not caused solely by failed recruitment efforts. Rather, high rates of teacher turnover are a much more significant, and costly, part of the equation. A 2017 report by the Learning Policy Institute (LPI) reviewed data from the National Center for Education Statistics Schools and Staffing Survey to understand which teachers are most prone to leaving the profession and why. The study found that teacher turnover rates are significantly higher in Title I schools serving predominantly low-income students, and schools that have large concentrations of students of color. Likewise, teachers who teach math, science, special education, and English language learners are more likely to leave their job than teachers of other subjects.²⁴ Of the teachers who leave

the profession, according to LPI, more than two-thirds leave for a reason other than retirement. On a global scale, teacher attrition rates in the U.S. are twice as high as in other nations with high performing education systems.²⁵

Some amount of turnover is expected in any industry and can have the positive effect of weeding out individuals who are poorly suited to the field. However, when attrition levels exceed standard hiring, it is often a sign that something is broken in the career pipeline. To make the most of human capital, industries typically work to build a strong pool of professionals with training that is purposefully aligned to industries' needs. In the medical profession, for example, medical schools are both highly selective and rigorous, ensuring top performers enter the field. Medical training requires in-depth experiential learning that is directly aligned to actual needs of the medical field – medical students serve as residents in a hospital or clinic for three to five years before completing their degree and becoming fully certified doctors. This deeply practical learning environment is essential for adequately preparing doctors for the challenges of the profession.

Unfortunately, within teacher training programs there is not always a similar alignment between educational theories and practices taught and the actual needs and working conditions in schools. While this is changing in some states and municipalities, the best examples of teacher preparation aligned to district educational goals can be found in other countries, namely the same high-performing educational systems that also boast low teacher attrition, including Finland, Singapore, and Shanghai. In these countries, teacher preparation programs require extended clinical classroom training that successfully bridges theory and practice.²⁶ When teachers' training adequately prepares them for the range of student needs they will encounter in the classroom – not just in theory, but through experiential practice – teachers are more effective from their first day on the job. Schools and students benefit because resources are not constantly needed to hire and train new teachers.



New York City: A System Marked by Churn

Constant Need for Classroom Teachers

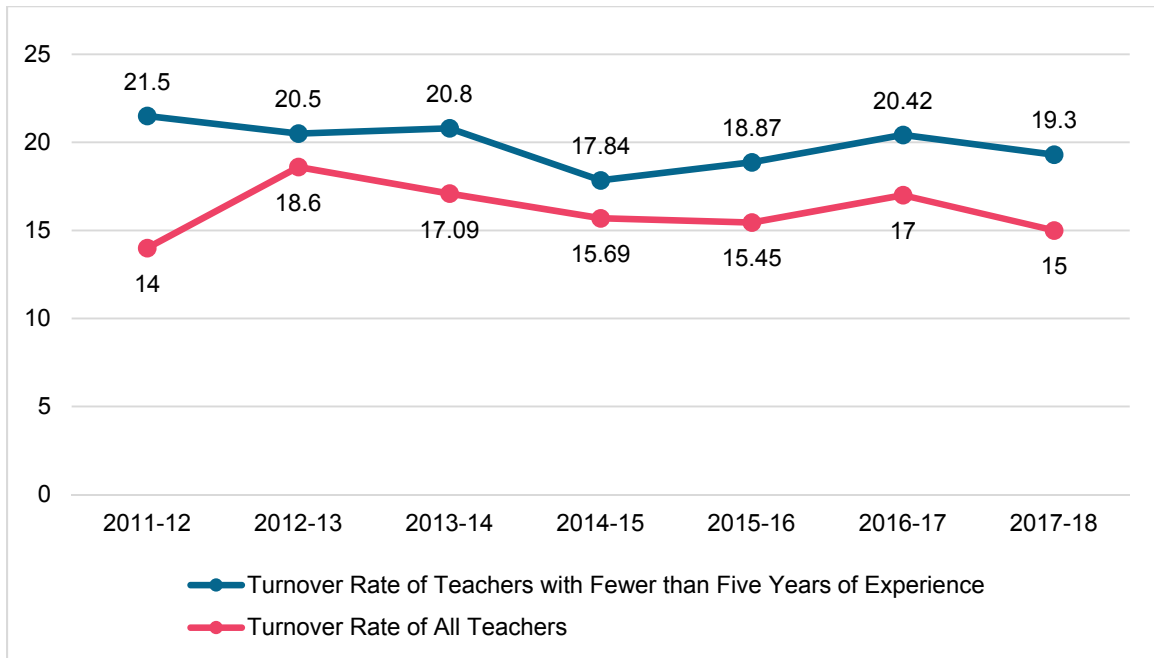
New York City's public schools employ over 78,000 teachers and are constantly in need of qualified teachers.²⁷ Despite rigorous and ongoing recruiting throughout the school year, turnover is high and teacher shortages persist, especially in certain schools or teaching areas. To fill these gaps, each year the Department of Education hires approximately 6,000 new teachers each school year.²⁸

Before describing the extent of the turnover problem in New York City, it is important to start with a note on the terminology used in this report. For our purposes, teacher attrition refers to employees who leave the profession entirely, whether through retirement, resignation, or termination. Turnover is more expansive and includes both those who leave the system for good, as well as teachers who may leave their classroom and move to either another teaching position in a different school, or a new position within school administration but remain on the DOE payroll. New York State metrics track average turnover of teachers, while City payroll data can provide a more detailed look at attrition. Findings from both of these data sources are used and discussed below.

Those who move within the profession or leave the classroom: turnover rates in NYC

The rate at which teachers left New York City schools or classrooms reached a troubling high in the 2012-13 school year when the teacher turnover rate was 18.6 percent of all teachers, and 20.5 percent of all new hires with less than five years of experience. Since that time, the rate of turnover has fluctuated in the City, and after several years of decline, in 2017-18, teacher turnover rates stood at about 15 percent for all teachers and 19 percent for teachers with fewer than five years of experience, as of the most recent data reported to the State Education Department (Figure 2).²⁹ For comparison, in Chicago approximately 20 percent of teachers leave their classrooms each year.³⁰

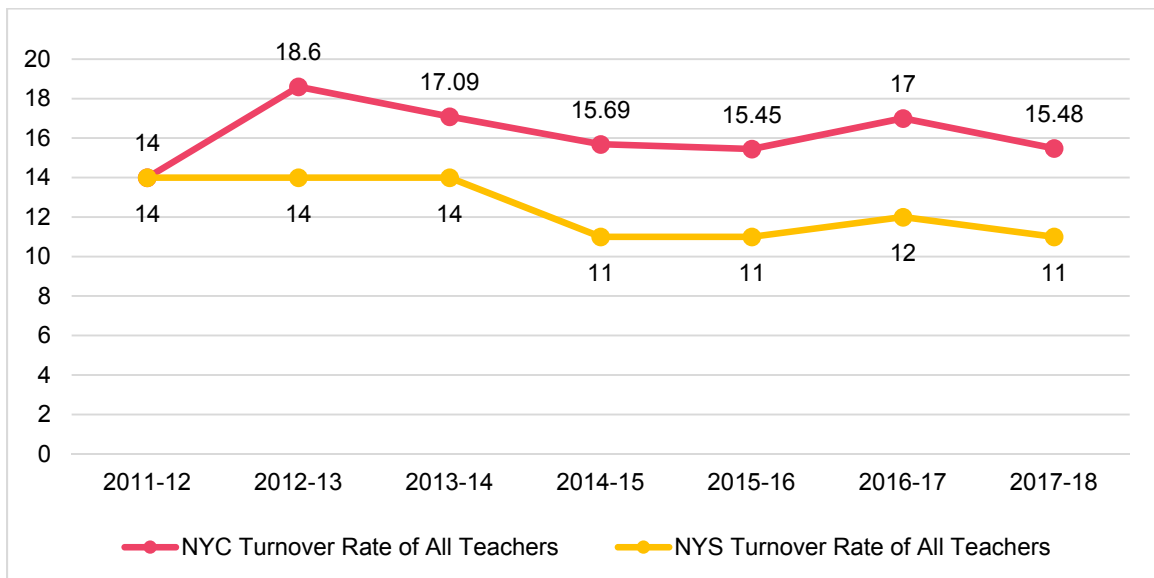
Figure 2: Teacher Turnover Rates - NYC



Source: Comptroller's Office analysis DOE metrics as reported in the New York State Department of Education Report Card Database

New York City has significantly higher teacher turnover than the statewide average, which in 2017-18 was about 11 percent (Figure 3). The national turnover rate is about 16 percent.³¹

Figure 3: Turnover Rate Among All Teachers, NYC vs. NYS

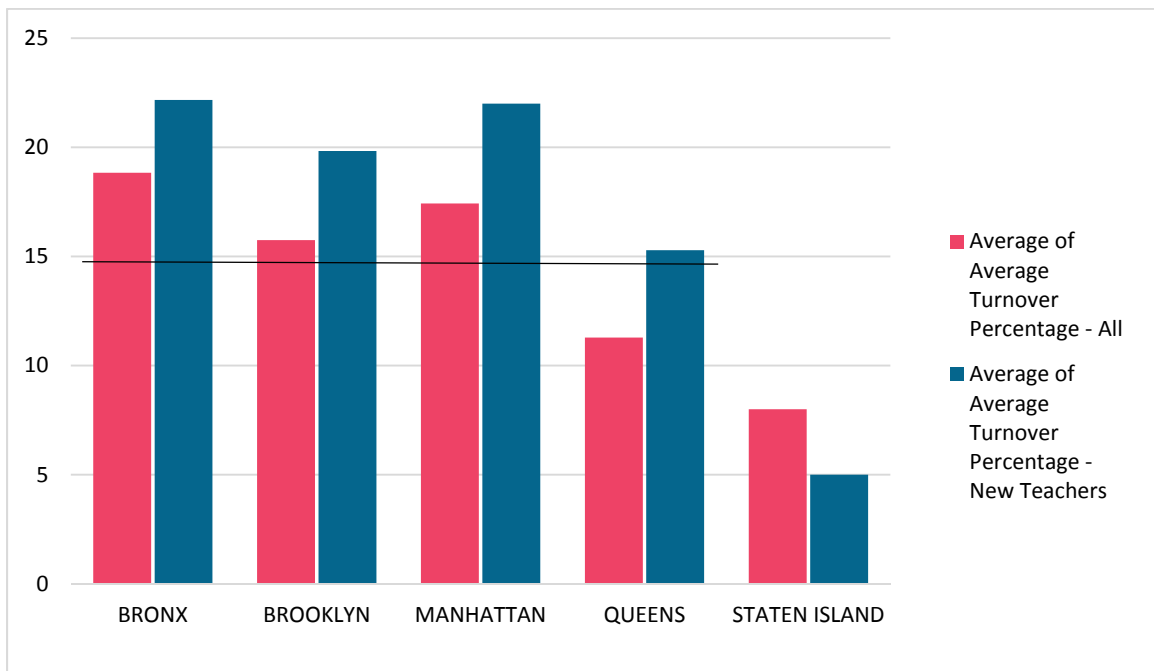


Source: Comptroller's Office analysis DOE metrics as reported in the New York State Department of Education Report Card Database.

As is the case nationwide, turnover rates in New York City vary greatly by academic areas, grade levels taught, location and other characteristics of the school. Schools with high concentrations of poverty and high-need students typically have the highest rates of teacher turnover. For example, among the City’s former Renewal Schools, a group of schools singled out as needing targeted resources to address low academic performance, turnover among teachers was 21 percent in the 2015-16 school year, higher than the city average.³²

Teacher turnover is also higher in certain areas of the City, which can be masked by citywide numbers. In the 2017-18 school year, Staten Island had a teacher turnover rate of just 8 percent. Meanwhile, average turnover in the Bronx was approximately 19 percent, and over 22 percent among teachers with fewer than five years of experience (Chart 1).

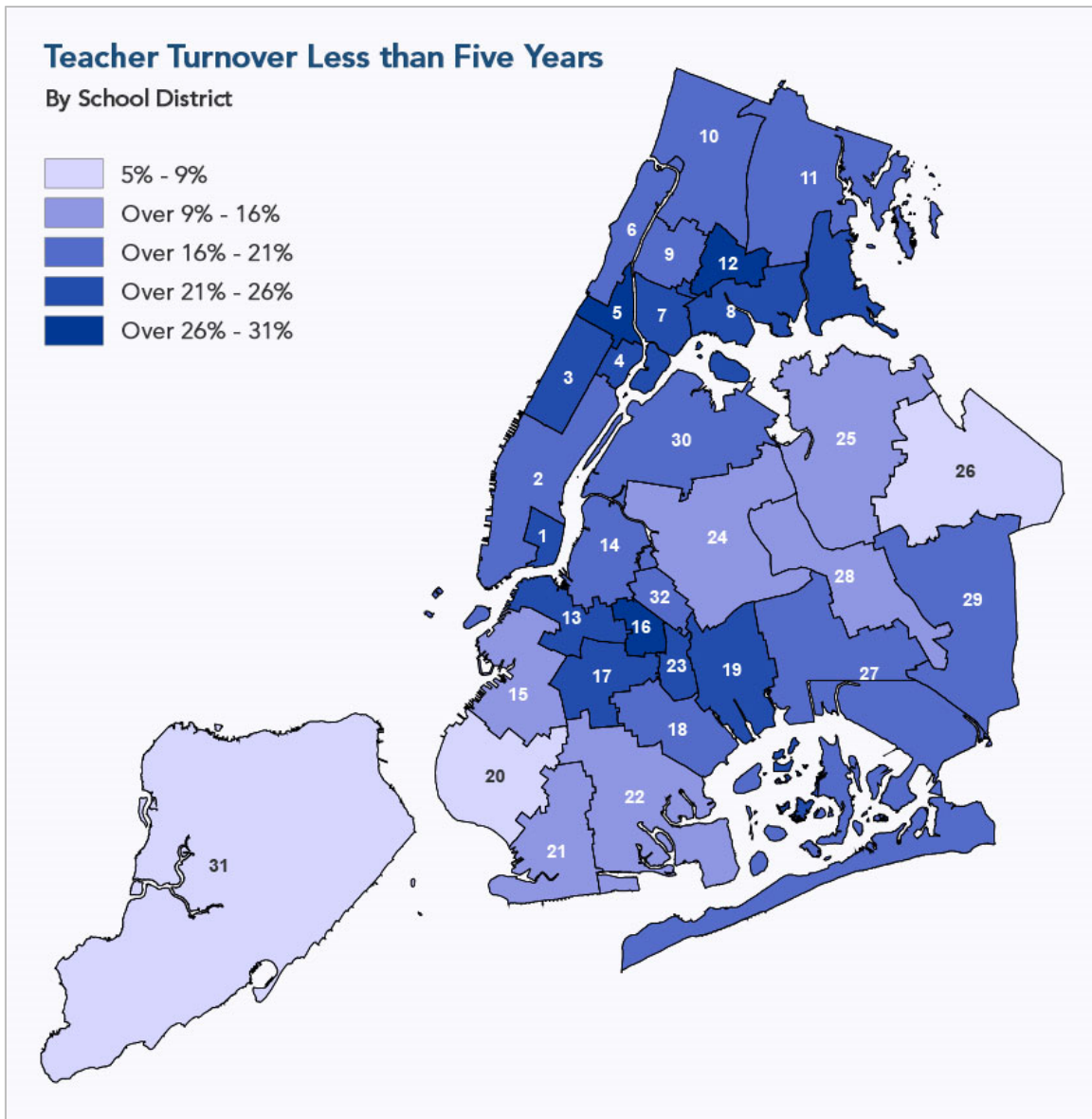
Chart 1: Average Teacher Turnover by Borough



Source: Comptroller’s Office analysis DOE metrics as reported in the New York State Department of Education Report Card Database.

Further distinction is found at the district level. Among new teachers in Community School District 5 in Manhattan, turnover was 29 percent compared with the average turnover of 22 percent for new teachers in the borough, or 18 percent among new teachers in neighboring district two. District 12 in the Bronx had an average turnover rate of 26 percent among all teachers, and 31 percent among new teachers, significantly higher than statewide averages.

New Teacher Turnover Across NYC Community School Districts



Source: New York State Education Department, Report Card data, 2017-18

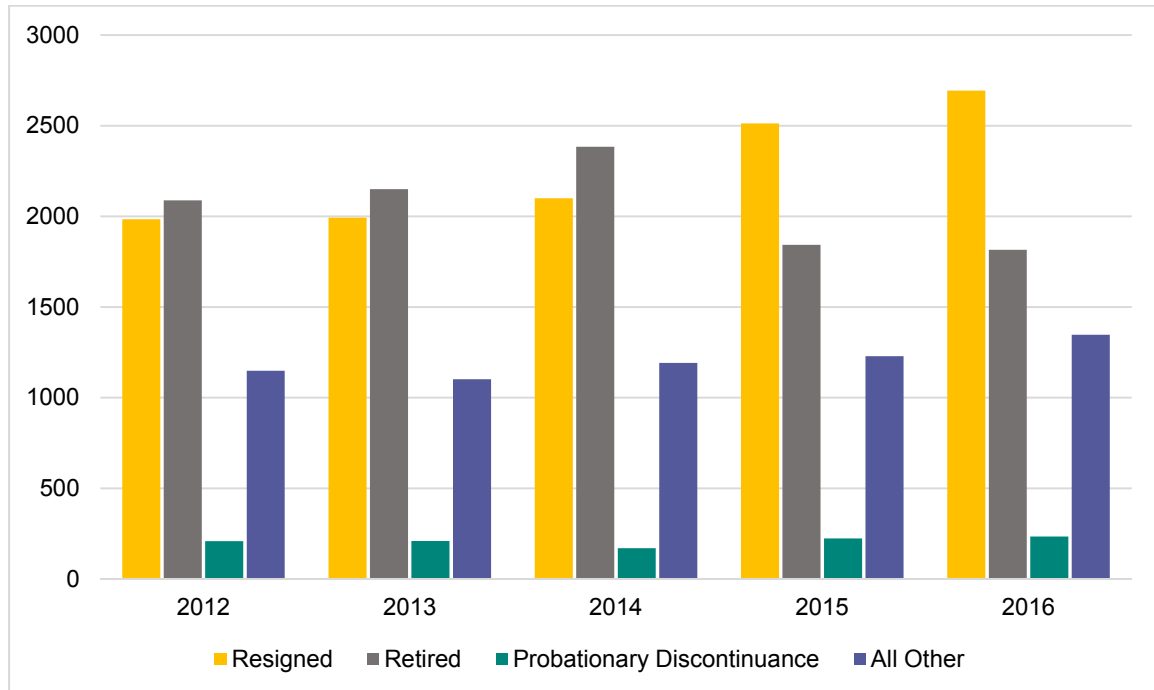
Those who leave: attrition rates in New York City

Citywide, about seven percent of teachers left the system between September 2017 and September 2018, similar to the nationwide attrition rate of about eight percent. The City's attrition rate has for the most part remained constant, over seven percent and under eight percent, for the past decade.³³

Of all the teachers who leave the Department of Education each year, more resign than retire or are terminated (Chart 2). Using data collected by the United Federation of Teachers, in 2016, 2,694 teachers resigned, more than the combined total of those who

retired (1,816) or were terminated (234). Teachers who resign may be leaving the profession altogether, or leaving employment by the City Department of Education for another agency or jurisdiction.

Chart 2: NYC Teacher Retirements, Resignations, Terminations



Source: Comptroller's Office analysis DOE payroll data collected by the UFT.

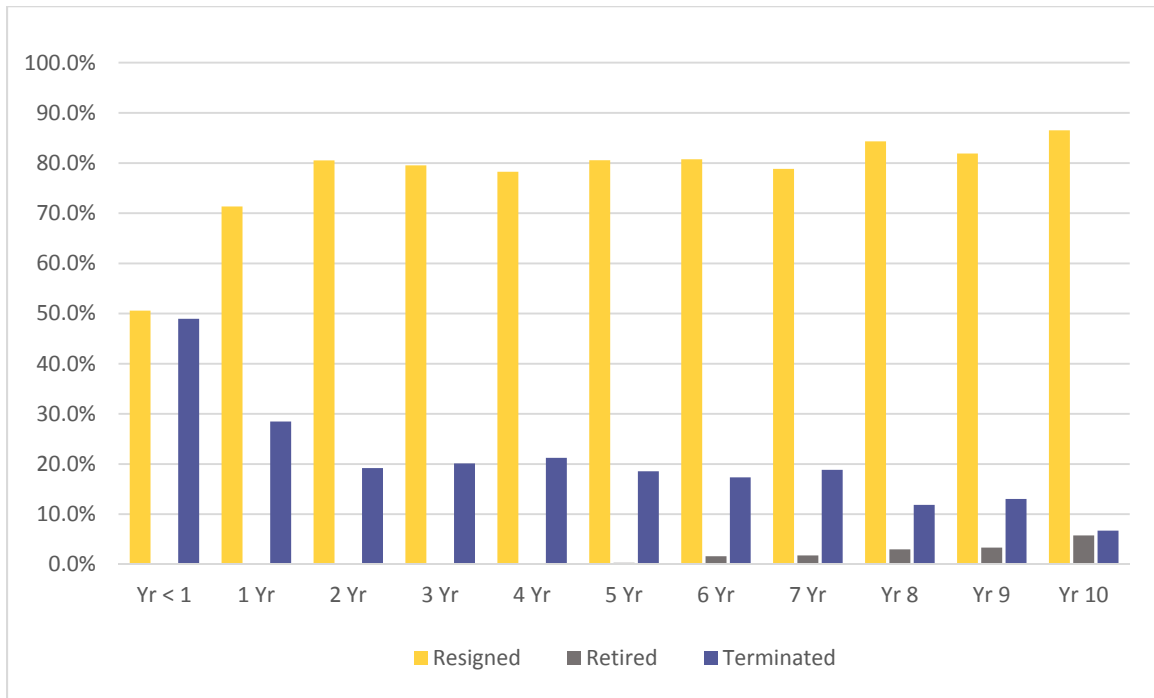
To better understand the scope of the City's difficulty retaining newly hired teachers, the Comptroller's office analyzed payroll data of cohorts of teachers, hired by DOE in the last ten years.³⁴ The analysis tracked the percentage of each cohort that left the DOE each year over five years, to arrive at a cumulative average of the percentage of a cohort that left the system within five years. DOE data show that over the past 10 years, more than 40 percent of teachers leave teaching within their first five years (Table 1). Specifically, of the 4,600 teachers hired in the 2012-13 school year, nearly 41 percent, or 1,882 teachers, had left the system by 2017-18.

Table 1: Loss of Pedagogues by Cohort, 2007-2017

Year Hired	Yr < 1	1 Yr	2 Yr	3 Yr	4 Yr	5 Yr	5 -year Cumulative Loss
2007 - 2008	2.8%	6.2%	10.4%	8.6%	6.5%	4.9%	39.3%
2008 - 2009	2.2%	8.6%	10.7%	8.0%	7.3%	5.5%	42.4%
2009 - 2010	3.3%	9.8%	8.9%	6.4%	5.5%	5.7%	39.6%
2010 - 2011	5.2%	10.3%	8.3%	6.8%	6.8%	5.8%	43.2%
2011 - 2012	3.5%	10.6%	9.1%	8.5%	7.1%	5.5%	44.3%
2012 - 2013	2.7%	8.9%	9.4%	8.4%	6.7%	4.8%	40.9%
2013 - 2014	3.8%	9.5%	8.4%	6.6%	5.3%		-
2014 - 2015	2.1%	11.4%	9.1%	6.8%			-
2015 - 2016	2.8%	12.0%	8.2%				-
2016 - 2017	2.9%	12.3%					-
2017 - 2018	2.2%						-
Average	3.0%	10.0%	9.2%	7.5%	6.4%	5.4%	
Cum Avg	3.0%	13.0%	22.2%	29.7%	36.1%	41.5%	

For the purpose of better understanding teacher retention, isolating the long-term employment trends among early career teachers is helpful. Based on averages since the 2007-08 school year, of teachers who leave the system within the first year of teaching, about half are due to resignations. After a year of teaching, however, resignations begin to steadily increase to account for 71 percent of departures after one year of teaching, and about 80 percent of all departures after two years of teaching (Chart 3). Resignations are by far the most common reason for early career teachers leaving, with terminations steadily declining to less than seven percent of all departures at a teacher’s tenth year of service.

Chart 3: Reason for departures by years of service, 2007 - 2017

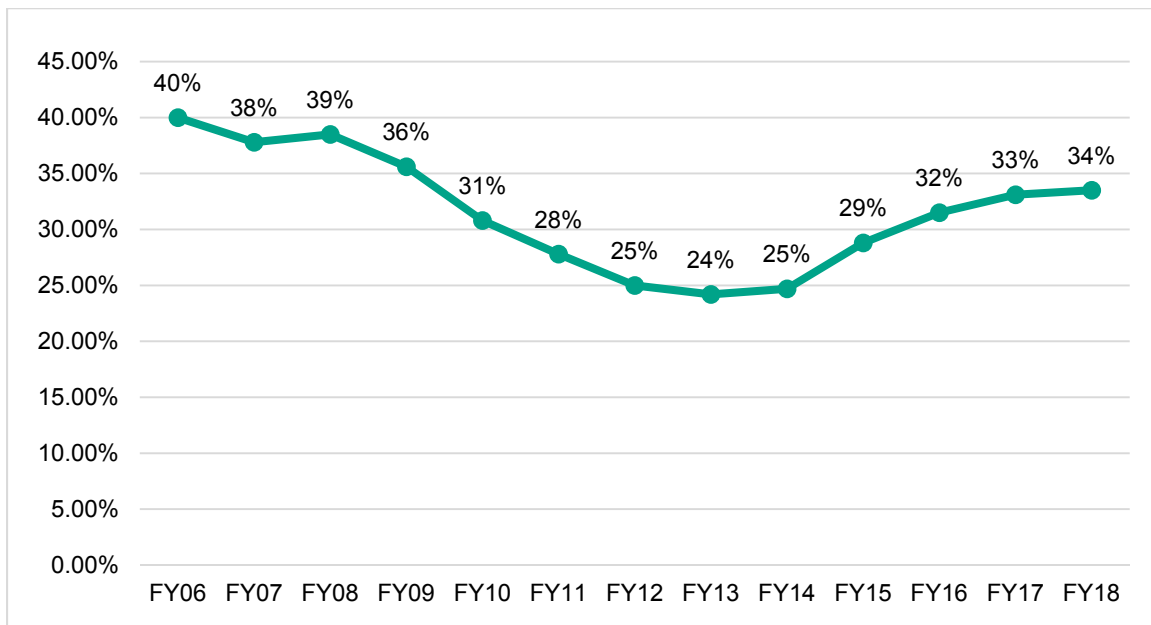


Source: Comptroller's Office analysis DOE payroll data reported in the New York Citywide Human Resource Management System. Data current as of April 2019.

Where New Teachers Work

In 2018, about a third of teachers Citywide had fewer than five years of teaching experience, according to reports in the annual Mayor’s Management Report. As shown in Chart 4 below, after a period of decline, the percentage of novice teachers in the system has been increasing steadily over the past five years. In FY 2006, 40 percent of all teachers had fewer than five years of experience. Over the next eight years, this percentage declined 40 percent to 24 percent in FY 2013, before increasing again to 33 percent in FY 2018.

Chart 4: Percent of teachers with fewer than 5 years of experience

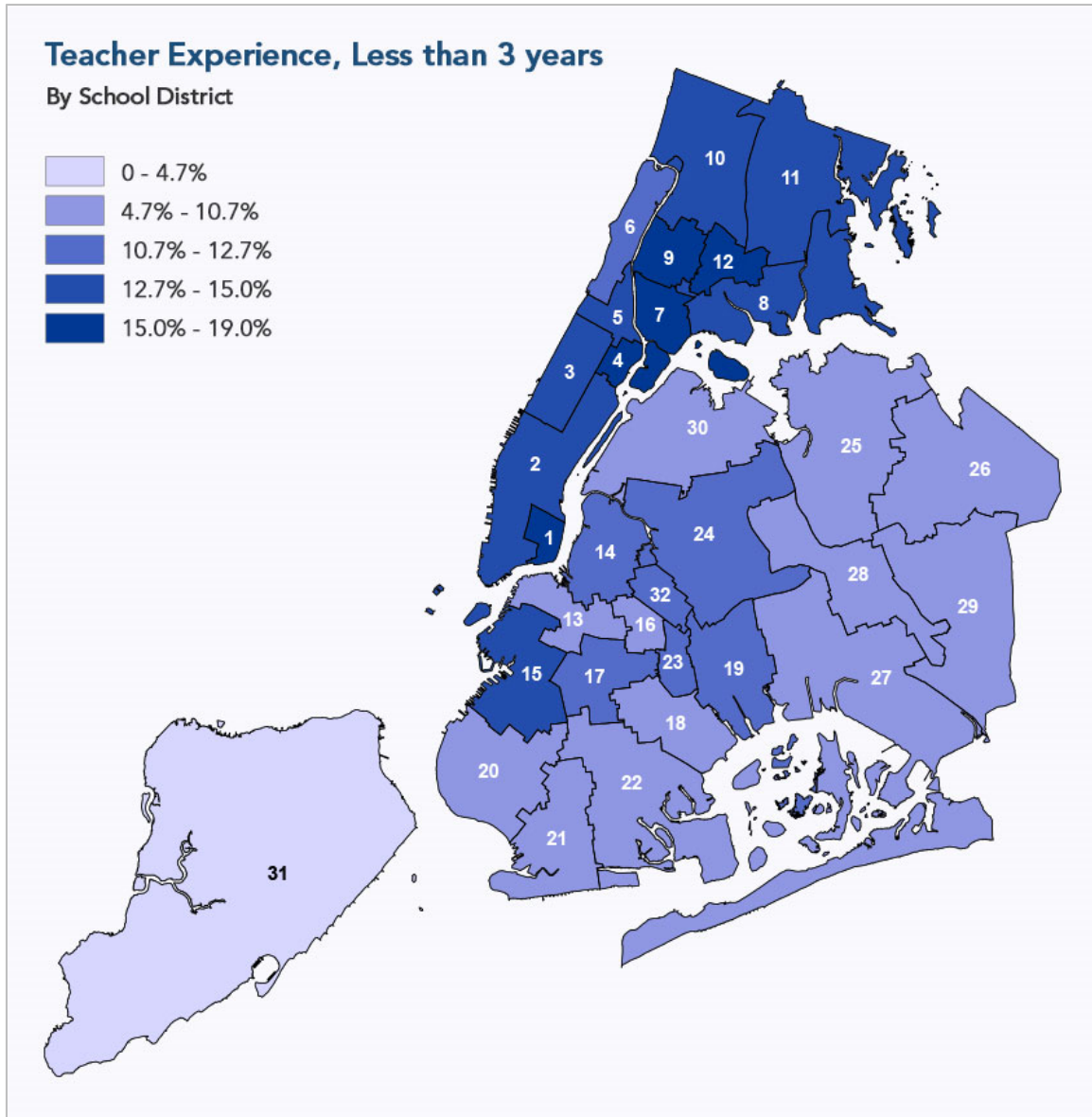


Source: NYC Comptroller's analysis of Mayor's Management Reports, FY06-FY18.

A different dataset, provided to the New York State Education Department and reported in the State Report Card Database, provides the percentages of teachers with fewer than three years of experience by local community school district. Certain districts have much higher percentages of the newest teachers. Teachers with fewer than three years of experience account for more than 16 percent of all teachers in Community School Districts 7, 9 and 12 in the Bronx and Districts 1 and 4 in Manhattan (see map below).³⁵

It is important to reiterate that novice teachers are, on average, less effective than teachers with more experience.³⁶ Additionally, turnover among early career teachers adds additional, hidden costs in New York City schools. Hard-to-staff schools that experience a constant churn of novice teachers are caught in a vicious cycle where school improvement plans become much harder to realize, in part because teaching staff is continually changing, further contributing to systemic inequities across the district. It is critically important, then, to ensure that the City seeks ways to incentivize equitable distribution of experienced teachers, and to ensure that students in high-need schools are not routinely exposed to the most inexperienced teachers who are also most likely to leave.

Percentage of teachers with fewer than three years of experience, by district



Source: New York State Education Department, Report Card Database, Map shows three years average, 2015-2017

Teacher shortage areas in NYC

Despite continual recruitment and hiring, New York City still has considerable teacher staffing needs. The U.S. Department of Education documents teacher shortage areas by state and district, and publishes the findings annually to assist recruitment efforts and individual teachers who are seeking available job opportunities. According to the most recent reported shortage areas, from the current 2018-19 school year, New York City has teacher shortages in fifteen subject areas, including: Math, Science, English as a Second Language, Art and Music Education, World Languages, Support Staff, Special Education, Language Arts, Health and Physical Fitness.

Teacher shortages in any subject area are concerning. However, in the case of instruction for multilingual learners (MLLs), these shortages also represent the City’s lack of compliance with State regulations. Recently adopted regulations require that multilingual Learners are provided “opportunities to achieve the same educational goals and standards that have been established by the Board of Regents for all students.” To accomplish this, the regulation mandates staffing levels, and requires units of study for MLL students at varying proficiency levels. Integrated English as a New Language instruction (ENL), now mandated for MLL instruction, requires more teachers certified in English for Speakers of Other Languages (ESOL).³⁷ With over 160,000 multilingual learners enrolled in New York City schools, recruiting and retaining well-qualified teachers who can support this population is crucial to academic progress for these students, in accordance with state regulations.³⁸

New York City schools lack teachers of color

The importance of a racially diverse teaching force that reflects the demographics of the student body is an issue that has gained renewed attention in New York and across the nation. Education researchers have examined the benefits that teachers of color bring to classrooms, particularly their varied perspectives on subject material, as well as the value of the interpersonal connections with students of color.³⁹

In New York City, roughly 60 percent of the teaching force is white, while less than 15 percent of the student body is.⁴⁰ Recognizing the importance of and need to hire a more diverse workforce, in 2016 the de Blasio administration launched the NYC Men Teach initiative, which focused on recruiting men of color to join the teaching profession. The initiative had an original goal of placing 1,000 men of color in City classrooms by December 2018. According to the FY18 Mayor’s Management Report, the program has placed approximately 400 full-time teachers in New York City classrooms, with another 542 participants enrolled in teacher training programs through CUNY.

Nationwide, targeted recruitment efforts have resulted in exceptional growth of the number of teachers of color in classrooms, more than three times the growth rate of white teachers.⁴¹ The success of recruitment, however, has been overshadowed by the high turnover experienced by teachers of color nationwide; in the 2012-13 school year, retention among teachers of color was 8 percent lower than for white teachers.⁴²

High turnover among teachers of color is driven by several factors. As noted above, teachers of color more often teach in urban schools with high concentrations of poverty which also have higher teacher attrition. Additionally, teachers of color also more often

enter the career through an alternative teacher certification programs, which typically have higher turnover rates (as will be discussed below).⁴³

In New York City, the NYC Men Teach program shows promise for placing more male teachers of color in classrooms. However, to protect this progress, New York City must work to ensure that all teachers are well prepared before entering the classroom and are receiving necessary supports and mentorship to ensure long-term success.



Alternative Certification Programs

Quality teacher preparation

Investing in the preparation of teachers and supporting them in the early years of their careers has long-term benefits for the entire education system. Teachers who are better prepared to address the special circumstances and academic needs of their students are not blindsided by the very real challenges facing many schools, particularly those with high concentrations of low-income students. As evidenced by numerous teacher surveys, however, many teachers do not feel their training fully prepares them for actual needs in their classrooms. A recent survey of New York City teachers found that less than 30 percent felt that they were “very well prepared” to provide instruction after their graduation.⁴⁴ Roughly a quarter of teachers surveyed responded that their training left them very well prepared to work with unique learners, including English language learners or students with special needs. A separate analysis of national teacher survey data found that teachers who felt inadequately prepared also responded that they were more likely to leave their teaching assignment within the year.⁴⁵

On the other hand, when teacher candidates spend significant quality time in the classroom under the mentorship of a strong, experienced teacher-mentor as part of their preparation and prior to managing their own classroom, turnover is cut by as much as half.⁴⁶ Unfortunately, there is significant variation in the quality and opportunities for experiential learning offered across teacher preparation programs.

Traditional Programs

The traditional, university-based teacher preparation model does often require a few months of student teaching, typically built into the program’s credited coursework. Under this model, the teacher candidate pays for this professional experience through tuition, and is uncompensated for contributions they make to the school as a student teacher. Student teachers deserve to be paid for the work they do in classrooms – an inequity that is often overlooked. Many university-based programs are unaffordable for students with limited means, or unattractive for potential teachers who are unwilling to accumulate debt during their training. Such an arrangement presents a significant deterrent for attracting a pool of high-quality candidates from diverse racial and socioeconomic backgrounds.⁴⁷

Alternative Programs

Alternative pathways to certification follow a model separate from traditional university programs. These programs typically incentivize recruitment into the teaching profession by offering reduced tuition and an accelerated timeline for training. By quickly preparing teacher candidates before placing them in the classroom as the lead teacher of record, these training programs may offer as little as two weeks of experiential training.

The Residency Model: A Proven Path

The residency model shows real promise for providing preparation that is closely aligned to actual needs in classrooms, while also improving teacher retention. Seen as a best practice in the highest performing educational systems around the world, teacher residencies have begun to take root across the U.S., with small pilots in cities including Boston, and Denver, as well as several in New York City. No residency program, however, operates on a scale that fully meets all district hiring needs.

As residents, teacher candidates spend a full year working in a classroom alongside an expert teacher who serves as a coach, mentor and guide and receiving feedback on their teaching practice. Once a resident becomes the lead teacher, usually in the second year of the residency program, they often continue to receive support and feedback. Similar in some ways to clinical medical residencies, teaching residencies give new teachers exposure to a range of academic or behavioral challenges in classrooms. With residents working under the direction of a seasoned professional, common classroom challenges become rich learning opportunities. And because a resident teacher functions as a co-teacher, schools benefit from a relatively inexpensive method to effectively reduce class-size.

NYC's Current Alternative Preparation Programs

In response to the constant demand for classroom teachers, New York City has invested in several alternative teacher certification programs that quickly train and place teachers into schools, filling either hard-to-staff classrooms, or high-need subject areas. Some of these programs focus on fast-track teacher preparation, typically by enrolling teacher candidates in intensive summer coursework and then, by the start of the school year, participants are hired full-time by the Department of Education and begin working as the main teacher of record in a hard-to-staff classroom while completing coursework in the evenings. Little to no classroom experience is provided prior to program participants becoming full-time teachers.

The advantages of alternative teacher certification cannot be overlooked. With the focus on rapid preparation, these programs fill a need for recruitment in schools with chronic

teacher vacancies. By offering free or reduced tuition, alternative certification programs make it much more affordable to obtain a teaching degree, opening access to the teaching profession to a wider and more diverse pool of candidates who might not have otherwise considered becoming a teacher. For example, both NYC Teaching Fellows and Teach for America (TFA) are highly selective programs that recruit talented professionals into New York City schools while removing financial barriers to achieving an education degree. TFA offers grant funds as well as transitional loans and food or housing support to new recruits, prior to their earning their first paycheck. TFA also prioritizes recruiting a diverse pipeline of teachers: in New York City, 62 percent of the 2016 cohort were people of color, 53 percent came from a low-income background, and 8 percent identified as LGBTQ. This is similar to the 2016 cohort from the NYC Teaching Fellows, which reported 66 percent of participants who self-identify as a person of color.⁴⁸

Because program participants teach full-time, earning a full salary and benefits while completing their degree requirements, there is less need to take on student loan debt. And though burn-out is certainly an open concern, alternative preparation programs are fast-paced and intensive by design, attracting a select pool of high achievers.

On the other hand, teachers who enter the profession through these alternative pathways are less likely to remain in their schools or in the profession.⁴⁹ A 2017 analysis by the New York City Independent Budget Office (NYCIBO) of teacher retention rates by various teacher preparation programs shows the extent of variation in teacher retention between various pathways into teaching. According to the NYCIBO’s analysis, about 78.5 percent of new teachers who enter the profession through the city’s Teaching Fellows program remained at their original school after the first year, just slightly less than those who enter through a traditional pathway (80.7 percent). But by the third year, just 41 percent of teachers trained through the Teaching Fellows remained at their original school, compared with 60 percent of traditionally-trained teachers.⁵⁰



	Total cohort	Percent who remained at original school after 1 year	Percent who remained at original school after 3 years
NYC Teaching Fellows	2,536	78.5%	41.1%
TeachNYC Select	428	74.2%	51.6%
Teach for America*	244	84.3%	23.9% *
Traditional Pathway	134	80.7%	60.3%

Source: NYCIBO: New York City Public School Indicators: Teachers: Demographics, Work History, Training and Characteristics of Their Schools. June 2017.

The goal of many alternative certification programs, including the NYC Teaching Fellows program, is to recruit teachers into hard-to-staff schools. By design, these programs place

participants in challenging school settings, often those with high concentrations of poverty, and high teacher turnover. Based on the same IBO analysis, 36 percent of NYC Teaching Fellows, and 54 percent of Teach for America teachers were working in high poverty schools in 2014-15, compared with 24 percent of teachers who had gained certification through a traditional university pathway.

The high turnover among teachers trained in the City’s alternative certification programs suggests that such fast-track preparation lacks fundamental elements necessary for fully preparing teachers, particularly those who will be working with populations of high needs students or in otherwise challenging conditions. Experiential learning – prior to working solo in the classroom – is largely absent from the largest alternative certification programs, despite the value it adds to teacher preparation and its proven contribution in encouraging new educators to enter the profession. Without intending it, these certification programs may actually add cost through increased teacher turnover rates in already high-need schools.

	<p>Recognizing the need for and value of in-classroom preparation for teachers, New York City has been piloting the New York City Teaching Collaborative, which provides a four-month apprenticeship for program participants. While the program doesn’t fully match the profile of a full residency program, participants spend a full semester working in a high-need classroom as partner teachers alongside an experienced teacher who functions as an instructional coach. Participants receive a stipend during the apprenticeship and are provided with feedback and evaluated for effectiveness. Following the apprenticeship, teacher candidates are placed in the classroom. To date, DOE has not published outcomes on retention of teachers trained in this program.</p>
	<p>NYC Teaching Fellows. Since 2000, the New York City Teaching Fellows program has recruited and trained new teachers in a highly selective and rigorous program. According to DOE estimates, over 12 percent of today’s teaching force in New York City, including 22 percent of all special education teachers, are alumni of the NYC Teaching Fellows program.⁵¹ The program was run by The New Teacher Project until DOE announced in 2017 that it would begin managing the program in-house. The FY2019 budget for the New York City Teaching Fellows program was just over \$22 million.⁵² Fellows in the program attend evening classes towards work on their master’s degree in education while serving as a full-time classroom teacher in a high need public school. The Department of Education partially subsidizes the cost of earning the master’s degree at a partner institution, and participants must commit to teaching throughout their degree program.</p>

Models of Success

As local districts increasingly seek policy solutions to the problems of teacher turnover, more attention has been given to teacher preparation programs. Some alternative preparation programs in other cities, and several here in New York City, provide a model for embedding in-classroom experiences into teacher training through extended residencies. Each of these share several common features, as well as offer interesting elements of program design to address a district's unique circumstances. Importantly, however, there are no examples of residencies in the U.S. that meet a significant portion of annual district hiring needs.

Boston

Boston has the oldest teacher residency program in the nation, in operation since 2002. It has also set the standard in many ways for residency programs that have followed in other cities, in how programs are shaped and sustained. Since its beginning, Boston Teacher Residency has graduated over 600 teachers, with over 70 percent remaining in the Boston Public Schools through their sixth year. This compares with a 51 percent retention rate among graduates from traditional university preparation programs.⁵³

The Boston Teacher Residency is a partnership between the Boston Public Schools (BPS) and the Boston Plan for Excellence (BPE), a local education fund that collaborates closely with BPS on the projects it finances. Through this partnership structure, BPE houses the residency programs and shares program costs and decision-making with BPS. BTR is partnered with UMass Boston which provides accreditation for courses towards residents' Master's degree. However, all courses are designed and taught by faculty of BTR. This unique oversight gives BTR considerable latitude in hiring instructors and developing and refining course content.

What makes the arrangement between the Boston Teacher Residency and UMass Boston exceptional and unique is the flexibility allotted to BTR to define the curriculum, evaluate how well it is aligned with the needs in schools and then make necessary adjustments.

In 2012, an independent academic review of the Boston Teacher Residency shed light on how the program has impacted both the pipeline of teachers in Boston Public Schools, as well as student achievement. The researchers found that the Residency program was able to attract a much more racially diverse pool of graduates than the first year BPS teaching

cohort as a whole. And the positive impact on the teaching pipeline was clear: BTR grads were much more likely to teach in STEM fields, and to remain teaching through their fifth year. In terms of impact on student outcomes, however, the results are less clear. While BTR teachers were not more effective in raising student test scores in math or ELA than other first year teachers, by their fifth year teaching, BTR graduates outperform other veteran teachers in math outcomes.⁵⁴

Denver

The Denver Teacher Residency (DTR) program has been uniquely focused on investing in and transforming the human capital within Denver’s public school system. The program began ten years ago, shortly after the teachers union ratified a plan to offer teachers a pay differential based on a school’s location or a teacher’s specific role within a school, as well as performance-based compensation for teachers. This paved the way for the district to recognize excellent teacher quality as being fundamental to school improvement efforts, and Denver Public Schools began to seek opportunities to invest in and cultivate a stronger pipeline of talented teaching professionals.

The result became the Denver Teacher Residency, a pilot program embedded in the school district, and implemented in partnership with the University of Denver Morgridge College of Education. The DTR was never sufficiently large to meet all of the district’s hiring needs; at its peak it graduated about 65 teachers each year, compared with annual district hiring of over 900 teachers. But the valuable lessons learned over the past decade have caused the district to now prioritize residential teacher training for a majority of its teachers. The pilot program in Denver is now transitioning as the district moves to bring the successes of the residency program to scale.

From the beginning, DTR sought to make strategic investments in the people who work most closely with students and are the most influential in improving student outcomes: teachers. Many districts often overlook the importance of developing human capital in favor of other resources, such as curriculum or standards-aligned metrics. Instead, Denver Public Schools chose to prioritize developing the capacity of the teaching workforce to provide excellent instruction in all school populations, and to hone school leaders who are able to create school communities that foster excellent instruction. As a result, the system created exceptional learning environments and built pathways both for new teachers, as well as training and professional development of teacher mentors.

A recent report that summarized some of the successes of the program:

“Over time, DTR became so much more than a hiring pipeline as it worked to shift school cultures, grow teacher leaders by elevating high-performing staff into pre-service mentors, and create rich and collaborative teaching and learning environments.”⁵⁵

Denver Public Schools has indicated that it is now seeking ways to scale the program in such a way that the majority of new teachers entering DPS will have completed training in a residency program. This vision will begin, as the original residency did, with partnerships with institutions of higher education – in this case, with eleven colleges and teacher preparation programs. Building on the strong foundation of the DTR pilot, Denver is leading the way in building a strong and diverse pipeline of highly qualified, equity-minded teachers across all of Denver Public Schools.

Pilots in New York City

Several smaller teacher residency pilots already exist in New York City and offer a glimpse of the potential for institutional partners that exist among the City’s rich higher education resources. These programs all feature similar components including paid living expenses for residents, pairing residents with a mentor teacher, and providing a full year of experience working in a New York City public school classroom. However, existing programs do not come near to producing the number of teachers the City needs to fill classrooms each year, necessitating ongoing reliance on the Teaching Fellows. One example of a successful residency is detailed below, but it should be noted that the City has been exploring several alternative pathways to teaching that offer more robust in-classroom opportunities.

New Visions for Public Schools Urban Teacher Residency

In 2008, New York City-based education non-profit New Visions for Public Schools launched an innovative residency program designed with the intent to ensure teachers received an immersive clinical experience during their training. The program design emphasized giving teacher candidates in-classroom experience where they would be exposed to a range of student abilities, and given the tools, mentorship, and coaching to practice making decisions about appropriate academic supports and interventions.

The Urban Teacher Residency (UTR) began as a partnership between CUNY Hunter College, New Visions, and the City’s Department of Education. It has since expanded and

now runs a similar but separate program in partnership with CUNY Queens College. As of 2018, the UTR has graduated over 250 high school teachers with a focus in special education, teaching English to speakers of other languages, math, science or English. In a highly structured two-year program, participants earn their Masters of Education from Hunter or Queens College, and use a curriculum developed in collaboration with professionals from New Visions. In the first year of the program, participants are paired with a mentor teacher and spend a full year working as a resident teacher in a high-need high school. Participants enrolled through Hunter College are placed in one of New Visions' charter network high schools while Queens College participants are placed in a New York City district high school.⁵⁶

District high schools that serve as host sites for residents are carefully selected based on several characteristics. Participating schools must receive Title I funding, to ensure residents are trained in an environment where student poverty is common. In addition, schools must not screen students as part of the admission process, to ensure a broad spectrum of skills and abilities are represented in the student population. Participating schools must also have enough well-developed functions of teacher collaboration in place – such as teacher team meetings, or collaborative student evaluation sessions – to expose residents to a range of possibilities within teaching. Importantly, host schools must be able to commit to paying the resident's stipend during their first year. This allocation of \$25,000 comes out of the principal's school budget.

During the year of residency, residents have numerous opportunities to hone their instructional practice in the classroom, under the direction of the lead classroom teacher who serves as a mentor. Residents co-teach at least one class with the mentor teacher each day, and teach one class as the lead teacher, with support and feedback from the mentor. Mentor teachers are carefully selected and given additional compensation to reflect the new leadership responsibilities they've assumed. For the resident, tuition at Queens College is deferred until completing the program, at which time candidates repay about half the cost of the Master's degree to NYC DOE through paycheck reductions spread over two years. Following the year of residency, teacher candidates are hired as full-time teachers in a high-need school in New York City while completing the necessary coursework towards their degree.

A recent independent evaluation of the Urban Teacher Residency has confirmed the program's positive impact in three key areas.⁵⁷ First, the evaluation found that students of UTR-trained teachers performed as well or better than peers taught by teachers trained in other programs. Positive impacts were even more pronounced in math and science, and among students of color. Second, UTR teachers had higher retention in Title I schools with large concentration of students of color where teacher turnover tends to be the highest.

Approximately 15 percent of UTR-trained teachers left teaching within three years, compared with 34 percent of other new teachers working in comparable Title I schools in New York City. Third, the evaluation found that the Urban Teacher Residency was highly effective in recruiting, mentoring and coaching teachers of color, with close to 60 percent of the most recent graduates being teachers of color.

Teaching Residents at Teachers College (TR@TC)

Another successful collaboration between the City and higher education can be seen at Columbia University's Teachers College. Teaching Residents at Teachers College (TR@TC) is a robust teaching residency that prepares participants through a year-long, paid residency. As of 2017, the program reported retention rates of 94 percent among program graduates.⁵⁸ Residents are paired with mentor teachers as well as a residency supervisor, who consistently observes the resident and offers guidance and reflection on progress. Mentors are provided a stipend and considerable scholarship to attend Columbia's Teachers College as well as health insurance assistance. Upon completion, residents make a commitment to teach in high-need schools in New York City for a minimum of three years.

American Museum of Natural History

This unique residency program is housed within the Richard Gilder Graduate School at the American Museum of Natural History (AMNH), and awards program completers a Master of Arts in Teaching degree, with specialization in grades 7-12 earth science. It prepares science teachers to work in four schools in New York City and Yonkers. During the 10-month classroom residency, participants are paired with a mentor teacher in addition to regular work alongside teachers of multi-lingual learners and students with disabilities.⁵⁹

The above models offer an intriguing glimpse of what is possible for scaling teacher residencies in New York City. By focusing on training sites that represent a complete picture of the opportunities and challenges of teaching in urban schools, along with establishing support and guidance for developing mentor teachers, each model ensures that participants gain valuable experience crucial for effective teachers. These programs successfully reduce financial barriers to participating, by offering reduced tuition, as well as stipends for living expenses during the year of residency. And while each program is both highly selective and rigorous, teacher candidates are given significant support throughout the program, and into their teaching career.

International Best Practices

Among nations that score highest on the Programme for International Student Assessment (PISA), an international educational assessment of 15 year olds, many of the leading nations share a strong teaching profession. A recent comparative analysis of the top performing systems found that educational districts in Australia, Canada, Finland, and Singapore share several practices that are typically common to teacher residencies. For example, these systems all feature teacher training programs that are highly selective and very rigorous, requiring in-depth clinical training in the classroom. Teacher preparation in these nations is partially or fully subsidized, as is professional development throughout a teacher's career. The collaborative nature of teaching is cultivated in high-performing systems: rather than novice teachers struggling in isolation, schedules allow teachers adequate time to plan, collaborate, and conduct inquiries into their teaching practice.⁶⁰

The strong performance of students in these nations is clear. But the strength of the teaching profession is equally impressive. For example, fewer than three percent of teachers in Singapore resign each year, due largely to policies designed to elevate the teaching profession and support teachers' success, both as they prepare for the classroom and throughout their careers.⁶¹



Recommendation: Time to Expand Teacher Residencies in New York City

To better prepare early career teachers for the profession and to reduce turnover, New York City needs to invest in a large-scale, paid, year-long teacher residency program. There is clear evidence that residencies significantly improve teacher retention.

New York City's students would directly benefit from teachers who were better prepared at the outset of their careers; New York City schools would benefit from the continuity of a stable teaching staff and the additional capacity from teaching residents to take on instructional functions such as substitute teaching or tutoring; and the City would benefit from long-term cost savings resulting from lower turnover. Absent a major shift in state and federal education policy that would require year-long clinical teacher preparation prior to certification, it is necessary for the City to direct resources to make experiential learning a standard for all teachers who enter the profession through city-funded alternative certification pathways. As the nation's largest school district, New York City could direct resources to fund resident teacher positions for as many teachers as are currently participating in the Teaching Fellows alternative certification program. By closely aligning a residency to meet the district's hiring and school improvement needs, the City has the potential to improve the quality and retention of its workforce, reduce class-sizes in schools where residents are placed, and build ladders of opportunity for current teachers to become mentors in resident classrooms.

Critical elements of teacher residency programs: incentivize strong, experiential training

Residency programs in other cities vary in programmatic design, but there are certain key features common to all successful residency programs.

Residents work under and alongside a single, accomplished mentor teacher in a high-functioning classroom. Successful residency programs ensure that each resident is paired with an expert teacher, with whom they collaborate and co-teach, and who serves as a mentor teacher, offering feedback and evaluation. This relationship has clear benefits for the resident, who gains in-depth classroom experience along with guidance in developing their teaching practice. The mentor teacher also benefits from increased salary as well as

opportunities to practice advanced leadership skills and the presence of a committed and qualified co-teacher in their classroom.

Residencies are year-long commitments for teacher candidates. Being immersed in the work and life of a classroom for a full school year provides teacher candidates opportunities to experience a full curriculum cycle and how a classroom and individual students evolve through various transitions that take place over time. The first month of school, weeks leading up to state exams, or transitions after extended holiday breaks are all times when students may exhibit particular academic or behavioral needs and a resident teacher benefits from observing and learning from the full academic cycle of these transitions. Likewise, schools benefit from yearlong placements because residents, in their role as co-teachers, effectively reduce class sizes and contribute to larger school improvement goals by serving as additional instructional staff.

Residency programs provide a stipend to cover candidates' living expenses during the residency year. Not all residential programs are able to offer living stipends to residents in addition to reduced or free tuition. However, it is considered a global best practice to provide a modest living stipend for the residency year. It ensures that while residents are focused on developing the skills they will need as teachers, they are not forced to take on additional student debt or juggle secondary work schedules which compromise the quality of their residential experience. A clear parallel can be found in the medical profession, where government funds support stipends for medical students during their residency training as well as subsidies for medical teaching hospitals. A stable workforce of well-trained physicians is considered a public necessity, and is supported through public funds. Similarly, ensuring consistently well-prepared teachers is essential for a strong, equitable education system.

Residency programs reflect a collaboration between a school district and an institution of higher education, with shared responsibilities of program development, oversight and evaluation, and an emphasis on quality. The goal of the partnership is always to meet the district's particular staffing and school improvement needs. An open and collaborative partnership encourages deeper reciprocity between education theory and the daily practice of teaching through teacher preparation curricula that is directly related to residents' clinical classroom experience. A well-aligned collaboration between the district and teacher training institutions – with regular feedback channels to inform both curriculum and instructional practice – helps ensure that new teachers are ready on “day one” to contribute to goals for educational quality and subject area needs set by the district.

Furthermore, successful residency partnerships must intentionally focus on quality and continuous improvement from the beginning. Ideally, each school that hosts a cohort of

residents would spend a year in a partnership development phase with the approved teacher preparation provider. This time would be spent developing plans for recruiting a diverse pipeline of teachers, developing a sequence of coursework aligned with residents' daily classroom experience, and establishing a feedback loop to ensure district school improvement needs are a shared goal. Additionally, each school where residents work would need to recruit and prepare mentor teachers. These mentor teachers require skill-building to ensure they are familiar with adult learning patterns, and have the necessary tools to provide instructional coaching to residents and integrate them into the daily routines of their classrooms. The focus on quality requires time and investment from participating schools, and accordingly requires financial compensation for dedicated staff.

What an investment in teacher residencies in NYC would look like

There are currently no examples of implementing teacher residencies on a large scale in the U.S. To phase in a program in New York City that could reliably train as many as 1,000 teachers hired in City schools each year would require some upfront costs.⁶² This investment would be partially offset by the long-term cost savings expected from lower teacher turnover among early career teachers. Currently, taxpayers subsidize the costs of placing under-prepared and under-supported teachers in classrooms where it is expected that a large percent will leave the profession within a few years. A more strategic investment in high-quality teacher preparation will strengthen the pipeline of teachers, ensure more equitable access to strong teachers across schools, and reduce costs associated with high teacher turnover in the long run.

Several variables would affect the true cost of launching a large-scale teacher residency program in New York City. Key factors to consider include whether the full cost of tuition would be covered and the amount of stipend offered to both residents and mentor teachers. In addition, programmatic costs need to be factored in, including: school-based staff to liaise between residents, the university partner, and the schools where residents are placed; professional development and coaching for mentors; and program evaluation.

Residencies also offer potential for some cost offsetting in schools where residents are placed. Prepared to Teach, a project within Bank Street College of Education that supports school districts in implementing teacher residencies, has outlined various cost models for how to redistribute some funding in order to support teacher residencies.⁶³ As an example, with careful program design, residents could take on additional instructional tasks in schools, such as substitute teaching (especially within their assigned classroom), or afterschool tutoring. While contractual issues that would need to be addressed, by assigning

these functions to residents, schools may decrease expenses while also giving residents valuable opportunities to hone their teaching skills.

Transforming NYC's alternative teacher preparation programs

Organizations like Prepared to Teach that support the work of scaling teacher residencies in other cities emphasize the importance of phasing in the residency program while phasing out quick-entry programs. This is done so that immediate hiring needs continue to be met, while simultaneously bringing cohorts of residency-trained teachers into the system. As these teachers enter the workforce, the school district can anticipate improved retention rates and associated cost savings. These cost saving can then be reallocated back into the residency program, improving its financial sustainability.⁶⁴

To begin to introduce a large-scale teacher residency program, the City could adopt a five-year phase-in time frame. In the first year the City would continue to recruit enough teachers to fill shortage areas through the NYC Teaching Fellows. At the same time, the City would invest in 250 additional recruits into a residency-style program. Rather than being placed directly into the classroom as current Teaching Fellows are, these candidates would be enrolled into a year-long co-teaching residency. Priority for the residency would be given to candidates seeking certification in high-need subject areas, including TESOL, Math, Science, or other specific teacher shortage areas.

In the second year of the phase-in, the first cohort of 250 residency-trained teachers would be eligible for hiring in hard-to-staff classrooms, and the number of recruits in the original Teaching Fellows program could be reduced by 250. By incrementally increasing the number of participants in the residency program each year and decreasing the number of students in the Teaching Fellows program, the program budgets for each would begin to balance. Assuming teacher retention would increase among those trained in a high-quality residency program, as more residency-trained teachers enter classrooms, eventually fewer new hires would be needed each year.

A sample phase-in schedule plan could resemble the following:

5 Year Phase-in of Teacher Residencies Accommodates Immediate Staffing Needs



With increased retention, the need to recruit, hire and train new teachers will also decrease, and the savings can be funneled back into the residency program.

Assuming the five-year attrition rate would be reduced by half to about 20 percent for teachers in the residency program, annual savings directly from increased retention would eventually amount to about \$4 million each year.⁶⁵

In addition, repurposed resources and staffing structures within DOE’s allocation to schools can ensure upfront funding is available to support a teacher residency program. Some funding currently directed to professional development could be reallocated, for example. In addition, costs for some academic functions in schools – such as substitute teaching, tutoring, or afterschool – could possibly be reduced if resident teachers take on these functions as part of their year of residency.⁶⁶

This proposal assumes that much of the program architecture within the New York City Teaching Fellows program could be efficiently expanded or repurposed to accommodate the first phase of a teaching residency program, rather than duplicating costs with a separate administrative office. As the teaching residency grows, it would gradually replace the current Teaching Fellows program. While some additional centrally-located program staff may be needed to support program design and coordination, it is assumed that

administrative costs would generally equal the current budget of the Teaching Fellows program.

To scale this model effectively, it is important to identify and partner with qualified institutions of higher education (IHE). Higher education partners, willing to commit to shifting their teacher preparation programs to school-based residency programs, can help DOE identify the principals and partner school sites that would most benefit from housing an annual cohort of teacher residents. Close collaboration with IHE partners in curriculum and professional development planning ensures the program design is directly aligned with DOE's instructional and school improvement needs. To support this partnership, DOE should consider convening IHE partners early in the program design phase to clarify roles and responsibilities, define a shared vocabulary for instructional leaders, and establish expectations for residents' performance.

Certainly some additional costs would be involved that may not be currently factored into costs of the Teaching Fellows program. Some examples include:

- **Program expenses.** Particularly in the development phases, the City would need to invest in program costs such as curriculum development, program evaluation, and recruitment of both residents and mentors.
- **Partnership development funding.** While much of the program development would be managed centrally, some additional work may fall on schools and would require compensation. These costs may include ensuring coursework is fully integrated into residents' daily classroom experience, and that additional instructional opportunities are available to residents, such as substitute teaching, mentoring, or leading afterschool activities. Conservatively, these costs would be up to \$75,000 annually per school hosting a cohort of ten residents to cover the salary of a dedicated program coordinator at each site. To accommodate 1,000 residents when fully scaled, this proposal would need to provide funding to 100 schools at an annual cost of \$7.5 million
- **Resident costs.** While the Teaching Fellows program already covers the cost of tuition for program participants, a residency would provide an additional living stipend of \$30,000. For 1,000 residents, this would add about \$30 million annually in program costs in addition to current tuition costs.
- **Funding for mentor teacher pay differential and professional development.** To compensate mentor teachers for the additional leadership tasks they assume when hosting a resident in their classroom, additional pay is necessary. A specific sequence of professional development is also needed, particularly for mentor teachers' first year working in the program. Assuming approximately \$7,500 per mentor, this proposal would require \$7.5 million annually.⁶⁷

It is important to remember that these investments are not simply increased costs. Rather, it is expected that investing in high-quality teacher preparation will yield significant cost savings as teacher retention increases and instructional quality improves. These long-term impacts go beyond simply improving the pipeline of effective teachers in the City, and represent a larger investment in education, in communities, and building a more sustainable City for all New Yorkers.

Acknowledgements

Comptroller Scott M. Stringer thanks Elizabeth Bird, Senior Policy Analyst and the lead author of this report. The Comptroller also extends his thanks to David Saltonstall, Assistant Comptroller for Policy; Tammy Gamerman, Director of Budget Research; Preston Niblack, Deputy Comptroller for Budget; Eng Kai Tan, Budget Bureau Chief; Archer Hutchinson, Web Developer and Graphic Designer; and Susan Watts, Director of Visual Content.

Comptroller Stringer would also like to recognize the contributions made by Alaina Gilligo, First Deputy Comptroller; Sascha Owen, Chief of Staff; Matthew Rubin, Deputy Chief of Staff; Shanifah Rieara, Assistant Comptroller for Public Affairs; Tian Weinberg, Senior Press Officer; Tyrone Stevens, Director of Communications; Hazel Crampton-Hays, Press Secretary; Dylan Hewitt, Director of Intergovernmental Relations; Alyson Silkowski, Associate Policy Director; Adam Forman, Chief Data and Policy Officer; and Nichols Silbersack, Deputy Policy Director.

Comptroller Stringer is grateful to the external reviewers who read earlier drafts of the report and whose incisive and thoughtful feedback continues to refine and ground this work.

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- 62 This assumes the residency program would eventually include all who participate in NYC Teaching Fellows, the City's largest alternative teacher preparation program.
- 63 See for example: Fallon, Brigid, "Investing in Residencies, Improving Schools: How Principals Can Fund Better Teaching and Learning." New York, NY: Bank Street College, Sustainable Funding Project, September 2017; DeMoss, Karen, Gina Bottamini, Brigid Fallon, Divya Mansukhani, Gretchen Mills, and Josh Thomases. "Clearing the Path: Redesigning Teacher Preparation for the Public Good." New York, NY: Bank Street College, Sustainable

Funding Project, September 2017. Accessed from: <https://www.bankstreet.edu/our-work-with-schools-and-communities/bank-street-education-center/prepared-to-teach/residency-partnership-resources/>

64 DeMoss, Karen, Gina Bottamini, Brigid Fallon, Divya Mansukhani, Gretchen Mills, and Josh Thomases. "Clearing the Path: Redesigning Teacher Preparation for the Public Good." New York, NY: Bank Street College, Sustainable Funding Project, September 2017.

65 This estimate assumes a cost of \$20,000 per teacher for recruitment, on-boarding, and training.

66 Certain contractual issues may need to be considered in order for residents to take on responsibilities for substitute teaching, particularly in classrooms other than the one they are assigned.

67 For example, current teacher leader roles designate 'Master,' 'Model,' and 'Peer Collaborative' Teachers. Each of these designations has specific additional responsibilities within their schools or districts, and qualifies for additional compensation.





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**TESTIMONY OF THE
UNITED FEDERATION OF TEACHERS
BY CHRISTINA COLLINS, DIRECTOR OF RESEARCH & POLICY
AT UFT TEACHER CENTER ON BEHALF OF
EVELYN DeJESUS, VICE PRESIDENT FOR EDUCATION**

**BEFORE THE
NEW YORK CITY COUNCIL JOINT HEARING OF THE
COMMITTEES ON EDUCATION AND HIGHER EDUCATION**

REGARDING TEACHER PREPARATION AND TRAINING

JUNE 25, 2019

Good afternoon. My name is Christina Collins and I am the Director of Research and Policy at the UFT Center under the auspices of Vice President for Education Evelyn DeJesus. On behalf of the union's more than 190,000 members, I would like to thank Education Chair Mark Treyger and Higher Education Chair Inez Barron and members of both committees for holding today's hearing on teacher preparation and training.

I would also like to recognize City Council Speaker Corey Johnson for his strong leadership, and congratulate him and the members of this council for your efforts in passing our most recent city budget.

Teacher Residency as Preparation

I would first like to speak to the matter of teacher preparation and how to improve our current system. New York City, like many urban school districts, has a tough time retaining new teachers. When I speak with new teachers, especially those who are struggling, the constant refrain is – "They didn't teach us this in (education) school." We need a new paradigm. One that mirrors the medical profession and gives prospective teachers a student residency of working, teaching and learning inside a New York City public school.

The UFT and the New York City Department of Education have been in talks with the City University of New York about how such a residency program could be structured. Each year, New York City hires upwards of 4,000 new teachers. We support a residency program that absorbs as many of these new hires as possible. New York City Comptroller Scott Stringer just yesterday proposed a residency program that builds on the existing alternative preparation program, the New York Teaching Fellows. With so many public school advocates calling for a vigorous residency program, we hope it is an idea whose time has come.

UFT Teacher Center

We at the UFT value your commitment to ensuring that our teachers are adequately prepared to succeed in our classrooms and that they receive meaningful learning opportunities throughout their careers to help them grow into exceptional educators. For this reason, I want to thank the City Council for its most recent investment in the UFT Teacher Center program.

The UFT's award-winning Teacher Center, founded in 1979, is a school-based professional development program that promotes teacher excellence and academic achievement for all students. The Teacher Center is a collaboration of the UFT, the New York State Education Department, the New York City Department of Education, participating schools and districts, school support organizations and metropolitan area universities and cultural institutions.

The UFT Teacher Center operates throughout the five boroughs of New York City with dedicated professional learning specialists in 115 school-based sites and over 25 experienced New York City educators who serve as Teacher Center field staff members and instructional specialists who work directly with schools and offer city-wide learning opportunities. Drawing on current research and best practices, the UFT Teacher Center's professional development activities are designed and taught by educators for educators to deepen content knowledge across all subject areas, including shortage area subjects such as math and science; enhance pedagogical skill; and support teachers to better serve all students, including English language learners and students with special needs.

Activities range widely and include intensive in-classroom support, after-school study groups, citywide networks, conferences and seminars. The UFT Teacher Center has deep experience in the design, delivery, and implementation of high-quality professional learning, including work with interactive learning experiences, in collaboration with outside partners. They also have a long history of successfully bringing innovative new content and pedagogical practices directly to classroom teachers throughout the city and working side-by-side with them in schools to support engaging instruction.

Through this network of 115 school-based sites and numerous conferences and workshops, during the 2017-2018 school year, the UFT Teacher Center provided professional learning to

more than 246,000 participants, including teachers, administrators, paraprofessionals, school staff and parents in New York City. And now more than ever, the UFT Teacher Center is uniquely positioned to play a leading role, as New York State moves to create and implement its new Next Generation learning standards and related resources and curricula. UFT Teacher Centers have and will continue to play a vital part in developing and executing New York's Professional Development Plan requirements and helping educate classroom teachers so the work aligns with the new standards.

The UFT Teacher Center also supports National Board Certification and serves as an approved provider of Continuing Teacher and Leader Education (CTLE) credits. It has partnerships with six local colleges and universities and New York State United Teachers (NYSUT) college partners including Brooklyn College and the New York Institute of Technology to support teachers' continuing education.

UFT Teacher Center School-Based Sites

I would now like to walk you through examples of the work performed at three distinct UFT Teacher Center school-based sites.

Students with Special Needs

First I would like to showcase the UFT Teacher Center school-based site inside P396, a special education program located inside PS 532 in Crown Heights, Brooklyn that recently opened in April 2019. This site works with educators from four District 75 locations and affects more than 1,600 special needs students in kindergarten through eighth grade.

Our colleague Shameeka Hill is the site specialist at this particular UFT Teacher Center site. The paint was barely dry when Ms. Hill was already planning presentations about how the new state learning standards in English language arts and math apply to special needs students and instruction. "I am a resource," is how Ms. Hill describes herself. And by May 2019, educators in these four District 75 locations were reporting that the Teacher Center site was providing them with hands-on materials for their students. Educators were thrilled to have this new content, which they used to write curriculum specific to the needs of their special-needs students.

Civic Education

Next, I would like to focus on UFT Teacher Center work around civic education. Supported by a grant from the national American Federation of Teachers (AFT), educators from across the city are meeting regularly with me and with staff from the UFT Teacher Center to discuss their vision for civics education and write recommendations to present to the New York State Board of

Regents in the fall. Their work will provide substance to New York State's K-12 framework for civic participation, which goes beyond calling for students to be educated in democratic responsibilities such as jury duty and voting. These standards identify ways students of all ages should behave and interact with each other, such as 6th graders showing respect for the rights of others in classroom debates regardless of whether one agrees with the other viewpoint.

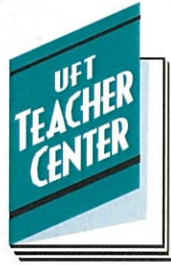
STEM Education

Finally, as educators, we know we are preparing our students for a world we can barely dream of. So how do we do that? By developing their critical skills early and ensuring that all students see science, technology and math as tools they can master – and have fun exploring.

Educators at PS 28 in the Bronx put this philosophy into action with their Teacher Center Coach, Roslyn Odinga, by designing and building structures that could prevent – or at least slow – an ice cube from melting. By working in teams, evaluating their designs and then improving them, these educators saw this experiment through the eyes of both a teacher and a student. They will be better equipped to help their own kindergarten students – yes, kindergarten – understand scientific concepts and vocabulary about the effects of sunlight on the earth's surface.

Closing Thoughts

We understand that providing our students with a world-class education means that our educators must be well prepared and afforded consistent professional development. For this reason, the UFT is committed to providing our members substantive and meaningful learning opportunities throughout their careers that help them grow into outstanding educators. We strongly believe that now is the time to engage in a conversation around implementing teacher residency programs to better prepare our future educators, and to continue support for our signature teacher professional development program, the UFT Teacher Center, to guarantee that the students of New York City are served by the best trained teachers with experience in the classrooms they will be working in. Thank you.



SITES LIST 2019



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PS 151

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HIGH SCHOOLS

ENY TRANSIT TECH HS

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KINGSBOROUGH EARLY COLLEGE SECONDARY SCHOOL

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ABRAHAM LINCOLN HS

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JOHN DEWEY HS

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Assembly Member Steven Cymbrowitz, District 45
Council Member Mark Treyger, District 47

QUEENS

DISTRICT 24

PS 81

Teacher Center Staff: Laura LoPresti
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DISTRICT 25

PS 29

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PS 32

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DISTRICT 26

PS 23

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Business Technology Early College HS

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DISTRICT 27

PS 105

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PS 48

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JHS 8

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JHS 72

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DISTRICT 29

PS 95

Teacher Center Staff: Annette Brown
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IS 192

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Collaborative Arts MS

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DISTRICT 30

PS 11

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PS 127

Teacher Center Staff: Theresa Janousek
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PS 150

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PS 151

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PS 222

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PS 212

Teacher Center Staff: Debbie Levy
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PS 228

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IS 145

Teacher Center Staff: Carla Carballo & Sophia Tsimaras
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HIGH SCHOOLS

JOHN ADAMS HS

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LONG ISLAND CITY HS

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BUSINESS TECHNOLOGY EARLY COLLEGE HS

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HILLCREST HS

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QUEENS, continued

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STATEN ISLAND

DISTRICT 31

PS. 6

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PS 1

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PS 13

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PS 22

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PS 26R

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PS 56

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PS 57

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PS 60

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PS 68

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PS 69

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IS 2

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STATEN ISLAND, continued

IS 7

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IS 51

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PS 61

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IS 72

Teacher Center Staff: Krystal Salerno

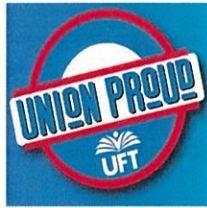
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United Federation of Teachers
A Union of Professionals

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**Testimony of the Steinhardt School of Culture, Education, and Human Development at
New York University
before
The New York City Council Committee on Education
and
The New York City Council Committee on Higher Education**

June 25, 2019

Good Morning Chairperson Treyger, Chairperson Barron, and all Council Members present. My name is Dr. Frank Pignatosi and I am Clinical Assistant Professor at New York University's Steinhardt School of Culture, Education, and Human Development. Thank you for the opportunity to testify and share my expertise on the topic of teacher training and preparation.

Well-prepared teachers, and importantly teachers of different backgrounds, are critical for student learning and academic achievement. However, there are increasing concerns about how well college and university teacher-education programs are preparing prospective educators for the challenges of today's classrooms in addition to what those teachers look like.

Our challenge is to rethink the model that sees the DOE and teacher education programs as partners who shuffle candidates to one another, from pre-service status to in-service status, much as divorced parents do with their children, each contributing to the education, but rarely doing it collaboratively in the same space. The onus of the partnership too often falls on the single candidate, who is left to negotiate and reconcile the input s/he receives from the two partners. Over the years, the teacher education programs at NYU have engaged in a variety of experiences building partnerships with schools and districts, focusing on clinically-rich models that emphasized the importance of teachers becoming active members of communities in and around the schools. Most recently, NYU has begun rethinking even further its approach to teacher preparation and building residency models in collaboration with school partners - districts and charter networks. Working with school partners across the country, it has built a secondary education residency program that admits candidates chosen by both NYU and its partner, that embeds the candidate in a school community beyond the content area of certification, and where NYU faculty and school-based faculty collaborate on the mentorship, focusing more on coaching strategies for both the candidate and the teacher mentor, than on evaluating the outcomes of the internship. In this model, everyone is a mentor and a mentee.

The focus should be on the quality of the pre-service internship more than on the quantity. The DOE does need more teachers certified in working with students with disabilities, but it also needs more general education and content-specific teachers to learn how to reach more students. Many of our programs graduate candidates eligible for dual certification and are

integrally intertwined with the field to address the concerns, but to best address the needs of students with disabilities we think that teachers must also be prepared to understand the issue of racial disproportionality from the referral point of view - who needs to be referred and who can benefit from excellent instruction to avoid referrals. One way to address this is actually through improving non-special education teachers' ability to reach more students. We have been experimenting with requiring all our non-dual majors to collaborate on lesson planning with their peers majoring in special education, and by engaging our special education faculty in working directly in schools with their learning specialists. We cannot afford to waste the expertise that schools and teacher education programs both bring to the table by letting it be shared only through the candidates. In addition, if we simply increase the amount of time pre-service candidates spend in schools, then we risk increasing the amount of time they spend focusing only on their content teaching, without really developing an understanding and a practice of the needs of student with disabilities.

Similarly, working with emergent bilinguals is as much about working with multilingual families. Often teachers, particularly general education teachers not specialized in language learning, are their first point of access and advocacy, especially in the case of newcomer students. A mathematics education pre-service teacher needs to understand multilingual communities and develop strategies just as much as a dedicated English as a New Language pre-service teacher. This cannot be achieved simply by adding more course work to teacher education program requirements nor by simply increasing the amount of time spent interning in schools. If that mathematics education pre-service teacher is assigned to a school that is struggling to address the needs of its emergent bilinguals, s/he risks increasing the amount of time spent NOT learning how to address those needs. In our new secondary residency program, NYU interns are required to learn about the community of their school, visit it, and develop collaborative projects with teachers and community members. Why not invite teacher education programs and school partners to collaborate in this effort, by spending time together in the school and its community, not by simply co-crafting new curriculum that is then handed off to educators?

Finally, while research validates that preparation programs with hands-on practice in a real classroom produce more effective teachers who stay in the profession longer and strengthen schools over time, this alone cannot address the gap between the identity of our NYC public school teachers and the identity of our NYC public school students. Last year, at least 45% of teacher candidates enrolled in New York University's Teacher Residency identified as people of color, making the teaching cohort two times as diverse as the current national teaching workforce. This year, the number is approaching 60%, and the NYC-based cohort is well over 90%. This, of course, has a lot to do with efforts to identify outside funding sources to facilitate the coverage of costs, but it also has a lot to do with collaborating with district and charter partners on sharing the overall costs. In addition, it means striving to identify the best candidates, based on more than their grades in past academic studies. We cannot lament the inequity of our school system, and then add new barriers to accessing the profession that rely heavily on academic scores from that very system. We cannot lament the struggle to attract teachers of color and to diversify the socio-economic backgrounds of our teachers, and then

add new requirements that make it difficult for candidates who do not have the economic resources to graduate from our programs to find income during their internship.

Thank you again for the opportunity to testify. I would be happy to answer any additional questions the Committees may have. (Please contact Konstantine Tettonis, NYU Government Affairs, kt1249@nyu.edu with any additional questions that arise.)

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Thank you again for the opportunity to testify. I would be happy to answer any additional questions the Committees may have. (Please contact Konstantine Tettonis, NYU Government Affairs, kt1249@nyu.edu with any additional questions that arise.)



FOR THE RECORD

Prospect Schools
Penny Marzulli, Deputy Chief Executive Officer

**Testimony Presented to the New York City Council Committees on Education & Higher Education
Oversight Hearing on Teacher Preparation and Training
June 25, 2019**

Prospect Schools respectfully submits the following testimony regarding Teacher Preparation and Training. We thank the New York City Council Committee on Education Chair Mark Treyger and Higher Education Chair Inez D. Barron for providing the opportunity to comment today.

For the last ten years, Prospect Schools has educated students in Brooklyn using a model that is anchored by three Key Tenets: Diversity, Word Class Academics, and Excellent Teachers. Today, our four charter schools are located in Brooklyn's CSD-15 and CSD-13 and we serve nearly 1,500 students in grades K-12, propelled by a team of over 300 employees. While we believe in preparing and training all our employees, we have a particular philosophy and programs in place to support our educators inside and outside the classroom. These programs help us retain our teachers, a critical element in ensuring our students get the best education possible, and they are successful: we'll retain 90% of our core faculty next year.

We believe that the bedrock of any successful school is strong, professional teachers. Our teachers are highly skilled in their content areas and are constantly improving their craft. Across the network, our educators have spent an average of six years in the classroom, and two thirds of our teachers have more than five years of teaching experience. They are committed to the Prospect Schools mission and excel as enthusiastic collaborators and engaged community members.

Support and development of our leaders and educators is a cornerstone of our organization. We believe strongly in collaborative learning communities, which are facilitated across schools in the form of instructional walkthroughs, vision and programming evaluation committees, and direct coaching and feedback. School leaders and network admin conduct regular classroom observations, hold one-to-one meetings with educators and facilitate comprehensive professional reviews where all teachers have ample opportunity to reflect on their strengths and plan, with a leader, how to address areas where they need to grow.

Every August, we kick off the school year early with an offsite New Faculty Retreat that gives our new educators a chance to learn from network and school leaders what it means to be a member of the Prospect Schools team. Over the course of a week, new faculty and staff learn about our mission, vision and core values, take a deep dive into understanding how our Key Tenets impact the

work they will be doing in the classroom, and get to know their new colleagues, Principals and network leaders.

One thing we believe both students and adults should focus on at Prospect Schools is a growth mindset. For our educators, this means engaging in not only weekly and monthly feedback sessions with their individual school leaders, but also participating in professional development opportunities provided by the network team — this year, our educators spent a combined 210 hours working on implementing our Academic Priority for the year, Equitable Engagement. This focus provided a lens for educators across the organization to work specifically on addressing the achievement gaps that exist across the schools, particular to their discipline. We also encourage our teachers to seek out external PD opportunities and will support them with the resources needed to engage in those trainings.

To ensure our newest educators get the support and training they need to succeed in the classroom, Prospect Schools partners with the NYU Steinhardt Teacher Residency Program which emphasizes practical experience and allows teachers-in-training to spend significant time learning alongside and getting feedback from our veteran educators. The educators who come through this program also have a particular focus on serving students with special needs and English language learners, and, once they complete their year-long residency and earn their Masters degree, our hope is that they join the Prospect Schools team as full-time faculty.

While the bedrock of any successful school is strong teachers, we also firmly believe in supporting school leaders and nurturing a strong leadership pipeline within our schools and our network. To that end, we have two programs in place that give Prospectors who have raised their hands for leadership opportunities a chance to receive extra professional development and support. These programs are our Emerging Leaders program and our Principal-in-Residence program, which embeds future school leaders alongside current Principals to learn and develop the skills and habits of mind they need to run a school.

Prospect Schools is also a proud participant in the District-Charter Collaborative, a program designed to facilitate collaboration between district and charter schools with the aim of improving instructional practices and student outcomes while also building schools' capacity to solve their own problems of practice and eliminate achievement disparities along the lines of race. Our educators and leaders who have participated in the program have not only learned from their District counterparts, but also benefited from an open and honest exchange of best practices and creative new ideas to try in the classroom.

Thank you for the opportunity to provide this testimony to the NYC Council Committees on Education and Higher Education. We hope that this testimony sheds some light on how we approach Teacher Preparation and Training and that we can continue to act as a partner in this important work, so all New York City students get the education they deserve.

**The Bronx Charter Schools for Better Learning
Denny Salas, Director of Public Relations & Development
Testimony Presented to the New York City Council Committees on Education and Higher
Education
Oversight Hearing on Teacher Preparation and Training
June 25, 2019**

Good afternoon Chairman Treyger, Chairwoman Barron and the rest of the committee members present here today. I am Denny Salas, Director of Public Relations and Development for the Bronx Charter Schools for Better Learning (BBL), and I am pleased to be here today to testify on teacher preparation and training.

BBL is a charter school located in City School District 11 in the northeast Bronx serving over 750 students from Pre-K through Fifth Grade at our two locations. For the 2015-2016 school year, the 2016-2017 school year, and the 2017-2018 school year, BBL was recognized as a "Reward School" by the New York State Education Department - which means we are a high academic achievement school rated among the top 20% in the state for English language arts (ELA) and math performance.

Moreover, for this past school year - the 2018-2019 school year - we were identified as a "Recognition School" by the New York State Education Department. A "Recognition School" are among the top performing schools under ESSA who have exceeded state measures of progress for ELA and mathematics and have met the federally required 95% participation rate in ELA and mathematics assessments.

Our students' success and progress could never be realized if our institution did not place a premium on teacher preparation and training. At BBL, we have a professional development staff comprised of four individuals who spend around fifty hours a week on development and training. In addition to our professional development staff, we have ten Academic Leaders - comprised of teachers who excel in the classroom - who serve as an extension of our development team. We also have six consultants that work with both our entire academic staff and professional development team throughout the year.

During the course of the year, our principals, professional development team, and academic leaders perform classroom observations - that vary in frequency depending on how long the individual teacher has been with our school - to determine if additional training and preparation are needed. A newer teacher is typically observed weekly by our professional development staff and four times a year by our principals. A teacher with over five years of service at BBL are typically observed on a bi-weekly basis by our professional development staff, and once a year by our principals.

If a teacher is struggling in the classroom, our professional development team and academic leaders will work with the teacher to determine where their area of improvement lies. If it is a classroom management issue, our academic leaders will assist the teacher in developing better

system and structures, or help the teacher create a behavior plan if it is in regards to a disruptive student. If it is determined to be a lesson execution and content knowledge issue, our academic leaders and professional development team will rearrange the teachers' schedule and work with them to solidify their mastery of the subject matter.

In addition to the aforementioned, our professional development team and academic leaders have weekly lunch meetings and weekly after-school meetings to discuss any training and preparation needs. These sessions are primarily used to solicit feedback from our teachers on classroom performance and share best practices.

The bottom line is our school administration and Board of Trustees will do whatever we can to ensure our teachers are fully prepared and ready to succeed in the classroom. We do this because we know that if our teachers are succeeding, then our students will succeed, and that is what matters most to us.

Thank you for the opportunity to provide this testimony to the Committee. We hope our city council can extract information from schools like ours, and apply those successes to district schools everywhere. The student, wherever they are, deserve the best teachers and the best educational instruction possible to reach their full potential. I look forward to your questions.

**New York City Council Committees on Education and Higher Education
Oversight Hearing on Teacher Preparation and Training
June 25, 2019**

We would like to thank the New York City Council's Committees on Education and Higher Education for holding this important oversight hearing on teacher preparation and training.

We testify today to highlight the need for the city to better address the gaps in teacher education programs and provide on-going training and support to all teachers, paraprofessionals, and substitutes so they are adequately prepared to educate and assist the nearly 300,000 students with disabilities in New York City (NYC). We believe there is a direct relationship between the lack of formal teacher education and continuing disability and special education professional development with the inferior proficiency and graduation rates of students with disabilities. Additionally, robust teacher preparation and ongoing training would allow for the integration of students with disabilities with their general education peers, supporting the Least Restrictive Environment (LRE) for all students.

INCLUDEnyc (formerly Resources for Children with Special Needs) has worked with hundreds of thousands of individuals since our founding 36 years ago, helping them navigate the complex special education service and support systems, so that young people with disabilities can be included in all aspects of New York City life.

According to the American Community Survey (ACS), an annual survey conducted by the U.S. Census Bureau, the overall percentage of people with disabilities in the United States in 2016 was 12.8%. Yet over 20% of the 1.1 million students in NYC public schools are classified as students with disabilities. We believe general education teachers may over refer students for evaluation for special education supports and services because teacher preparation programs lack sufficient education on identifying the basic characteristics of learning, behavioral, and cognitive disabilities and on how distinguishing students who may be falling behind for other reasons, such as limited English-language skills.

As a result of the city's "special education reform" initiative launched in 2012 to increase the time students with disabilities spend in general education classroom, more students with disabilities than ever before are being educated in Integrated Co-Teaching (ICT) classrooms in NYC. While we applaud this integration, in addition to adequate teacher preparation, general education teachers also need ongoing professional development on how to meet the academic and environmental needs of students with diverse learning styles so they are able to support *all* students in

their classrooms. This should include all professionals working with our students, including paraprofessionals and substitute teachers.

Although ICT school placements have grown, 57,000 students with disabilities in NYC still spend more than 40% of their school day in self-contained classrooms (2017-18). We believe more students with disabilities could be educated in less restrictive environments (LRE) if teachers, paraprofessionals, and substitutes were better prepared with additional curriculum and behavioral training and support.

We recommend that the NYC Department of Education require annual professional development and ongoing school-based support on:

- Basic characteristics of disabilities, especially learning, emotional, intellectual, physical, ADHD, and sensory processing disorders
- Differentiated instruction
- Behavioral supports, interventions, and strategies
- Effective co-teaching
- Value of inclusion and creating an inclusive school and classroom environment
- How to partner with parents in their child's education

These trainings should be required for teachers, paraprofessionals, and substitutes.

Thank you for taking the time to consider these important matters. We look forward to working with you to improve equity and access for all students with disabilities in New York City.

Sincerely,



Barbara A. Glassman
Executive Director



Testimony to be delivered to the New York City Council Committees on Education and Higher Education

RE: Teacher Preparation and Training

June 25, 2019

Good afternoon. I am Maggie Moroff and I work as the Coordinator of the ARISE Coalition, a group of parents, advocates, educators, academics and other stakeholders who have been working together for over a decade to push for systemic reforms to special education in New York City to improve the day-to-day experiences and the long-term outcomes for students with disabilities. I'd like to speak this afternoon about the need to train and provide on-going support to NYC's public school teachers so that they are prepared to provide all students, including those with dyslexia and other disabilities, with appropriate, evidence-based literacy instruction that is grounded in the science of reading. In particular, teacher preparation programs frequently fail to provide pre-service educators with the knowledge and training they need to be able to provide explicit and systematic instruction in the foundational skills of phonemic awareness and phonics, which research has repeatedly and unambiguously shown is beneficial for all students and absolutely essential for those with dyslexia.

It should be an educational priority – perhaps the top educational priority – for NYC to ensure that all students learn to read. Success in school — in math, science, social studies, and even the arts — depends on students being able to understand and use information from text. Students who struggle with reading tend to avoid it and over time fall further and further behind their peers reading on grade level. The further students fall behind, the more likely it is that they will leave school unprepared for adult life. ARISE members know that far too many of our students, with and without specific literacy-related disabilities, are in danger of leaving school without the literacy skills they need to succeed in the world after high school.

When we consider the serious implications of failing to teach students to read, it is clear that there is no time to waste. As the City moves to increase diversity of all kinds in our schools and our classrooms, it is essential that we equip teachers with the skills to teach literacy across the spectrum of learners. We can't blame students or their disabilities for the dismal outcomes we see in standardized tests or graduation and dropout rates. Rather, in most instances, students simply haven't been taught effectively, because, across grade levels, neither general education nor special education teachers have been adequately prepared to offer the systematic,

targeted, evidence-based literacy instruction their students need. This is unfair to teachers, who are left to try to figure it out on their own and then harshly judged when they don't know how to do something they've never been taught how to do, and unfair to students, who struggle unnecessarily and are inappropriately segregated into special education classrooms when they don't respond to the hodgepodge of instruction their schools currently use.

It's not too late to turn this problem around, however, and we're particularly glad that the Council is considering teacher preparation and training this afternoon. What ARISE members see when we look closely at the work in the schools with our students is a great deal of variability in teacher practice and effectiveness, which is backed up by studies that have found a lack of consistency in higher education programs that prepare future teachers. In far too many cases, teaching colleges adhere to philosophies about literacy instruction that are unsupported by the extensive research base on how children learn to read and that directly contradict the work being done by cognitive scientists at their own universities. We suggest that the City look carefully at places where it has the ability to influence teacher preparation and training, such as the NYC Teaching Fellows program, teacher training programs at CUNY, or possibly creating a paid apprenticeship program in literacy at the DOE. If teachers in pre-service certification programs receive explicit instruction themselves in how children learn to read and in evidence-based teaching methods, they'll come into the classroom far better prepared to teach all their students, including those with reading disabilities.

As far as on-going teacher support and in-service training, we strongly support the DOE's current efforts to improve literacy instruction for students in early childhood grades (the Universal Literacy initiative and a new pilot to offer intensive reading interventions over the summer to kindergarten and first grade students in a small number of schools, for example). However, we cannot neglect students currently in grades 3 through 12 who are still struggling with foundational reading skills because they never received appropriate instruction when they were younger. There needs to be a coherent plan to address the current variability in instruction and ensure that upper elementary, middle, and high school teachers also have access to the training and support they need to improve literacy instruction for older students and provide intensive interventions when necessary. Programs like the DOE's summer intensive reading pilot should be considered for expansion across all boroughs and offered to students in older grades as well, keeping in mind the importance of making sure that instruction is developmentally appropriate and highly engaging. Students should get the support they need to catch up, without feeling stigmatized or like they are being punished by having to attend.

ARISE members are confident that with adequate resources, dedicated teacher preparation, and a strong commitment from everyone involved, school staff won't be left alone to try to teach their students to read, students won't have to struggle or turn to private schools and tutors to advance their skills, and parents won't have to fear that their children, regardless of whether or not they have dyslexia or another disability, will leave school without learning to read.

Committee on Education & Committee on Higher Education Joint Oversight Hearing: Teacher
Preparation & Training
Tuesday, June 25th, 2019

Testimony of Tasfia Rahman, Policy Coordinator
The Coalition for Asian American Children and Families (CACF)

Good Afternoon, Chair Treyger, Chair Barron, and members of the Committees on Education and Higher Education. Thank you for the opportunity to testify today on the issue of teacher preparation and training.

Since 1986, CACF is the nation's only pan-Asian children and families' advocacy organization and leads the fight for improved and equitable policies, systems, funding, and services to support those in need. The Asian Pacific American (APA) population comprises over 15% of New York City, over 1.3 million people. Yet, the needs of the APA community are consistently overlooked, misunderstood, and uncounted. We are constantly fighting the harmful impacts of the model minority myth, which prevents our needs from being recognized and understood. Our communities, as well as the organizations that serve the community, too often lack the resources to provide critical services to the most marginalized APAs. Working with almost 50 member organizations across the City to identify and speak out on the many common challenges our community faces, CACF is building a community too powerful to ignore.

We need our teachers well-trained and supported to help immigrant youth who struggle with English language proficiency, the acculturation process, and inadequate academic preparation. Despite the Asian Model Minority Myth Asian Pacific American immigrant youth come from families that face high rates of poverty, live in linguistic isolation, and lack the knowledge of available systems and resources. Consider:

- In the NYC Department of Education schools, 1 out of every 5 APA student does not graduate from high school on time or at all
- Nearly 2/3 of APA students in NYC come from homes where languages other than English is spoken.
- 1 out of 4 English Language Learner students is APA
- Asian Americans have the highest rate of linguistic isolation of any group in the City at 42%, meaning that no one over the age of 14 in the household speaks English well.
- 40% of NYC APA youth are not college ready upon graduation from high school

We make the following recommendations:

1. **Equip teachers with the tools and techniques to better engage immigrant students, including English Language Learners/Multilingual Learners, immigrant parents with limited English proficiency.** This goes beyond language in many cases. Many of our parents feel unwelcome, uncomfortable, and often embarrassed to be in school spaces. As a result, they are unable to be as involved in their children's education as they would like to be. Because of their limited English proficiency, many parents depend on the children themselves to navigate the school system. We need to provide our teachers with the knowledge, awareness, and support to be more inclusive of immigrant parents, especially those of our ELL/MLL students.

2. **Provide more professional development in response to teacher and student needs rather than solely to fulfill guidelines.** Our teachers face new challenges every day in the classroom that are not often covered in professional development. There needs to be a way in which teachers can receive professional development that is more relevant to the unique academic issues their students may be facing.
3. **More training and support for collaborative co-teaching.** Our students, especially our ELL/MLL students and students with disabilities, benefit from having more than one teacher in the classroom. However, if our teachers are not supported and are not given enough time to adequately prepare and coordinate between each other, our students do not receive all the benefits of having multiple teachers.

Thank you for this opportunity to testify, and we look forward to working with the City Council to ensure that our educators have the training and resources necessary to prepare and support our students.

Testimony To Address Teacher Education

Jennifer Pankowski, EDD

Pace University-Assistant Professor and Program Coordinator for Special Education

The responsibility of creating a well prepared and diverse teaching force for the NYC Department of Education is one that should be approached through open collaboration between institutes of higher education teacher preparation programs and the NYC Department of Education and New York City and State as a whole. The city of New York represents one of the most diverse populations of students in the country and as such it is our joint responsibility to provide teachers who are prepared to meet these diverse needs while simultaneously being culturally responsive. As stated in this call, "Well-prepared teachers, and importantly teachers of different backgrounds, are critical for student learning and academic achievement."

In order to echo this sentiment, the various current obstacles and successes must be addressed. One of the areas of increasing concern centers around the ability of college and university teacher-education programs to adequately preparing prospective educators for the challenges of today's classrooms in addition to ensuring they are preparing a diverse workforce.

Advocacy in the areas of inclusion of students with disabilities have changed the landscape of how today's classrooms function. Teacher Education programs thus must adjust to means the needs of the ever changing classroom dynamics. Pace has made a commitment to preparing every teacher to work with a diverse student body, in 2015 Pace redeveloped its core coursework to address inclusive education and supports for students with disabilities. In addition, all students receive coursework in classroom management and student autonomy, as well as an assessment course to help teacher candidates understand the special education referral process and the continuum of services and how to ensure every student on being educated in the Least Restriction Environment regardless of the content area they are studying. We have also included "term inclusive education" to our programs, therefore providing important coursework in every degree for TESOL/language learning and students with disabilities

Advocacy efforts also are focusing on the concern that few teachers are prepared to teach English Language Learners, who comprise a large portion of the student population in New York City public schools. Similarly, in our efforts to address the diversity needs of NYC, more emphasis must be placed on recruiting individuals who have a background in multiple languages and linguistics, this can be those with an educational background, or those who themselves speak more than one language. Pace students have several language courses embedded into their programs, including a course in language and global perspectives that help all students better understand the language needs of students in NYC public schools. We also have TESOL and Bilingual programs that are currently supported with a grant obtained by a faculty member. Also several state and federal grants also exist. Another opportunity to prepare TESOL and Bi-lingual certified teachers is via the mayors grants programs, however who is able to provide those degrees, not all the process for selecting participating schools is time sensitive and limited, by limiting the institution we are limiting those who are able to receive the education. The city of New York in collaboration with but public and private universities should work together to help expand the university offerings for these types of programs.

The third and final concern raised by this Committee is that, while there is significant representation of students of color in public education, teachers of color, especially male teachers of color, are significantly underrepresented. It is my believe that in order to address this concern, we must determine how to identify ways of appealing to a diverse group of highly competent individuals. If we want to recruit and retain diversity, we must support diversity.

Appeal to the masses, when I first started at Pace I remember a NYC Teaching Fellows subway campaign and 6 years later, the fellows continue to be the most diverse group we support. Another consideration is how we support diverse groups, if we look at the support staff of schools, particularly among paraprofessionals in special education we can see a large amount of diversity, all races, genders, religions, ages as represented, yet this does not continue into the teaching force, when I have asked some of these support staff the biggest obstacle is obtaining the educational and certification exam requirements. We need to cater to the audience we want to recruit, offering tuition assistance for groups not traditionally well represented in the field, making individuals aware of loan forgiveness programs for public service, marketing via racially and ethnically rich forums. Additionally, programs such as Men Teach and Black Men Teach, serve to encourage and support Men and Men of color in the field of education. IT is important that at both the k-12 and university levels, we partner to increase the desire of men of color to enter the field and remain in the field by increasing the representation of men of color in roles leadership within schools and universities. Faculty, principals, do a better job of recruiting. Pace has already made a commitment to doing a better job of recruiting and informing future teachers of financial opportunities for pursuing careers in high needs areas and urban settings Pace also has included an agenda for hiring faculty: TESOL with urban experience, and hiring faculty and adjuncts of diversity backgrounds.

Questions moving forward:

What are we doing in d75, opportunities for d75 inclusion?

We must encourage teachers to become dual and triple certified. Changing the dialog about special education and d75 need to be a joint effort between the NYC Department of Education and Universities, particularly when hiring and starting programs. Teachers need to be provided with professional development opportunities via colleges and universities to help support students with disabilities in a general education setting and create truly collaborative educational settings.

TEACHERS COLLEGE
COLUMBIA UNIVERSITY
A Graduate School of Education, Health & Psychology

Testimony to New York City Council
Committees on Education and Higher Education
Hearing on Teacher Preparation and Training
Tuesday, June 25, 2019

Aimee Katembo
Director, Office of Teacher Education

As administrators and teacher educators in the Office of Teacher Education at Teachers College, Columbia University, we are so pleased that the New York City Department of Education is centering this important discussion about the needs of students with disabilities, students for whom English is an additional language, and students of color. We share your commitments, and we come to the conversation to offer two additional perspectives on how to strengthen teacher preparation in New York City: first, it is essential to recognize that learning to teach does not and *can not* happen over the course of a single pre-service academic program. Second, diversifying the teaching force requires a sincere financial commitment on the part of our city and state policy makers.

Today I'd like to highlight a few programs at TC that support the city's need for teacher preparation in areas of need and creating a diverse workforce, and offer recommendations on how to strengthen our partnerships.

Teachers College is the first and largest graduate school of education in the United States, and an affiliate of Columbia University. Through its three main areas of expertise—education, health and psychology—Teachers College engages in disciplinary and interdisciplinary research, the preparation of dedicated public service professionals, work with local, national and global communities, and informing public policy to create a smarter, healthier, and more equitable and peaceful world. Today, Teachers College has more than 5,000 students, more than 20 percent of whom come from outside the U.S., representing 84 different countries. Among students who are U.S. citizens, 45 percent identify as people of

color. Teachers College prepares more than 500 teachers annually and the majority stay and teach in NYC public schools, the very schools where they did their student teaching.

At Teachers College, *all* teacher education students engage in coursework and field experiences that focus specifically on the needs of students with disabilities, and we proudly offer robust degree programs in Early Childhood and Special Education, Elementary Inclusive and Special Education, Applied Behavior Analysis, Intellectual Disabilities and Autism, Bilingual & Bicultural Education, and Teaching English to Speakers of Other Languages (TESOL), to name just a few; all programs are directed by leaders in their fields.

In addition, we share New York City's commitment to recruiting and preparing teachers from backgrounds that are currently under-represented in the teaching force; this commitment is manifested in recruitment and admissions decisions across TC's 20+ teacher education programs, and is formally supported through minority scholarships, our Teacher Opportunity Corps Program, and a growing number of opportunities for *all* members of our community to develop their own racial literacy and for aspiring teachers of color to find support, community, and affirmation at TC.

In spite of our pride in the programming that we currently offer, we have identified two powerful opportunities to strengthen our preparation of and support for New York City Teachers. First, we find that teachers, particularly those serving students with disabilities or students for whom English is a second language, benefit from structured induction support and professional development opportunities long after their TC graduation date. We don't see this as a failure of our degree programs but rather a fact about the nature of teaching: **learning to teach effectively takes more than a couple of semesters.**

Indeed, we have a robust two year induction program for graduates of our federally funded Teaching Residents at Teachers College (TR@TC) program, which serves aspiring teachers in the very subject areas under discussion today: secondary special education and TESOL. After graduating from this rigorous program, TR@TC graduates teach in New York City public schools for a minimum of 3 years and receive a wide range of supports that are individually tailored to meet the needs of each graduate and are visited at least 10 times by

experienced induction mentors in each of their first two years. The induction mentorship that is designed for our highly diverse cohorts of graduates is individualized, culturally responsive, and meant to establish a culture of sustainability for our new teachers. Our results speak for themselves: across the first 9 years of the program, **97%** of TR@TC alums continue to work in education-related fields. More recently, we brought induction mentorship to a broader range of TC alumni through the New Teacher Fellowship, and we are exploring how this support could be offered more broadly across all of our teacher preparation programs.

Next, we also see a tremendous opportunity to **increase public funding aimed at diversifying the teaching force**. Strong programs which can benefit from additional funds are already in place. For example, the Teacher Opportunity Corps is a state-funded program specifically designed to increase the number of teachers from under-represented backgrounds; at Teachers College, this program allows us to support twenty aspiring teachers of color with tuition support, mentorship, professional development opportunities, intimate seminars with top faculty, and internships in New York City public schools. What if we had enough funding to support 100 aspiring teachers of color in this way? What if we were able to offer full scholarships to all TOC interns? Our infrastructure is strong and we are ready to grow.

There are areas in which we are already poised to support New York City teachers with their in-service learning. We **currently** offer a wide variety of professional development services for in-service teachers, including workshops on designing accessible curriculum through the Teachers College Inclusive Classrooms Project, induction support through our Center for Professional Education of Teachers, powerful lectures and learning opportunities through our annual Reimagining Education conference on teaching and learning in racially diverse schools, and a certification extension in bilingual education, to name just a few.

In sum, Teachers College has the expertise and the structures to support New York City in its work to teach and affirm all learners, and we stand ready to help. We have templates for strong induction support and we'd be happy to collaborate with the New York City Department of Education in developing in-service professional development supports for a broader range of teacher candidates.

Possibilities include: connecting New York City teachers with the *many* effective workshops and conferences that Teachers College has on offer, co-constructing induction pathways that support and affirm our next generation of teachers, and above all, **funding** the aspiring teachers whom we most want to see in our classrooms.

Uncommon Schools, NYC
Crystal McQueen-Taylor, Regional Senior Director, New York City
Testimony Presented to the New York City Council Committees on Education
and Higher Education
Oversight Hearing on Teacher Preparation and Training
June 25, 2019

Uncommon Schools New York City respectfully submits the following testimony in regard to teacher preparation and training and thanks the New York City Council Committee on Education Chair Mark Treyger and Higher Education Chair Inez D. Barron for providing the opportunity to comment.

Regardless of the program, district, or charter school, an investment in our teachers and their preparation is one the most powerful commitments we can make to our students. Too often, preparation is focused simply on quantity- the number of hours, credits, or sessions versus quality- the impact that training will have on a teacher's practice and student learning in the classroom.

At Uncommon Schools, our commitment to studying high quality teacher practice that has results, codifying that practice, and then disseminating that practice has been hallmark to our success. When we see that a teacher is having extraordinary success with his or her students, we flock to that classroom to try to "bottle" the things that that teacher is doing well by recording their teacher moves, analyzing their preparation work, and looking at the impact on student work. We then take those practices, and we develop in-service trainings to share those best practices with other teachers.

Our teachers receive three weeks of professional development prior to the start of the school year so that they are ready to hit the ground running with students on day one in the classroom. The defining feature of this professional development is not only the length of time, but the depth of the content and extensive opportunities for teachers to practice and get feedback before implementing in front of students. In addition, throughout the school year, teachers engage in weekly professional development that is focused on real time areas in need of development that our principals observed in classrooms earlier in the week or saw as gaps in student work. The techniques and skills that teachers gain in these trainings can go into implementation the next day. This is the commitment to our teachers' growth that they require and deserve.

While we are extremely proud of the work that we do to prepare our teachers to support our 9,000 students, we also know that it's not enough to only focus on our students. This is why, as an organization we value and prioritize sharing and disseminating best practices in teacher preparation externally- whether through our multiple publications or our continued partnership with the NYCDOE.

Over the past five years, Uncommon Schools has partnered with the NYCDOE Office of District Charter Partnerships and our partner Superintendents in Community School Districts 1, 5, 7, 16, 17, 18, 19, 21, and 23 to come together in service of over 1,000 school leaders and teachers. The areas of common focus that we came together around each year will be of no surprise- supporting emerging readers to develop great reading habits, supporting our secondary school readers to closely read and comprehend texts, and how to check for student understanding throughout lessons and use that information to plan for upcoming lessons, amongst other topics.

These are not district or charter issues- finding opportunities for schools to share and disseminate our best practices and coming together to train and prepare all teachers is just the right thing to do. Uncommon Schools is privileged to do this work in partnership with our NYCDOE colleagues. As we all work towards a common goal of preparing our students for college and career success, we hope to see more opportunities for educators to come together to learn and grow in service of our students.



The City University of New York

**Testimony of Ashleigh Thompson, PhD
University Dean for Education**

New York City Council Committee on Education/Higher Education

Teacher Preparation and Training

Tuesday, June 25, 2019

Good Afternoon.

On behalf of this panel from the City University of New York, I would like to thank Chair Treyger and Chair Barron, as well as the members of the Committees on Education and Higher Education, for the opportunity to speak to you on the topic of teacher preparation and training at CUNY.

My name is Ashleigh Thompson, and I serve CUNY as University Dean for Education. In this role, I oversee Teacher Education programs across the university. I am pleased to tell you about our support of students in this important academic and workforce area, which contributes to CUNY's role as the leading provider of teachers to the NYC Department of Education.

I am joined today by Dr. Michael Middleton, Dean of the School of Education at Hunter College. Hunter was CUNY's first, and today is one of our largest, schools of education.

Our testimony will describe CUNY's efforts to provide New York City with well-prepared, diverse urban educators, committed to teaching in our City's public schools.

CUNY enrolls more than 18,000 students in education programs across the University, from associate to doctoral degree programs at 16 campuses. More than 7,000 students pursue graduate study, and education is CUNY's largest discipline across master's-level programs. CUNY prepares teachers for certification in nearly every subject area licensed in New York State. In the past five years, through concerted effort, CUNY has seen growing undergraduate enrollment in education, and a ten percent increase in our numbers of graduates.

The majority of CUNY's education students are people of color: 63% of teacher candidates and 70% of education students overall (includes associate; all fall 2018). CUNY's education cohorts are growing more diverse each year. From 2010 to 2018, teacher candidates of color have increased from 61% to 73% of bachelor's students and 37% to 53% of master's students. CUNY has invested targeted resources to recruit and support teacher candidates of color through State Education's Teacher Opportunity Corps and NYC Men Teach. Since 2015, more than 1,000 students have received programmatic and financial supports across fifteen campuses through NYC Men Teach at CUNY, which aims to promote academic momentum and completion, certification and hiring. Facilitation of the transfer process, enhanced clinical experience, and seminars on culturally-relevant education are hallmarks of the program.

New York State and New York City depend upon the diverse teaching force educated by CUNY. In 2016-2017, CUNY comprised 21% of all New York State's graduates of classroom teacher programs, but 36% of the state's graduates of color. In 2017-2018, CUNY prepared 48%—almost half— of all teachers in the state who earned a license in Bilingual Education; this was up from 41% the previous year.

As in the example of Bilingual Education, which content areas our pre-service and in-service teachers are able to pursue grows and deepens each year to support the needs of our city's schools. CUNY has launched new programs in Physical Education and Health Education proactively addressing needs described by reports from the Office of the Comptroller; new residencies focused on Computational Thinking aligned with Computer Science for All; and new online Advanced Certificates in high-need areas like Special Education, TESOL, and Bilingual Education. As New York State Education Department will soon increase the number of student teaching hours required, CUNY explores ways to expand financial aid available to support undergraduate and graduate candidates. We have developed initiatives to prepare students for state certification exams, including those which focus on teaching students with disabilities and English Language Learners.

A strong local P-20 partnership undergirds these connections between CUNY and our Schools of Education and the NYC Department of Education and its districts and schools. CUNY and DOE engage in deep teacher pipeline work, especially as it connects to teacher diversity, recruitment, and hiring, to better address teacher supply and demand. Leadership teams focus on innovative approaches to increasing pre-service clinical preparation, joint funding opportunities, new programs to meet hiring needs, state certification, and communication. We share data with the aim of better supporting teachers in both pre-service and in-service roles. Collaboration centers on a commitment to continue to improve outcomes for students.

CUNY provides many pathways into a professional teaching career for thousands of candidates from a wide range of backgrounds and starting points, more affordably and with less debt than other New York State institutions. From welcoming new cohorts of Teaching Fellows, adult learners excited to change careers and enter the classroom; to celebrating CUNY graduates honored as Big Apple Award winners; to supporting faculty with ideas for curricular innovation— CUNY is committed to teachers' clinical readiness, lifelong development, and career success.

Thank you.



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Testimony of Michael Middleton, PhD.

New York City Council Committee on Education/Higher Education

Teacher Preparation and Training

Tuesday, June 25, 2019

Good afternoon.

Thank you to Chair Treyger and Chair Barron, as well as members of the Committees on Education and Higher Education for the opportunity to speak with you this afternoon.

My name is Michael Middleton and I serve as the Klara and Larry Silverstein Dean of the School of Education at Hunter College (HCSOE) of the City University of New York. Since our founding in 1870, Hunter College has been dedicated to educating deeply thoughtful, knowledgeable and highly effective teachers, administrators and counselors – future professionals who, on a daily basis, make a significant and positive impact on their students and on the City of New York. We have been the recipient of the American Association of State Colleges and Universities Christa McAuliffe Excellence in Teacher Education Award, which honors exemplary teacher education programs. All our programs in teacher preparation are currently accredited by the Council for Accreditation of Educator Preparation (CAEP).

In the Fall 2018, we enrolled 2787 students in teacher preparation programs 78% of whom identify as female and 54% as non-white. We graduated approximately 1200 students in teacher preparation programs this year, with over 1000 recommended for state certification. Recent numbers obtained from CUNY show that 62% of completers of graduate education programs from Hunter, and 47% of completers of undergraduate programs, were employed by the NYC Department of Education.

We are committed to preparing professionals to meet shortage area needs for the city. In 2018, 19% of our graduates were from Bilingual Education or TESOL programs, 7% from adolescent math or science education, and 32% across Special Education programs, including work with blind, deaf and hard of hearing students, those students with severe or multiple disabilities, and students with learning and behavioral challenges. 49% of all our graduates who applied to the DOE were hired, and more than half of those - 54% - were hired in shortage area jobs of math, science, Spanish, ESL, or special education. Over the last five years, I am proud to report that more than 50% of the degrees awarded by the School of Education have been in these teacher shortage areas.

HCSOE is committed to educating reflective, knowledgeable, and highly effective candidates as future professionals who will make a significant impact on the academic achievement, as well as the intellectual, social, and emotional development of their students.

Today I'd like to highlight two elements of our programs – our clinical practice work and our commitment to educating a diverse student population.

Our clinical experiences in all programs are intentionally structured so that teacher candidates have initial field experiences focused on observing teachers and students in diverse classrooms, more extensive intermediate experiences where they begin working with small groups of learners (including students with disabilities and those for whom English is a new language), and culminating student teaching experiences of 14 weeks, which exceeds the current requirements by New York State Education Department. During student teaching, our assessment criteria align closely with those utilized by the NYCDOE for evaluation of classroom teachers. The combination of coursework at Hunter, purposeful clinical experiences at three levels, and focused support from our faculty and mentor teachers helps ensure that teacher candidates who graduate from Hunter College are well prepared as classroom teachers to serve New York City Public Schools.

At the HCSOE, we are deeply committed to educating professionals who are prepared to meet the opportunities of teaching our schools' diverse population and approach this commitment in several ways.

All teacher education students are required to take courses in special education and the social foundations of education, which cover multicultural education and teaching in ways that are responsive to the diversity in our teacher candidates' future classrooms. Our students also take coursework in child development that covers not only children's cognitive and physical growth, but also their social and emotional learning, first and second language acquisition, and other topics especially relevant to the diversity in our city. Finally, to support the linguistic diversity present across New York's schools, the HCSOE offers bilingual programs in Spanish, Chinese, and French for Early Childhood and Childhood Education teachers, counselors, and school personnel who want to be prepared and certified to work with their dual language students.

This curriculum serves as the basis for our many partnership programs with districts and organizations, and specifically, in our work with the NYCDOE, since effectively serving students by supporting their diversity across race, language, disability, and other categories is our shared goal and mission. We have worked with the Teaching Fellows program for over a decade, supporting over 2,000 students as they became teachers and grew as professionals in special

education, TESOL, and bilingual education programs. We worked to prepare more early childhood educators to respond to the Mayor's universal pre-K initiative, and we work with current teachers to enhance their math knowledge to more effectively teach students in the Algebra for All initiative - a critical entryway to achieving college readiness.

HCSOE also engages outside experts for short term work with our faculty and students to advance our understanding of how to teach in ways that support all NYC students. Over the past two years alone, Dr. Django Paris, a national expert in multicultural education, Dr. Marianna Souto-Manning, whose research examines how to address inequities through early childhood education, and Dr. Sonja Nieto, who has expertise in the education of students of culturally and linguistically diverse backgrounds, have come to Hunter to hold workshops and lectures that supplement our coursework and provide distinct learning opportunities for our students, faculty, and current school teachers.

In addition to supporting the children in the NYC public schools through producing high quality professionals, we also recognize and believe in the importance of recruiting and supporting teachers who reflect the diversity of our city. The HCSOE has a campus chapter of the Mayor's NYC Men Teach initiative, whose specific mission is to recruit and unite Black, Latino, and Asian men committed to educating the city's diverse population. We also have been awarded a 2nd round of funding from the New York State Education Department for a Hunter Teacher Opportunity Corps (TOC) to increase the participation of historically underrepresented individuals in teaching careers and to prepare teachers to address the learning needs of all students. As a result of our efforts, 54% of our students in teacher preparation programs identify as non-white; whereas, the national average is approximately 20%.

I'd like to conclude my comments with two brief examples that illustrate our work.

In learning method for teaching literacy, our Childhood Education students go into their students' neighborhoods to identify literacy examples in the local community. Our teacher candidates then reflect on what they learned about the literacy resources across different communities, and how that knowledge helps teachers support literacy development.

Finally, I'd like to share the story of a Hunter graduate whose family immigrated from Afghanistan. He was a NYC public school student who attended Hunter College. He dreamed of being a teacher because he felt he could understand the struggles of many of the City's

students. He was recruited to and applied to our master's program, receiving support from the NYC Men Teach initiative. With our support, he successfully completed his degree and is now a 2nd grade teacher in an elementary school in the Bronx. Last week, he brought his young students to visit Hunter College, because he wants to give them the dream of higher education and to show them how their work in his classroom is an important step on that journey.

Hunter has been preparing teachers for this great city since 1870. As we enter the second half of our second century in operation, I am proud I can speak for our faculty and staff and say to the Council that we are more committed than ever to ensuring that New York City's children all have a well-prepared, effective educator to guide their development. High quality public education from pre-K through graduate school has been - and will continue to be - the engine driving the incomparable success and unending dynamism of the City of New York.

Thank you.

One-Shot Miracle Solutions Won't Improve Our Schools
Alan Singer, Hofstra University catsajs@hofstra.edu

I am a former New York City high school teacher and a teacher educator at Hofstra University on Long Island. Many graduates of our School of Education become New York City teachers. Speaking today I represent my views but not the views of the university. We need to dispel some myths about education and teacher preparation.

1. Education and teacher preparation are not miracle cures for massive social upheavals. We can make our schools better, but that will not address the over 100,000 New York City school children that are homeless at some point during the school year, the interrupted education of many young people arriving from war zones, the deterioration of public housing, gentrification that produces overcrowding and general economic distress in poorer minority communities.
2. Initial teacher preparation in a School of Education is not like a one-time vaccination good for the rest of someone's career. At the completion of student teaching, a graduate of a School of Education program is only a certified beginner. The problems described in the call for this meeting, especially better instruction for students with disabilities and English Language Learners, means an investment in ongoing teacher staff development and daily time set aside for planning teams to coordinate how they will address student learning needs.
3. One teacher in a classroom is not sufficient. New York City needs to hire more teachers. New York State recommends but does not mandate inclusion classes with two teachers in the room. Only specifically designated classes with a high number of students with registered disabilities have an additional teacher in the classroom. Given the large number of struggling students, 15% are English Language Learners, more than 20% have IEPs and many more require 504 support, more than half score of the 3rd through 8th grade student scored less than satisfactory on Math and reading tests, almost every classroom needs a second teacher whether students are classified ELL or with disabilities or not.
4. Charter schools are not a solution; instead they are a big part of the problem. Charters are permitted to hire untrained, uncertified people and call them teachers, undermining teacher preparation and Schools of Education. The Charter chains run a Peace Corps type operation, recruiting people from elite colleges, predominately white, who want a New York City experience, who follow scripts and then leave before learning how to teach. Meanwhile the charters draw off better performing children from the public schools and they have been documented either refusing to offer special services to students with disabilities and English language Learners or counseling those children out of their programs.
5. High-stakes multiple choice qualifying tests for teacher certification do not improve the quality of teaching. Instead, they block potentially excellent minority candidates, especially people who were English Language Learners themselves, from the teaching profession. Drop the tests. Let Schools of Education prepare and evaluate candidates.
6. Politically connected alternative certification programs, including charter school options, Teach for America, and Teaching Fellows, are the Uber of education. They look good until the consequences become clearer. They circumvent efforts by city and state officials to improve teacher preparation and many of the people they put in the classroom prove to be temporary.
7. If New York City wants to increase the number of minority educators, it will have to make teaching more financially attractive for people from lower income families. Provide opportunity scholarships and forgivable loans for local high school graduates that cover living expenses for college students who commit to teaching in New York City schools in high needs communities and specified certification areas. Salaries must go up significantly. A one-bedroom apartment in a less desirable area of Brooklyn rents for \$2,500 a month or \$30,000 a year, more than half of a starting teacher's salary.

It will not be easy to address these problems. A useful start is to at least recognize the depth of the difficulties and the cost of potential solutions.



Office of the Dean

Leading and Learning from Praxis: Serving with Compassion

Good Afternoon, Chairs Mark Treyger and Inez Barron, and Council members of the Committees on Education and Higher Education.

My name is Jacob Easley II, Dean of the Graduate School of Education, Touro College. I am providing testimony today in regards to the quality of educator preparation in higher education, particularly related to the diversity of the teacher workforce and meeting the challenges of New York City's hard-to-fill licensure areas and classrooms. Touro College, as a stand-alone institution, is on record for preparing the largest number of Special Education teachers hired by NYCDOE along with teachers in other high needs areas. We are # 9 in the nation, according to Diverse Issues in Higher Education, for graduating minority master's level students; and lastly, a recent report by The Education Trust reveals that our graduates have a Student Achievement Growth Rating above the overall NYCDOE teacher workforce.

I am a professional educator and advocate. As Dean representing an average annual enrollment of more than 2,400 educators and 20,000 + alumni, my colleagues and I work tirelessly to ensure that our state's educator preparation programs prepare effective teachers who positively impact P-12 student learning and development. I am also a former classroom teacher. I am certain we all agree that educational quality is a premium. It is important that we work together to forge sound legislation and practices that are evidence-based, lending themselves to practical implementation that improves the profession. Touro College continues to partner with NYCDOE and stands ready for deeper and more sustainable articulations. That said, I respectfully share the following concerns and recommendations regarding quality educator preparation; partnerships for innovation and teacher diversity; data sharing for continuous improvement; and ongoing advisement for evidence-based and responsive legislative action.

Quality Educator Preparation

Educator Preparation Programs (EPPs) among our public and private institutions of higher education are held to a high standard for program quality and continuous improvement. Our programs undergo professional evaluation for registration and approval by the New York State Education Department. Additionally, state statute requires a comprehensive performance review of programs in the form of national accreditation, currently on a 7-year cycle. National accreditation ensures that our

programs are accountable for the quality and standards-based content and clinical practice, collaborative partnerships with school districts and other community stakeholders, overall efficiency, and measurable impact on P-12 student learning.

Our EPPs are accountable to the public. Programs provide an annual report as part of the US Secretary of Education's Title II reporting on program effectiveness. More than 90% of New York's teachers are prepared by the state's nationally accredited higher education programs that are highly regulated by the NYSED, our professional accreditors, as well as the Middle State Commission on Higher Education as part of our broader institutional accreditation.

It is an unfounded belief that EPPs overall are of poor quality and lack public accountability. For individual institutions that do not meet state and/or national expectations for effectiveness, they must be identified, supported and or sanctioned by following state policy.

Teacher Diversity and High Needs Areas

There are numerous advantages of a culturally, linguistically, and racially diverse teacher workforce, and research continues to unfold the benefits on student learning, particularly for historically marginalized groups, as well as school culture.

Like many of our peers, Touro College has established a strategic plan to identify, recruit, and develop talented minority and linguistically diverse teachers for New York City schools. We have learned that to be successful in this arena, collective efforts among universities, schools, their districts, and other stakeholders are required. Legislative, financial, and curricular programming must align to achieve the desired results of teacher parity. Innovation is also a key ingredient to ensure a quality teacher pipeline. For example, collaborative grow-your-own initiatives to advance the careers of New York City's more than 28,000 paraprofessionals are just one example of capitalizing on the city's culturally diverse communities and their adult workforce.

Data Sharing for Continuous Improvement

Continuous improvement is essential for agile and sustainable systems for the advancement of the profession. The potential for effective improvements is hindered by the lack of systematic and ongoing data sharing between NYCDOE and educator preparation programs. As EPPs are accountable to the public by way of national accreditation, we are significantly handicapped in our ability to fully meet the market and educator quality needs of the city with limited access to or difficult-to-mine data on the effectiveness of our graduates at disaggregated levels.

We must work together to reverse this impediment.

Ongoing Advisement for Evidence-based and Responsive Legislative Action

On too many occasions well-intended legislation has yielded unintended consequences that create barriers to innovation and access to quality programs for talented teacher aspirants. Additional costs for licensure to a tune of \$1,000 or more, in some cases, and increased course credit hours for graduation are two examples of unintended consequences. These barriers are real. They directly affect the ability to recruit a talented and diverse teacher pool.

In a national study by the American Association of State Colleges and Universities, 40% of deans indicated that state departments do not regularly consult their peers across the state on policy issues. While we are appreciative of this forum, the sentiment is not all that different at the local level concerning communication between EPPs and regional school districts.

Research also informs us that a P-12 student's achievement is influenced by factors other than an individual teacher to include school factors, home and community support or challenges, individual student needs and abilities, and prior teachers, to name a few. To best address these factors, along with the unintended consequences that result from a lack of coordinated consultation, we ask that this Council of Committees seek to formulate a standing advisory group consisting of EPP representation from public and private institutions, the teachers' unions, and other key stakeholders. Such a group, working together to mitigate access and other barriers, is needed to inform policy and practice for innovation in educator recruitment and quality preparation related to the needs of hard to staff areas, schools serving marginalized communities, and all learners.

Honorable Members of the New York City Council
Committee on Education
Committee on Higher Education

June 24, 2019

**Testimony from Prepared To Teach:
Sustainable Funding for Quality Teacher Preparation, Bank Street College**
Dr. Karen DeMoss, Executive Director

Thank you for the opportunity to provide testimony to the New York City Council on the critical issue of teacher preparation and diversity in the City's schools. Our project, Prepared To Teach: Sustainable Funding for Quality Preparation, housed at Bank Street College, works nationally to address underlying economic challenges in the teacher preparation sector by developing new residency partnership approaches for school district and teacher preparation programs around the interconnected issues of novice teachers' capacity to teach all children well and broader questions of teacher diversity.

The Importance of Teacher Quality and Diversity

The New York City Council has importantly and appropriately highlighted both novice teacher quality and the recruitment and retention of diverse teachers as core issues for the New York City Department of Education (NYCDOE) to be able to teach all students well. Novice teacher quality matters because decades of research show that first-year teachers have a harder time supporting strong learning outcomes in students compared to their more experienced peers. They also are more likely to be employed in schools serving students from low-income backgrounds and/or students with a range of more demanding social, emotional, and academic learning needs. Thus, their first year(s) as less effective educators disproportionately affect those students who most need strong educational experiences in order to realize their potential, including students identified with special educational needs and emergent bilingual students.¹ Given the connections between teacher quality and student outcomes, students taught by novice, less effective educators would also be expected to be more frequently referred to special education, more likely to need remediation, and less likely to be "on track" to progress through the system college and career ready.² In addition, new teachers who struggle are more likely to leave the profession, creating a churn of continuous streams of novice teachers in the very schools that the City invests deeply in for professional development and school improvement. Those investments walk out the door when novice teachers leave, and children are once again taught by another novice teacher underprepared to support their success.³

Diversity in teaching—both the representation of a full range of diversity in the teaching force and individual teachers' skills to effectively support students representing the full range of diversities—is also crucial. Because of the increasingly diverse student needs in our schools, including for emergent bilingual, special education, and trauma-affected students, coupled with the socio-cultural differences that reflect the lived reality of individuals within and across communities, novice teachers should have mastered a host of pedagogic, content, and learning sciences knowledge and skills

before teaching the City's students. In addition, students should have access to visibly diverse individuals, since having a single teacher who visibly and culturally represents one's background in elementary school actually serves as a protective factor for students of color, increasing the likelihood of high school graduation even without any other intervention.⁴

Quick-Entry Programs: A Policy Solution with Detrimental Consequences

Since the passage of the No Child Left Behind Act in 2001 (NCLB), states have been encouraged to open alternative pathways to the teaching profession. The argument for the shift held that preparation barriers kept potential high-quality teacher candidates out of the profession, so loosening requirements would yield a stronger teacher pipeline.⁵

In terms of diversity, there is some evidence that higher proportions of candidates of color do enter teaching through alternative pathways compared to traditional pathways. For example, the federal 2018 State Title 2 Data on teacher preparation show that, in New York State, only 29% of teacher candidates in alternative programs were reported as white, while 46% in traditional programs were. Whether this trend has been positive or not, though, is contested because of high turnover rates from alternative programs.⁶

In fact, the percent of teachers entering through alternative pathways has grown since NCLB from 8% to over 30%, but little evidence indicates this sector shift improved outcomes for students.⁷ Teachers entering through alternative pathways are less effective than traditionally prepared teachers. They are much more likely to teach in hard-to-staff schools and in schools serving students from low income backgrounds and/or students with multiple social, emotional, and academic needs. Despite often heroic efforts to succeed with their students, enabling some alternatively certified teachers to succeed with students at roughly the same level as traditionally prepared teachers, alternatively certified teachers feel less efficacious compared to their traditionally-prepared peers and leave the profession more quickly, including from programs tailored to meet district needs, such as the New York City Teaching Fellows.⁸ Teachers of color prepared in these alternative routes appear even more likely to leave the profession early, undermining the positive outcome of increased diversity that has been attributed to more readily available alternative entry pathways to the profession. As one of the national Prepared To Teach partners has noted, the recurring churn feeds a cyclical pattern of quick-entry/quick-departure that may do more to undermine public confidence in teaching as a profession and to create a permanent need for intermediary organizations that support alternatives than to address teacher quality and diversity issues.

The Importance of Clinical Practice

As with any other profession that requires practitioners to make complex decisions in situations defined by unique contextual and individual factors, becoming an effective teacher requires practice—specifically, linking the ever-growing knowledge base on human development, learning sciences, and effective pedagogy with guided, supervised practice that enables deep critique and reflection.⁹ In fact, it is the clinical practice portion of preparation that creates the link between questions of quality and diversity. Without strong clinical practice before they become teachers of record, novice teachers are less effective than they could and should be. When novice teachers of color are among those who are underprepared, they are more likely to leave the profession.¹⁰

Pharmacists, architects, doctors, engineers, hairdressers, nurses—all these professions require a minimum of 1500 hours of meaningfully supervised professional practice in New York before aspirants are allowed to operate independently. For teachers, though, alternative routes allow individuals to be hired as the teacher of record with as little as 40 hours of pre-service work in a classroom, often unsupervised. Federal data indicate that alternative programs average 90 hours of practice before being hired, and traditional programs average over 500.¹¹ While still much less than the level of required practice for entry into other professions in New York, traditional programs provide candidates with much more extensive opportunities to build their skills. Graduates from these programs more likely to stay in the field as teachers, reducing turnover costs that run into the billions every year.¹²

Without supported, extended clinical practice before becoming a teacher of record, aspiring teachers have insufficient opportunities to master the complexities of teaching and learning, to practice applying the growing knowledge base of how children and young adults learn, or to reflect on how to adjust their practices to address all students' needs. They lack the time to learn and to apply research-based practices that support students with exceptional needs and emergent bilinguals. They have to rush through important concepts around relationship building, trauma-informed care, and culturally sustaining practices. Learning to teach takes time, and the City's students should not have to learn under teachers who themselves have not had the opportunity to learn to teach.

Economic Barriers

Addressing the opportunity to learn gap for future teachers is largely an economic issue. Most aspiring teachers have a hard time pursuing their teaching credentials because their required clinical practice is unpaid. Other professions allow entrants means to earn money while in supervised training, but teachers have historically been required to do their full-time, semester-long student teaching for free. That reality creates strong incentives for candidates to enter through quick, cheap pathways since fully 40% of undergraduates and 76% of graduate students work full time while going to school, and 20% of students who work have dependents.¹³ They cannot afford to quit working during clinical placements.

These economic realities are even more prominent for candidates of color. Recent national data shows that candidates of color enrolled in teacher preparation programs come from families making under \$45,000 a year—less than half that of white candidates.¹⁴ To ensure novice teachers are well prepared to teach and reflect the full diversity of the City, we must find ways to minimize the financial barriers to entering the profession through strong preparation pathways that set novice teachers up for success with all the students in the system.

Mutually Beneficial Partnerships for Quality Teacher Residencies: Changing the Landscape

Through this hearing, the City Council asks an important question of how the New York City Department of Education is working with teacher preparation programs to address the City's need for better prepared and more diverse candidates. The NYCDOE and its partners can point to many examples of high-quality partnerships that reflect the kinds of preparation opportunities and focus on areas of high need for the City's new teachers. We applaud these efforts, and Bank Street College counts itself among such partnerships with the NYCDOE. This summer, we are launching a new TESOL certificate residency program, which will prepare new, highly qualified teachers for

the City's emergent bilingual students in collaboration with the Internationals network and other public schools. Candidates will have a full year of teaching alongside and accomplished licensed teacher, while being supported with aligned, deep learning and reflection associated with Bank Street's program. Evidence shows that residency preparation is even stronger than traditional preparation options that rely on student teaching for clinical practice, improving outcomes for students who have residents alongside their regular teachers in the classroom and also for future students. Residency-prepared teachers stay in the field longer—70% to 90% remain in districts five years into their careers, compared to 30% to 60% from other kinds of programs. Their stronger preparation allows them to be successful; their success gives them self-efficacy in their work; self-efficacy increases retention; and retention continues to improve their skills.¹⁵ When residencies are funded, such opportunities are available not only for those who can afford to work for a year for free, but for all aspiring teachers.

Most of the residency programs that are currently available in New York City are either unfunded or are not sustainably funded, that is, partnerships have to raise money to support candidates. Prepared To Teach is working with teacher preparation programs across the country, and many across New York City and State, to address the challenge of making sure that the highest-quality preparation is affordable for all aspiring teachers. Without addressing the underlying economics of teacher preparation, we cannot solve the challenges of novice teacher quality and teacher diversity. Our project is dedicated to addressing this problem in partnership with the CUNY, Independent, and SUNY sector preparation programs that work with the New York City Public Schools.

These partnerships work closely with school-building principals to explore how they can design a residency program where teacher candidates have meaningful roles in schools where they both can engage in the formative learning they need to become strong teachers and serve some of the time in positions that schools already pay individuals to fill, such as substitute teachers, tutoring, and teaching assistant roles. By designing residencies so that cohorts of residents are placed in the same schools, economies of scale become available to both the school and the preparation program, allowing partnerships to braid resources and reallocate dollars already being spent in current programs to more effective residency programs. Some partnerships have also discovered that tighter alignment between the preparation program and the residency placement not only deepens learning, but it also affords opportunities to streamline formal coursework, since learning is more efficient when it is directly applied to practice.

Developing these models requires time on the part of both the preparation program and the school and/or district personnel. Many partnerships across the country, including in New York City, are currently national leaders in showing what this kind of work can accomplish. For example, here in New York, the College of Staten Island has partnered with PS 45 in District 31 for the last year to design a residency where 8 candidates will be provided \$15,000 for the year out of current NYCDOE operating budgets. The Union is also a partner in the work, as the model develops and supports effective, diverse teachers.

These small pilots are only the start. There are nearly 50 institutions of higher education that place teacher candidates in the City, and at least half of them are ready to begin conversations and

planning for how to partner more deeply with the NYCDOE to design and invest in residencies that their candidates can afford. As the sole organization nationally working directly on this economic barrier to residencies, Prepared To Teach understands that developing more sustainably funded models requires investments, not only for candidate stipends in high-cost-of-living areas to ensure a strong pool of residents, but also investments in the partnership development conversations that will help transform the teacher preparation sector and its district partners into true collaborators that bring their strengths to bear on this crucial need for change in how teachers enter the profession. They should have more, not less, of the deep learning that preparation programs offer. They should have more, not less, time learning under an accomplished teacher. And they should be able to afford to become members of such an important part of our nation's democratic fabric: Teaching.

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Tom Sheppard

Parent Member - CEC 11

Good morning. I would like to thank the committee for affording me the opportunity to testify before you. My name is Thomas Sheppard, and I am a dad to 6 children, 3 of which are current students in NYC Public Schools. I am a Parent Member of the District 11 CEC, and an Education Advocate in the Bronx. As a parent, I have been advocating for issues of equal access to education for families in my community for several years. Among those is the issue of insuring that all of our schools, and especially those in our most underserved communities in the Bronx, have access to highly qualified teachers.

Schools in the Bronx in general, and District 11 in particular, have well over 90% Black and Latinx student populations. In District 11, our students and families represent cultures from the Caribbean, Central and South America, Africa, the Middle East, Eastern Europe, Asia, and various places throughout the United States. With these cultures come with many different languages, customs, and traditions.

With the richness and diversity in our community also comes very big challenges. The chief among them is poverty. Physical inequities such as food, housing and economic insecurity; underfunded and dilapidated Schools and social inequities such as the Schools-To-Prison Pipeline exist in part because of the lack of teacher development in our community. For example, student achievement is directly linked to the curriculum that educators are responsible for teaching to our children. If educators are unprepared to teach that curriculum, then student achievement declines, and the achievement gap widens. The implementation of the Common Core Standards is a prime example of this. Teachers were almost completely unprepared to teach this curriculum, and every measure of student achievement reflected it.

A priority of Chancellor Carranza is the implementation of a Culturally Responsive and Sustaining Education for all NYC Public School Students. A successful implementation of this type of education model hinges on teachers being prepared to teach it. And not in a haphazard way, but in a deliberate and planned way that includes giving our schools and teachers the resources they need to do this in a way that does not repeat the mistakes of the past.

While this committee cannot address all of the social and economic barriers that exist in our community, it can address the barriers that make it extremely difficult for our children to receive the education they need to transcend poverty and have a better life as adults.

Again, I want to thank the committee for allowing me the opportunity to testify. I will be happy to answer any questions the committee may have for me in response to my statement.



Testimony by Educators for Excellence-New York
Members & Executive Director Paula L. White on
Teacher Preparation and Training

Prepared for the New York City Council Committees on
Education and Higher Education

June 25, 2019

Good afternoon - and thank you Committee Chairs Treyger and Barron and the members of the Committees on Education and Higher Education for hearing my testimony today.

My name is Paula L. White. I am the Executive Director of Educators for Excellence-New York, an educator-led teacher advocacy organization with over 14,000 New York City public school teachers as members. Teacher preparation and training is one of many issues that you are called to focus on, but it is of paramount importance to educators. As a former teacher and school improvement leader, I know that teachers want us to get teacher training right, and students need us to get teacher training right. Teachers choose the profession for the best of reasons and so we owe the best to them in return. But so far, that's not what they've got.

That is why over the last year, E4E-New York members came together to select teacher preparation and professional development as the next critical issues to address. A team of 23 educators developed a series of recommendations and published a paper, *Ready for Day One and Beyond*, on how the city and state can ensure that all teachers entering our classrooms are prepared and continually supported throughout their career.

The New York City Department of Education hires approximately 6,500 new educators yearly but they overwhelmingly do not share the backgrounds of the students they are teaching. Eighty-three percent of city students are students of color compared to 39 percent of teachers. Almost 20% are students with disabilities, and the city's student population is one of the most linguistically and socio-economically diverse in the country.

New educators are expected to meet the needs of these students, but in far too many instances, inadequate preparation and poorly designed field experiences fail to equip them to do so. It doesn't have to be this way. When New York City and New York State policy makers prioritize fixing these problems, educators will be ready for day one in the classroom.

Today three Educators for Excellence-New York members will share their personal experiences that underscore why the recommendations our members are proposing are so critical for driving improvement.

Phillippa Bishop-Alexander, a middle school educator in Brooklyn, will tell you why the New York City Department of Education must invest in partnering with and incentivizing teacher preparation programs to train more excellent teachers of color to work in our schools.

Rachel Fishkis, a high school English teacher in the Bronx, will share her experience in a teacher residency program and how the expansion of such programs will ensure that educators bring extensive classroom experience to their first official day leading a classroom.

Finally, Dan Gannon, a high school social studies educator in the Bronx, will talk about his experience preparing to become an educator and how the City and State must push for better results and support from teacher preparation programs.

These teachers' stories are not unique. Rather, they serve to amplify the voices of many in their profession who are not here with us today. .

Our members' February 2019 report, *Ready for Day One and Beyond*, has been submitted to the Committees for your consideration. We know what works, and we're here to help. As you

move forward, E4E stands ready to provide additional testimony and connection with educators in the field.

Thank you.

Testimony by Phillipa Bishop-Alexander
Brooklyn Middle School Educator
Concerning improving teacher workforce diversity

Good afternoon - and thank you Committee Chairs Treyger and Barron and the members of the Committees on Education and Higher Education for hearing my testimony today.

My name is Phillipa Bishop-Alexander and I am currently an educator in Brooklyn. I am here to highlight and elevate an issue that teacher preparation programs can and must be a part of the solution to: the diversity of our City's workforce.

I moved to New York City as an immigrant when I was eleven years old and I have spent my time as either a 17-year veteran educator in New York City Public Schools. I am proud to be both a product and a part of our public school system.

When I moved to this City, I was alone without the support of my parents. Neither of my parents knew how to read or write, but they instilled in me at an early age that my education was the most important thing for me to pursue in my new home. I threw myself into learning.

Luckily, I had teachers, coaches, and counselors at my New York City Public School that became like a family to me. They were a dynamic group of educators who showed me the beautiful complexity and uniqueness of humanity - lessons that cannot be taught, but come from knowing someone deeply.

Unfortunately, in one of the most diverse cities in the world, nearly all of my teachers were white. The beautiful complexity of humanity I learned in New York City Public Schools was missing a crucial aspect - teachers of color. Teachers that looked like me.

As I grew older, I started questioning why the leadership in my classrooms lacked the racial diversity I saw in the rest of the City. Those questions led me to becoming an educator myself.

As a veteran educator, I now get to see how having a diverse school staff impacts all students. When a teacher shares a similar background to a student they are able to infuse that shared experience into the curriculum and learning experiences we provide students. And, studies back this up. Johns Hopkins found that black students who have just one black teacher in elementary schools makes them not only significantly more likely to graduate high school, but also enroll in college. Despite these advantages, our City's teachers workforce is only 39 percent teachers of color - while our student population is an incredible 83 percent students of color.

New York City can make a difference. Every year New York State prepares nearly 10 percent of all American educators and our City recruits and hires thousands of new educators into our schools - enough new educators to staff up entire school districts in other cities. I believe that if the New York City Department of Education uses its power as the largest employer of educators in America to partner with teacher preparation programs that are excelling at not only recruiting and enrolling future educators of color - but also preparing them to be the excellent educators, the statistics I shared with you would shift dramatically..

If the New York City Department of Education sets the expectation that programs that prepare educators to teach in New York City Public Schools have plans, strategies, and a focus on recruiting great teachers of color - we can begin to close the educator racial diversity gap in

New York City and across the country and more little girls like me will have teachers at the front of their classrooms who look like them.

We have that power. It is time for us to make it a priority.

Testimony by Rachel Fishkis
Bronx High School Educator
Concerning expanding teacher residency programs

Good afternoon - and thank you Committee Chairs Treyger and Barron and the members of the Committees on Education and Higher Education for hearing my testimony today.

My name is Rachel Fishkis and I am a high school teacher in the Bronx. Today I'd like to talk about how the city can ensure every educator is ready on day one by promoting and growing teacher residency programs.

When I entered my classroom in 2015 as a full-time instructional leader I walked in with two years of instructional experience under my belt. That was thanks to my participation in the Blue Engine/RELAY Graduate School of Education Residency Program - a program that partners with the New York City Department of Education to provide future educators the experience of becoming an educational leader through real-world, in-school work as an educator.

Traditional preparation programs place a heavy focus on theoretical coursework that often feels disconnected from the realities that teachers face when they enter the classroom for the first time. Despite this emphasis, Educators for Excellence-New York found in a survey of New York City educators that only 29 percent reported feeling "very well" prepared to provide rigorous instruction as a first-year educator. Furthermore, the vast majority of preparation programs in the State of New York provide limited classroom experience to future teachers - and that experience is often in classrooms that do not reflect the range of socio-economic, racial, and ability diversity that is typical in a New York City public school.

In the first year of my residency I worked to support an experienced teacher and taught full-time as a small-group instructor. I was able to grow and continually receive feedback from excellent educators at my school. In my second year, I continued as a small-group instructor, but started taking graduate school coursework and began lead-teaching certain classes. Like any good educator, they were able to support me as I grew in instructional confidence and gradually release me into additional responsibilities as an instructor. My role in the classroom continued to grow - while still being supported by a mentor who gave constant feedback - until I was nearly a full time classroom leader. My classroom was a classroom.

From the first day of my residency I was in classrooms and supporting students with disabilities, students who are learning English as a new language, and students representing the incredible diversity of our City's schools. On my first day as a full-time educator in 2015, I was neither shocked nor overwhelmed by the complexities of teaching in New York City Public Schools because I had two entire years of experience that prepared me to be a successful classroom leader. Throughout that first year, my colleagues were often surprised to learn that I was a new teacher. "This doesn't seem like your first year!" they would tell me--because, thanks to my residency training, it really wasn't.

In our neighborhoods with the most students of color and highest rates of poverty nearly 25 percent of educators have less than three years of experience - compared to just 15 percent in communities with more white, affluent students. That means the teacher burnout and turnover in these schools is a very real problem. Because of my experience in a residency program, my first years in the classroom were not spent on the exhausting exercise of attempting to marry the pedagogical theory provided by most preparation programs with the realities of teaching.

Instead, thanks to my practical residency training, I was able to confront the majority of the challenges of being a new teacher and I was able to dodge the early career burnout that afflicts so many of my more traditionally-trained peers. I am proud to say that, thanks to the solid foundation provided by my residency experiences, next year will be my 6th year at the same school, and I plan to continue teaching in the Bronx for as long as possible.

Because of New York City's size and number of new teachers it hires each year, it can play a significant role in financially investing in growing and expanding teacher residency programs. By creating in-house programs or partnering with high-quality organizations, the New York Department of Education can ensure that every new teacher walking into our schools is ready on day one.

Thank you for your consideration and I look forward to partnering with you to ensure that more educators are able to experience the quality training I received in my teacher residency.

Testimony by Dan Gannon
Bronx High School Educator
Concerning holding teacher preparation programs accountable

Good afternoon - and thank you Committee Chairs Treyger and Barron and the members of the Committees on Education and Higher Education for hearing my testimony today.

My name is Daniel Gannon and I am currently a high school educator in the South Bronx. I would like to speak with you today about the need to hold our teacher preparation programs accountable for being transparent and providing a high-quality education to New York City's future educators. Our future teachers, and most importantly our future students, deserve the improvements I am speaking to you about today.

I was trained as an educator in a graduate education program based in Westchester County. At the time I had no reason to doubt the quality of the preparation I was receiving. I had just finished my undergrad degree and chose to stay at my school because it seemed good enough and would certify me in the field I wished to teach - high school social studies.

It was only until well into the program that I began to see some of its flaws. The program included two portions of in-classroom experience - a 2 week internship at a school and a 12 week formal student teaching experience. Neither opportunity provided me the chance to work extensively with a diverse group of students but what was most disappointing was that half of my preparation experience was spent in a classroom that did not align with my certification area..

Finally, when it came time to search for a job the messaging from my preparation program was explicitly - "go cut your teeth in the city for a few years and then come back to Westchester." That was the extent of the job placement support I received. Now, as a veteran teacher, I am able to see how this sort of advice creates a system where brand new teachers with minimal experience are funnelled to our most high-need schools to merely leave after two to three years and return to classrooms that are coded as "easier" to educate. Often we look to schools to solve high teacher turnover, but the reality is that educators are being embedded with the expectation that short stints in high-need schools is the norm before they even step foot in a classroom.

I rejected that advice and I continue to proudly work in the South Bronx nine years later. My experience led me to joining the Educators for Excellence-New York educator-led policy team focused on improving teacher preparation. I believe that the New York City Department of Education and the New York State Education Department must require that preparation programs that prepare teachers for our public schools be transparent with the experience and outcomes they produce for educators.

Right now in New York, an aspiring educator has no access to any information about teacher preparation program outcomes. There is no public data about the demographics of program participants, where and what type of schools graduates end up teaching in, what are their average salaries, what certification areas do educators graduate and begin their career in, or how long their graduates remain in education. All of these helpful data points are easily accessible in New Jersey and many other states, but not in New York.

With the sunlight of additional preparation program transparency, educators like myself can make informed decisions about which preparation program fits the type of educator they wish to become. Ideally, I could have selected a program that has real-life training experience, high rates of graduation and placement in communities like the Bronx - ensuring that I was ready on day one of my teaching career to help my students get the type of education they rightfully deserve. Being a teacher is already an extremely difficult job to do, but improving our preparation programs by becoming more forthcoming with information about these programs should only help educators start their careers on a strong foundation and put the best prepared professionals in front of our students on day one.

Thank you for hearing my testimony.

READY FOR DAY ONE AND BEYOND



83%
of students
are students
of color



39%
of teachers
are teachers
of color

WE AS EDUCATORS RECOMMEND

Increase Educator Workforce Diversity

The New York State Education Department (NYSED) and the New York City Department of Education (NYCDOE) should substantially invest in the diversification of New York's teaching workforce.

The diversity gap between New York City's teaching workforce and its student population is deeply concerning to us as educators — while 83 percent of the student population are students of color, less than half that number are teachers of color.¹ Studies show that children of color and students from low-income households who have at least one teacher of color are significantly less likely to drop out of school and more likely to attend a four year college.² The academic benefits that teachers of color provide all students are clear. As such, we must prioritize the recruitment and preparation of an impactful teacher workforce that more closely mirrors our student population. Teacher diversity matters.

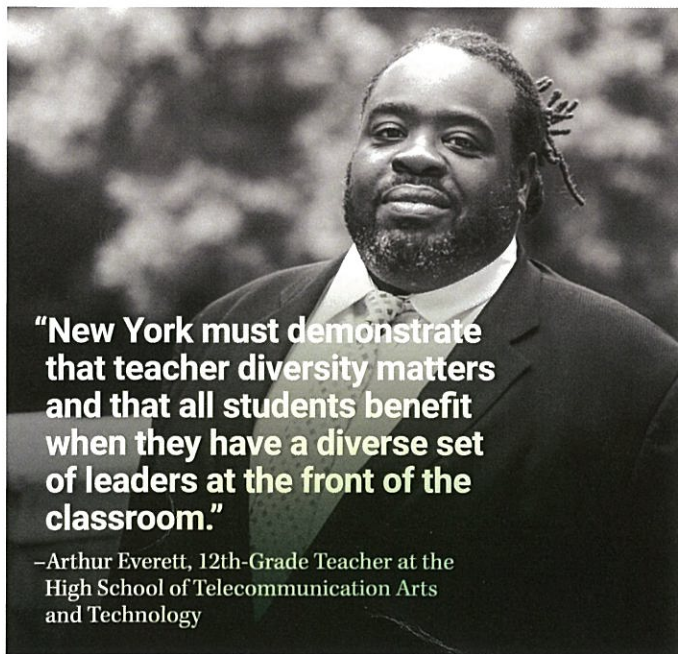
ACTION PLAN

- The New York State Legislature should expand the Teacher Opportunity Corps (TOC), which recruits and supports historically underrepresented and low-income teaching candidates, so that at least 10 percent of incoming New York teachers each year are TOC participants.
- The NYCDOE should commit to recruiting and employing graduates of preparation programs that have shown success in matriculating greater numbers of educators from diverse backgrounds. Additionally, the district and schools should set diversity goals for prospective teacher hiring pools before advancing candidates to later hiring stages.
- NYSED and the NYCDOE should publish yearly reports on educator workforce diversity, initial placement, and mobility within and between school districts over the course of a teacher's career.

WHAT THIS COULD LOOK LIKE

Creating a diverse teacher workforce requires leveraging and expanding successful programs like the TOC, which recruits and trains educators of color. Additionally, the NYCDOE could use its power as the state's largest employer of educators to build relationships with preparation programs that are exceptional recruiters and trainers of candidates of color. The districts and schools should also assess current hiring practices and implement changes to address biases. For example, a school could only move forward with its hiring process when 50 percent of its applicants identify as a person of color, thus increasing the likelihood that talented candidates of color are considered. Many organizations already do this, and it works.³

In addition, reports on workforce diversity would inform stakeholders about the efficacy of these strategies. In 2018, the state budget included funding for a report on teacher diversity, and we need to ensure this report is completed and made public. Tennessee, for example, produces a statewide report on teacher diversity trends and makes recommendations on hiring practices that districts can implement to increase workforce diversity.⁴ Reports at both the state and city levels provide broad trends and localized, in-depth details, as identified by the Education Trust-New York's teacher workforce 2018 diversity report, See *Our Truth*.⁵



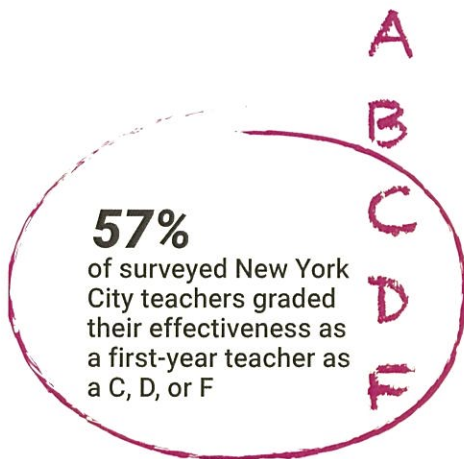
“New York must demonstrate that teacher diversity matters and that all students benefit when they have a diverse set of leaders at the front of the classroom.”

—Arthur Everett, 12th-Grade Teacher at the High School of Telecommunication Arts and Technology

Endnotes

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READY FOR DAY ONE AND BEYOND



Educators for Excellence-New York. (2018). Survey of New York City Teachers.



70%
of surveyed teachers reported a desire that their preparation program would have included a deeper focus on supporting students with disabilities and multilingual students/English Language Learners.

Educators for Excellence-New York. (2018). Survey of New York City Teachers.



57%
of surveyed educators wanted a higher quality field experience in a community that more closely matched the schools they planned to teach in upon graduation.

Educators for Excellence-New York. (2018). Survey of New York City Teachers.



WE AS EDUCATORS RECOMMEND

Grow Teacher Residencies

The New York City Department of Education (NYCDOE) should make recruiting and hiring candidates who participate in yearlong teacher residencies a significant source of educator talent.

Teacher attrition is high for new teachers, and initial teacher performance is predictive of how teachers will fare later on in their careers.¹ Only 29 percent of city educators reported being “very well” prepared to provide rigorous academic instruction upon graduation.² Proactive support for first-year educators will have beneficial effects for them and their students. More than 25 percent of teachers in city high schools with the highest proportion of students from low-income households and/or students of color have less than three years of experience, compared to just 15 percent of teachers in schools with high proportions of white and/or affluent students.³ The data is clear: Our least experienced colleagues are teaching the students who need the most support.

Residency programs work to solve this problem by providing educators with continued coursework coupled with at least one school-year’s worth of classroom experience, overseen by a master teacher, in the type of schools they are most likely to work in after graduation. Furthermore, residencies have long-term impact for students and schools – the National Center for Teacher Residencies estimates that 86 percent of residency graduates are still teaching in their placements in high-need schools after three years.⁴

ACTION PLAN

- The NYCDOE should recruit and hire from yearlong teacher residencies by setting an ambitious goal for the proportion of incoming teachers in high-need schools who are residency graduates.
- The NYCDOE should place New York City teacher residency participants in schools serving high rates of students with disabilities, multilingual learners/English Language Learners, and students from low-income households.
- New York City residency programs should provide residents a living wage.
- NYSED should design a teacher certification pathway that acknowledges the extended training and service gained from residency participation.

WHAT THIS COULD LOOK LIKE

Current student teaching experience provides limited opportunities for classroom leadership with diverse student populations: students with disabilities, multilingual learners/English Language Learners, and students from different racial and ethnic backgrounds. Placing residents in schools that reflect this diversity benefits students by providing the support of an additional classroom educator. In addition, the residents are guided by a master teacher.

But aspiring teachers cannot take advantage of programs they cannot afford. Residency programs must provide a living wage to allow all future teachers, particularly those from low-income households, to live in the community where they work.

NYCDOE currently partners with promising programs that can be expanded, like the Urban Teacher Residency and Bank Street College of Education’s Prepared to Teach. Residents in these programs teach a limited number of classes a week under the supervision of a master teacher, while also completing relevant coursework and receiving ongoing support. Significantly, both programs provide residents with a living wage and offer districts models that are financially sustainable.

We must also acknowledge residents’ skills and experience gained through extended preparation by providing them with alternative means for certification – a process that has been identified as a barrier to new teachers entering the profession.⁵

For more information on these recommendations and updates from the New York City public school teachers behind them, go to e4e.org/oneandbeyond

Endnotes

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READY
FOR DAY ONE
AND BEYOND

WE AS EDUCATORS RECOMMEND

Require Preparation Program Transparency

The New York State Education Department (NYSED) should publicize teacher preparation program outcome data annually.

Prospective New York State educators should have relevant and reliable information about the state's teacher preparation programs, considering that these future educators represent 10 percent of all higher education students in the country.¹ Unfortunately, the state does little to help prospective teachers select a program that is right for them. Like any educational institution, not all schools are the right fit for all students or have the expertise to train future teachers for the classrooms in our hard-to-staff schools. Furthermore, with this data, policymakers would be able to craft and update policies that improve teacher preparation.

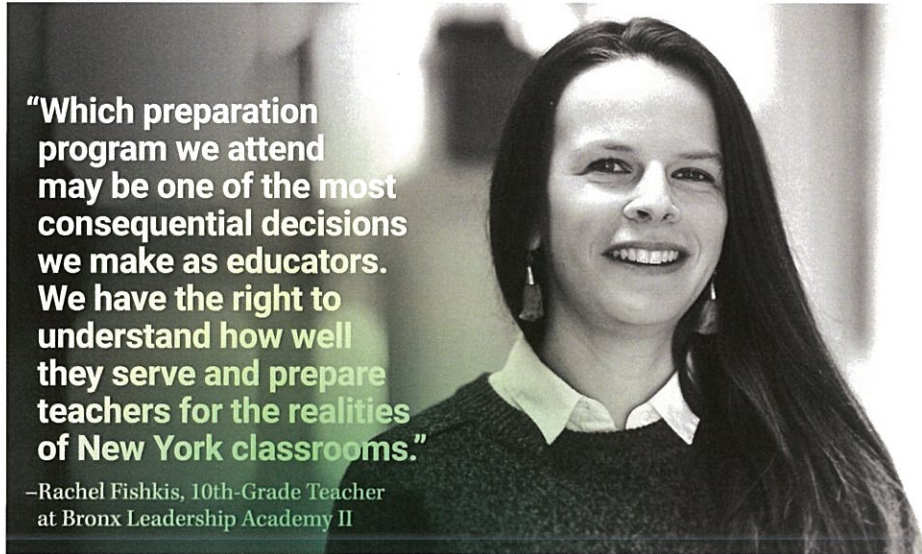
ACTION PLAN

- NYSED should track and publicize preparation program data that includes, but is not limited to: demographic data of students, certification exam pass rates, employment rates (by certification area), graduate retention rates once in the classroom, and the type of schools (e.g. high-need, well-resourced, racially diverse) where graduates are employed.

WHAT THIS COULD LOOK LIKE

Twenty-seven states already make educator preparation program data public.² New Jersey, for example, has a comprehensive website where future educators and policymakers can view program and certification-level data. Educators can see the demographics of enrolled students and graduates, whether or not graduates go on to teach in high-need schools, the hire rate for graduates, and their retention rates once teaching. Providing this information empowers future educators to make informed decisions and gives the public insight into the efficacy of these programs.

This data will provide policymakers and other stakeholders with crucial information on how programs train new educators. Combined with our recommendation that the NYSED and the NYCDOE publish yearly reports on educator workforce diversity, we will have a better view of how educators enter the profession and move throughout their careers.



“Which preparation program we attend may be one of the most consequential decisions we make as educators. We have the right to understand how well they serve and prepare teachers for the realities of New York classrooms.”

—Rachel Fishkis, 10th-Grade Teacher
at Bronx Leadership Academy II

Endnotes

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READY
FOR DAY ONE
AND BEYOND

WE AS EDUCATORS RECOMMEND

Improve Professional Development Quality and Alignment

The New York State Education Department (NYSED) and New York City Department of Education (NYCDOE) should ensure that professional development is high-quality and aligned with students' needs, teacher professional growth plans, and schoolwide Comprehensive Education Plans.

Our students should have instructional leaders who are continuously growing and developing as professionals, but unfortunately there are a number of barriers to quality professional development that meets our individual needs. Requiring teachers to complete 100 Continuing Teacher and Leaders Education (CTLE) credit hours of professional development every five years is often seen as just another box to check. There are countless providers across the city hosting professional development, but the quality varies widely by facilitator and program. And the NYCDOE website meant to help us identify those opportunities lacks the functionality needed to be truly useful.

With additional data and deeper alignment between our professional growth plans and the professional development opportunities, we can ensure our city's educators are continuously learning to meet the needs of our diverse student body.

ACTION PLAN

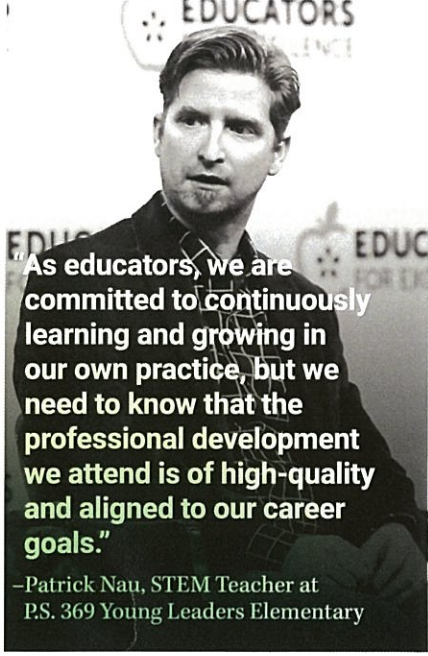
- The NYCDOE should collect program quality data about professional development, including programming provided by schools, the district, the United Federation of Teachers, and other third-party providers.
- The NYCDOE should redesign the "I Teach NYC" website to make it more teacher-friendly and to be the hub for the professional development program data.
- NYSED should ensure CTLE professional development credit hour requirements align with professional growth plans.

WHAT THIS COULD LOOK LIKE

The NYCDOE has made progress identifying what professional development should look like in our schools. However, the NYCDOE does not collect data on the quality of the programs we invest our time and money in every year. Educators should be able to assess the quality of the offerings using an easy-to-understand rubric based on commonly understood descriptors of professional development, like those proposed by the Learning Policy Institute in "Effective Teacher Professional Development."¹ With this data, educators and the NYCDOE will be able to engage in a data-driven process to improve and strengthen the quality of professional development offered in the city.

To ensure teachers have easy access to this information, the NYCDOE should redesign the "I Teach NYC" website so it is more teacher-friendly, searchable, and has filters that allow us to browse professional development trainings by provider, district, content area, and peer feedback data collected from surveys. As an example, District 75 has a website that provides educators with a comprehensive, searchable database of development opportunities that they can sign up for.²

In addition, the state requirement for 100 hours of CTLE credit hours should be meaningful. We are educators. We take learning seriously. NYSED should stipulate that a portion of the hours spent in CTLE professional development align with professional and school-wide growth plans and strengthening curricular infrastructure. The hours spent fulfilling CTLE requirements should focus on supporting students with disabilities, multilingual learners/English Language Learners, restorative discipline and social-emotional learning, and instructional practices relevant to diverse student populations.



As educators, we are committed to continuously learning and growing in our own practice, but we need to know that the professional development we attend is of high-quality and aligned to our career goals."

—Patrick Nau, STEM Teacher at
P.S. 369 Young Leaders Elementary

Endnotes

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**READY
FOR DAY ONE
AND BEYOND**

WE AS EDUCATORS RECOMMEND

Increase Accessibility and Equitable Funding for Professional Development

The New York City Department of Education (NYCDOE) should ensure that all educators have access to the professional development opportunities and the new leadership positions outlined in the 2018 United Federation of Teachers contract.

Oftentimes, we are forced to choose professional development based on cost, sometimes costing upward of \$300, rather than what our classroom needs. And when we can afford opportunities, we must request coverage from substitute teachers. In our experience, substitute teachers often do not report to high-need, hard-to-staff schools because of the perceived difficulty. Without substitutes to cover our absences, we are under pressure not to attend out-of-school opportunities, making it more difficult to access critical professional development.

In addition to growing our practice, we need to grow our careers through leadership opportunities such as those outlined in the 2018 UFT teacher contract. Positions like the Teacher Development Coordinator would benefit the advancement of staff skills and provide additional leadership to veteran teachers. Unfortunately, these opportunities are funded through school budgets that administrators are often unable to afford, effectively shutting qualified teachers out of these positions.

ACTION PLAN

- The NYCDOE should create a fund to help teachers access professional development opportunities linked to their professional growth plans and schoolwide growth plans.
- The NYCDOE should establish financial incentives to secure substitute teachers for hard-to-staff schools and districts.
- The NYCDOE should subsidize funding for teacher leadership positions in high-need schools.

WHAT THIS COULD LOOK LIKE

The NYCDOE should make “Teacher’s Choice Funds,” which currently provides a small stipend to educators for classroom supplies, available for educators to use the money for professional development opportunities aligned with their growth plans. By expanding the purpose of these funds, the city can demonstrate that it values quality teachers and provide equitable access to high-quality professional development for educators who cannot currently afford it.

We know that financial incentives reduce teacher attrition at hard-to-staff schools.¹ Similar incentives for substitute teachers to attend hard-to-staff schools would encourage substitutes to report to those assignments and allow teachers to pursue the professional development they need. Other districts, like Tennessee’s Knox County Schools district, address these concerns through pay differentials for substitutes in high-need schools.²

Additionally, the 2018 UFT teacher contract provides opportunities for teacher leadership to educators who have shown expertise in providing professional development and support for their colleagues. As partners in teacher professional development, the NYCDOE should establish a fund that subsidizes these positions at the school-level in order to alleviate the burden on school budgets and provide these opportunities to more qualified educators.



“We are hungry to take on leadership positions and grow as professional educators. Let’s remove the barriers preventing us from leading in our schools and our profession.”

—Leona Fowler, Instructional Support Teacher at District 75, P233Q

Endnotes

- 1 Feng, Li, Sass, Tim R. The Impact of Incentives to Recruit and Retain Teachers in "Hard-to-Staff" Subjects. (30 October, 2017). Retrieved on January 1, 2019 from <https://onlinelibrary.wiley.com/doi/full/10.1002/pam.22037>
- 2 Knox County School District. 2018-19 Salary Schedule. Page 20. Retrieved on January 17, 2019 from <https://www.knoxschools.org/Page/16731>

Good afternoon, Councilmembers. My name is Charlotte Dubiel, I am a researcher affiliated with the NYU Metropolitan Center for Research on Equity and the Transformation of Schools. I submit my testimony today on the subject of teacher education and preparation programs in the New York City Metro area.

Recent [reports](#) from the NYU Metro Center have found the majority of NYC public school teachers feel unprepared to discuss issues of race and culture in the classroom, and recent [research](#) from the NYC Coalition for Educational Justice has also revealed the curricula being used in schools are appalling unrepresentative of NYC public school students. A common rejoinder to CEJ parents' call for more representative and responsive curricula is: teachers can adapt materials to suit the needs of their classrooms. We investigated the preparedness of teachers to adapt materials and create culturally responsive classrooms. Using New York State DOE data, we identified the most attended teacher preparation programs. After mapping out each available teaching certificate at the top ten programs, we isolated a representative sample of teaching degrees and surveyed all of the coursework descriptions pertaining to each degree in the sample.

Our conclusions, based on a representative sample of all NYC teacher preparation coursework, are the following:

- The majority of teacher preparation programs *do not* explicitly train teachers to select and adapt readings, lessons, content, and other materials for a culturally diverse classroom.
- Of all teacher preparation programs surveyed, none train teachers in restorative justice practices or other culturally responsive classroom management methodology.
- While bias-awareness is mentioned at least once in a third of the teacher preparation programs surveyed, programs do not explicitly instruct teachers to utilize students, communities, and families as sources of knowledge. In other words, a deficit mentality prevails.
- Students for whom English is a new language (ELL/ENL) are portrayed as lacking English proficiency, and rarely portrayed as having pre-existing knowledge and skills. Teachers are not trained in pedagogical practice that highlights ENL students' prior knowledge.
- The City University of New York (CUNY) City College has the most instances of culturally responsive content of all teacher preparation programs in the analysis. CUNY Lehman College and Teachers College at Columbia University have the most critically conscious course descriptions of all teacher preparation programs in the analysis.
- Of all degrees leading to a teaching certificate included in the analysis, Art Teacher programs provide the most culturally responsive preparation.

Our findings support the conclusion that new teachers are not sufficiently prepared to create and/or adapt culturally responsive teaching content and pedagogy. New York City is the most richly diverse public school system in the nation and possibly in the world. The teachers entering the system, however, have not been equipped with the tools to turn rich cultural knowledge into classroom learning.

I therefore recommend that all teacher preparation programs equip teachers by requiring courses that:

- Explicitly train teachers to select and adapt teaching materials for diverse configurations of students
- Explicitly train teachers in culturally responsive classroom management
- Instruct teachers to inspect and revise their own material for bias and deficit assumptions
- Instruct teachers in the pedagogy of recognizing and uplifting knowledge that is different from their own, or beyond the scope of standardized information

Until these additions are implemented by all teacher preparation programs, the NYC Department of Education will be accountable for equipping teachers with the tools of culturally responsive classrooms. The aforementioned teaching skills, namely: adapting teaching materials, culturally responsive classroom management, replacing biased lessons/practices, and utilizing difference as a classroom asset are each absolutely necessary to serve New York City public school students. The Department of Education has begun the first step this important work by implementing implicit bias trainings for all employees, but there is much more work to do.

As long as teacher preparation programs remain in their current state and no supplemental professional development is required, culturally responsive classrooms will be occasional, not system-wide. NYC students deserve teachers who have been trained to see them as full of capacity. Teachers deserve to be provided with the tools to succeed in NYC classrooms, by tapping into the best of NYC student potential.

Good work is being done in pockets of teacher preparation programming. The culturally responsive coursework in Art Teacher departments, at City College, Lehman College, and Teachers College can serve as a model that must be expanded to inform the practice of all NYC public school educators.

Yours sincerely,

Charlotte Dubiel

Uncommon Schools, NYC
Crystal McQueen-Taylor, Regional Senior Director, New York City
Testimony Presented to the New York City Council Committees on Education
and Higher Education
Oversight Hearing on Teacher Preparation and Training
June 25, 2019

Uncommon Schools New York City respectfully submits the following testimony in regard to teacher preparation and training and thanks the New York City Council Committee on Education Chair Mark Treyger and Higher Education Chair Inez D. Barron for providing the opportunity to comment.

Regardless of the program, district, or charter school, an investment in our teachers and their preparation is one the most powerful commitments we can make to our students. Too often, preparation is focused simply on quantity- the number of hours, credits, or sessions versus quality- the impact that training will have on a teacher's practice and student learning in the classroom.

At Uncommon Schools, our commitment to studying high quality teacher practice that has results, codifying that practice, and then disseminating that practice has been hallmark to our success. When we see that a teacher is having extraordinary success with his or her students, we flock to that classroom to try to "bottle" the things that that teacher is doing well by recording their teacher moves, analyzing their preparation work, and looking at the impact on student work. We then take those practices, and we develop in-service trainings to share those best practices with other teachers.

Our teachers receive three weeks of professional development prior to the start of the school year so that they are ready to hit the ground running with students on day one in the classroom. The defining feature of this professional development is not only the length of time, but the depth of the content and extensive opportunities for teachers to practice and get feedback before implementing in front of students. In addition, throughout the school year, teachers engage in weekly professional development that is focused on real time areas in need of development that our principals observed in classrooms earlier in the week or saw as gaps in student work. The techniques and skills that teachers gain in these trainings can go into implementation the next day. This is the commitment to our teachers' growth that they require and deserve.

While we are extremely proud of the work that we do to prepare our teachers to support our 9,000 students, we also know that it's not enough to only focus on our students. This is why, as an organization we value and prioritize sharing and disseminating best practices in teacher preparation externally- whether through our multiple publications or our continued partnership with the NYCDOE.

Over the past five years, Uncommon Schools has partnered with the NYCDOE Office of District Charter Partnerships and our partner Superintendents in Community School Districts 1, 5, 7, 16, 17, 18, 19, 21, and 23 to come together in service of over 1,000 school leaders and teachers. The areas of common focus that we came together around each year will be of no surprise- supporting emerging readers to develop great reading habits, supporting our secondary school readers to closely read and comprehend texts, and how to check for student understanding throughout lessons and use that information to plan for upcoming lessons, amongst other topics.

These are not district or charter issues- finding opportunities for schools to share and disseminate our best practices and coming together to train and prepare all teachers is just the right thing to do. Uncommon Schools is privileged to do this work in partnership with our NYCDOE colleagues. As we all work towards a common goal of preparing our students for college and career success, we hope to see more opportunities for educators to come together to learn and grow in service of our students.

Preservice Teachers' Knowledge of and Beliefs About Dyslexia

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ABSTRACT

The purpose of this research was to explore preservice teachers' knowledge bases regarding dyslexia as a language-based reading disorder. In a researcher-designed open-ended survey, 287 preservice teachers from Alabama, New York, and Virginia defined dyslexia, identified the characteristics of students with dyslexia, provided ideas for effective instruction for students with dyslexia, and cited the sources which informed their knowledge. Findings indicated that while preservice teachers held basic understandings of dyslexia as a reading disorder, they expressed confusion and misunderstandings about the specific phonological processing components of dyslexia. Suggestions for improving preservice teacher education regarding dyslexia are provided.

Since its earliest documentation in 1896, enormous strides have been made in understanding dyslexia as a language-based reading disorder. Despite these research findings, much confusion exists within the field of education. Teachers still are uncertain about recognizing and remediating the reading and writing difficulties displayed by 2.8 million children (Hudson, High, & Al Otaiba, 2007). For the purpose of this paper, we will define dyslexia as such:

Dyslexia is a specific learning disability that is neurobiological in origin. It is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. These difficulties typically result from a deficit in the phonological component of language that is of an unexpected in relation to other cognitive abilities and the provision of effective classroom instruction. (Lyon, Shaywitz, & Shaywitz, 2003, p. 2)

Because reading disabilities impact nearly 80% of students who are labeled *learning disabled*, the terms *dyslexia* and *reading disabilities* have become somewhat interchangeable (Hudson et al., 2007). It is estimated that dyslexia affects approximately 5 to 17 percent of the population (Shaywitz, 2003).

Students with dyslexia struggle most with the phonological understandings of language and often fail to connect letters and sounds. These challenges complicate the task of decoding, in which readers must use their knowledge of letters and sounds to decipher unfamiliar words. Because students with dyslexia struggle with letter-to-sound correspondences, their decoding is slow and inaccurate. As disfluent readers, students with dyslexia may also struggle with comprehension.

By studying brain structures, researchers have begun to understand the neurobiological roots of dyslexia. Booth and Burman (2001) discovered that, when compared to non-dyslexics, students with dyslexia have decreased amounts of gray matter in the brain's lobes associated with processing spoken and written language, potentially resulting in difficulties in phonological awareness (Hudson et al., 2007). Functional brain imaging

reveals that students with dyslexia show underactivation in the lobes of the brain responsible for language processing and overactivation in other areas of the brain which may compensate for their language difficulties (Shaywitz & Shaywitz, 2004).

Another significant step towards understanding dyslexia came through genetic studies, which suggest a biological influence on reading development. One-fourth to one-half of children with a dyslexic parent develops similar literacy struggles (Scarborough, 1990). Specific genes, including chromosomes 6 and 15, have been identified as involved with reading disabilities (Grigorenko, 2001). Though these studies do not explain why some children develop dyslexia and others do not, there appear to be genetic factors impacting dyslexia.

Effective Instruction for Students with Dyslexia

To understand effective instruction for students with dyslexia, we can draw on research involving students with reading difficulties and/or learning disabilities. The earlier that children with reading difficulties are identified, the better their chances are to receive effective remedial instruction (National Institute of Child Health and Human Development, 2000). To make significant progress, students with dyslexia need both systematic and explicit, focusing on the alphabetic principle of how letters and letter combinations represent speech sounds. In particular, readers with dyslexia benefit from various methods of intensive intervention: instruction on letter-sound correspondence, phonemic awareness including blending and segmenting, fluency practice with sight words and decodable words, oral reading practice, and writing instruction connected to word work (Blachman et al., 2004). There is promising evidence that students with dyslexia are able to make gains in reading accuracy and fluency when they receive such instruction (Shaywitz et al., 2003). Functional brain imaging reveals that such instruction helps students with dyslexia to activate previously underactivated parts of the brain that are associated with reading.

To understand effective instruction for students with dyslexia, we can draw on research involving students with reading difficulties and/or learning disabilities

The Confusion Surrounding Dyslexia

Despite significant strides in understanding the nature of dyslexia as a language-based reading disorder, dyslexia is “often misunderstood” (Hudson et al., 2007, p. 506). The confusion surrounding dyslexia has led several researchers to point out common misconceptions or confusion about the causes, incidence, and instructional implications of dyslexia (Hudson et al., 2007; Wadlington & Wadlington, 2005). One of the most common misunderstandings is that dyslexia is rooted in word and/or letter reversals and inversions (Hudson et al., 2007; Rayner, Foorman, Perfetti, Pesetsky, & Seidenberg, 2001). Many emergent and beginning readers – dyslexic or not – write and read letters backwards, reflecting their developing understandings of orthographic representations (Adams, 1990); Reversals alone cannot be used as an early identification marker, though students with dyslexia may be less likely to grow out of letter and/or word reversals.

Another common misconception is that dyslexia is caused by deficits within the visual system. Morgan’s (1896) early written records refer to dyslexia as ‘word blindness’. Orton’s (1925) optical reversibility theory and Hermann’s (1959) spatial confusion theory attributed dyslexia to the perception of letters and words in reversed forms. Research from the last three decades (Fletcher et al., 1999; Vellutino, 1979; Vellutino et al., 1991) has helped to dispel the visual perception myths of dyslexia.

Many misconceptions also exist about the incidence of dyslexia. Contrary to popular belief, girls and boys are equally affected by dyslexia, as shown in longitudinal research from Shaywitz and colleagues (Shaywitz, Shaywitz, Fletcher, & Escobar, 1990). Males are typically overidentified as reading disabled because they may be more likely to act out and demonstrate frustrational behavior in response to their struggles.

Another common confusion is the notion that dyslexia can be outgrown. In fact, dyslexia is a lifelong condition, as shown through research with adolescents, college students, and adults with dyslexia (Bruck, 1990; 1993; Shaywitz et al., 2003). Another myth is that dyslexia can be cured. While people with dyslexia often develop compensatory strategies and can be academically and professionally successful, they still may display phonological deficits. Though people with dyslexia can develop reading comprehension skills, they tend to be slower, less accurate readers than their non-dyslexic peers.

Teacher Knowledge of Language and Language-Based Reading Disorders

Because teachers are often the first adults to recognize the signs of dyslexia in young children, it is imperative that teachers understand the nature of dyslexia. In fact, multiple organizations from the fields of teacher education, special education, and language and literacy (American Federation of Teachers, 1999; Brady & Moats, 1997; International Dyslexia Association, 1997; International Reading Association, 2003; National Joint Committee on Learning Disabilities, 2000) have addressed teacher knowledge about reading disabilities in their standards and position statements. In its position paper on preservice teacher education, the National Joint Committee on Learning Disabilities (1998) stated that all graduates of teacher preparation programs must “have knowledge of current definitions and characteristics of individuals with learning disabilities and how these disabilities affect students’ development and educational performance” (p. 2). Furthermore, because students with dyslexia benefit from explicit instruction in foundational skills such as phonological awareness, phonics, and phonemic awareness, teachers must demonstrate expertise in understanding our linguistic system and its relation to literacy development. As explained by Moats & Foorman (2003), “Knowledge of language structure, language and reading development, and the dependence of literacy on oral language proficiency are prerequisite (but not sufficient) for informed instruction of reading” (p. 32).

Sadly, too many of our elementary school teachers enter classrooms with deficits in their knowledge of language structures and linguistics. In her survey of teacher knowledge, Moats (1994) found that teachers were unaware of linguistic terminology including *phonics* and *phoneme*, were unable to reliably identify consonant digraphs and blends, and were unable to analyze words at the phonetic level. A number of studies (Bos, Mather, Dickson, Podhajski, & Chard, 2001; Moats & Foorman, 2003; McCutchen, Abbott, & Green, 2002; McCutchen, Harry, et al., 2002; Spear-Swearingling & Brucker, 2003) have revealed that experienced general education teachers and special education teachers demonstrate knowledge gaps in language structure, leading to the conclusion that teachers “lack a degree of technical knowledge that is relevant and fundamental to the teaching of reading” (Cunningham, Perry, Stanovich, & Stanovich, 2004, p. 161). Teachers’ gaps in knowledge have largely been attributed to teacher preparation programs, which have historically neglected teaching word level reading skills (Hoffman & Roller, 2001; Moats, 1994; Moats & Lyon, 1996). When teachers receive training in phonological awareness and orthographic instruction, they are able to understand the importance of both in meeting the needs of struggling readers and to adapt their own instructional practices to improve student learning (2002).

Many teachers struggle to understand linguistic and orthographic structure of our language; it is not surprising that teachers may operate with similar confusion about language-based reading disabilities such as dyslexia. Researchers who have explored teachers’ beliefs and knowledge about dyslexia documented that teachers

operate with many misunderstandings and misinformation (Regan & Woods, 2000; Wadlington & Wadlington, 2005). In administering a survey of their knowledge and beliefs to 250 participants, researchers (Wadlington & Wadlington, 2005) found that nearly 70% of participants incorrectly identified word reversal as a major criterion in the identification of dyslexia and over 50% of participants were unaware of a hereditary link in dyslexia. Furthermore, the majority of participants vocalized their uncertainty about dyslexia and requested further information and training.

Purposes of the Study

The following questions guided the present study: (a) What understandings and/or misunderstandings do preservice teachers have regarding dyslexia?, and (b) How do preservice teachers come to these understandings and/or misunderstandings? Our overarching intent was to give voice to preservice teachers' knowledge on the definitions of dyslexia and their understandings of how to recognize and identify students with dyslexia in classroom settings. An additional intent was to understand how well teacher education coursework informs preservice teachers about language-based reading disabilities.

Methodology

Data Sources

We designed a five-item questionnaire to understand participants' knowledge of and beliefs about dyslexia. The questionnaire asked participants to (a) define dyslexia, (b) list traits of students with dyslexia, (c) discuss how teachers might identify students with dyslexia in their classrooms, (d) suggest methods of instructional support for students with dyslexia, and (e) identify any experiences that have influenced their beliefs about dyslexia.

In designing the first four questions, we believed that asking participants to generate their own definitions of dyslexia would produce very different findings than simply asking participants to rely on declarative knowledge. The objective of the survey was to encourage participants to rely solely on their own knowledge, rather than responding to the cues and implied information that prompts in a true-false, multiple-choice, or Likert-type format may carry. Previous researchers (Wadlington & Wadlington, 2005) examined teachers' beliefs about dyslexia in a survey form, with participants providing a Likert-type answer to one-sentence factual statements.

The final research question came in response to previous research (Wadlington & Wadlington, 2005), which encouraged future researchers to "explore not only what participants believe but also why they believe as they do" (p. 30). Participants also provided minimal biographic data, including age, gender, and nature their teaching certification.

Research Sites and Participants

Participants for this study consisted of 287 preservice teachers from Alabama, New York, and Virginia. All preservice teachers were enrolled in undergraduate and

graduate education literacy and language arts coursework at one of three universities in Alabama, New York, and Virginia. Of the 287 preservice teachers, 213 pursued certification in elementary (K-6) education, 45 sought secondary (6-12) certification, and 29 pursued a dual certification in elementary and special education. Students from both the Alabama and New York universities were in their third semester of a two-year Masters in Teaching program, and were student teaching at the time of the study. Prior to data collection, students from the New York university had completed two courses in literacy development and one course in special education. Students from the Alabama university had completed one course in literacy development, as well as two courses in special education. Students from the Virginia university were in their fourth of five years in a teacher education program, which includes both a Bachelor of Arts and a Masters of Arts in Teaching. These students had completed three courses in language and literacy development and one course in special education. Though there was certainly variability among the participants in terms of their areas of certification and the nature of their preparation, all participants had finished all special education and literacy courses by the time they completed the survey and only had student teaching and reflective seminars; in other words, none of the participants were to take any other course offerings in the areas of literacy or special education. Participants ranged in age from 21 to 55, and none had previous classroom experience. Of the sample, 86% were women and 14% men.

Data collection from all preservice teachers occurred during university classes in elementary and secondary language, literacy, and writing instruction. At the end of weekly classes, participants spent approximately fifteen minutes completing an open-ended questionnaire. To minimize the effects of researcher presence, researchers were not responsible for the distribution and collection of questionnaires; when possible, this task was instead handled by graduate assistants, who had no responsibility for students' grades. Of all invited participants, the response rate was 96%. Participation was both voluntary and anonymous.

Data Analysis

The qualitative data were analyzed using the principles of grounded theory, involving repeated readings of multiple data sources to identify significant themes. After collecting data, we independently read all of the questionnaires and recorded our observations in memos. We then reread the data and worked independently to identify emerging themes. Next, we collaboratively discussed these themes to identify more specific codes to be used for data analysis. Once we jointly established codes, we independently coded all data; we both reread all questionnaires to code responses. Subsequently, we compared our findings and established an interrater reliability of 0.92. Though our initial hope was to disaggregate the data by preservice teachers' state of training and their areas of certification, the unequal numbers of participants from Alabama, New York, and Virginia made such analysis unattainable.

Findings

The Definition and Characteristics of Dyslexia

A very small number of participants, less than 2% of preservice teachers, understood dyslexia as a language-based reading disability. A significant number of participants defined dyslexia as a reading disability which complicates a student’s ability to read and write. The following is the most sophisticated response, provided by an elementary teacher pursuing dual certification in K-6 and special education:

Dyslexia is a language-based reading disorder, especially in the phonological component of reading. Students with dyslexia struggle with aspects of reading, such as spelling and decoding unfamiliar words, but may perform extremely well in other academic areas.

Table 1 provides additional information about how preservice teachers defined dyslexia and its characteristics.

Though only a small minority of participants understood language as a basis for dyslexia, they were able to recognize many of the components of literacy with which students with dyslexia might struggle, including decoding, fluency, comprehension, and spelling. Preservice

teachers’ knowledge informed how they would identify students with dyslexia in their future classrooms, with participants relying upon their ideas about dyslexia as letter, word, and number confusion as their primary method of recognizing students with dyslexia.

The most common finding pertained to preservice teachers’ attribution of dyslexia to word and/or letter reversal, distortion, or inversion. In fact, 74% of participants believed word, number, and/or letter reversal and inversion was an early identification marker for students with dyslexia. Examples of this belief included the following: reading or writing from left to right rather than from right to left; seeing words, letters, and numbers backwards; transposing, flipping, or confusing letters (d/b or q/p); and decoding words in a “jumbled” fashion. In fact, 36% of preservice teachers used the term “jumbled”.

Providing Instructional Support for Students with Dyslexia

When asked about instructional support for students with dyslexia, preservice teachers would provide one-on-one help and request time with reading specialists. Additional suggestions for helping students with dyslexia included extended work time, additional reading/writing practice, peer editing and support, a supportive

Table 1: *Participants’ Definitions and Characteristics of Dyslexia*

Participants’ Definitions and Characteristics of Dyslexia	Responding Percentage of Preservice Teachers
Letter reversals (including switching, transposing, flipping, inverting, and jumbling).....	74%
Reading / writing words out of order or in the wrong direction.....	40%
Issues with fluency (including slow, labored, or disfluent reading)	33%
Number reversals	33%
Reading disorder / disability.....	30%
Issues with writing.....	18%
Below level / not able to keep up with classmates	18%
Not interested in reading (motivation, refuses).....	16%
Difficulty with or reluctance to read aloud.....	15%
Issues with comprehension.....	12%
Issues with spelling	12%
Issues with decoding and/or letter-sound correspondence	11%
Issues with oral language and/or pronunciation	11%
Difficulty learning to read and write.....	10%
Don’t know a definition or characteristics.....	8%
Visual processing deficiencies	8%
Brain / cognitive impairment	8%
Issues with math	6%
Normal or above normal intelligence.....	4%
Language-based reading disorder.....	2%
Messy handwriting	Less than 1%

environment, and patience on the part of teachers. Nineteen percent of participants stated that they did not feel prepared to provide instructional support for students with dyslexia.

Sources of Information

When asked about the sources of information which informed their knowledge about dyslexia, over one-third of preservice teachers self-reported that they lacked experience and/or knowledge about dyslexia. Table 2 details the preservice participants' ideas about the origins of their knowledge of dyslexia. The next most commonly cited sources of information were (1) experiences in undergraduate and graduate coursework and (2) interactions with family or friends who had been diagnosed with dyslexia. A small portion of participants reported that hands-on experiences working with students with dyslexia in tutoring or field placements were important sources of information. Even fewer participants pointed to online research or textbooks as valuable sources of information.

Discussion and Implications

Our overarching purpose in this study was to examine preservice teachers' knowledge of and beliefs about dyslexia. We undertook this task in order to understand how well teacher education coursework prepares preservice teachers to identify and work with the students with dyslexia whom they will likely encounter in future years of teaching.

We were both encouraged and discouraged by trends in our findings. We were pleased to find that preservice teachers seem to have a basic understanding of dyslexia as a reading disorder which complicates a student's ability to read and write. It also seems that the participants in our study understood that dyslexia may impact all aspects of literacy development, including fluency, comprehension, decoding, writing, and spelling. We were discouraged to find that our participants did not seem to understand dyslexia's link to deficits in the phonological components of language. If teachers fail to understand the more complex issues inherent in dyslexia, they may struggle to provide effective remediation and instruction for students with dyslexia.

Our findings suggest that teacher education coursework lacks sufficient or accurate information about dyslexia, as evidenced by the 8% of participants who could not define dyslexia and the 33% who were not able to identify any sources which informed their understandings. Furthermore, participants' confusion about the roles of reversals as an early marker of dyslexia and about dyslexia as a visual processing deficiency or cognitive impairment suggest that much of the up-to-date scientifically-based research has not been effectively conveyed in coursework. These findings are particularly significant since the majority of the preservice teachers in our study were in their final semesters of their course of study and had completed at least one semester-long course in special education.

This study has important implications for teacher training and ongoing professional development. Graduate schools must make concerted efforts to improve preservice teachers' knowledge of dyslexia. Our findings reveal that the majority of preservice teachers do not have the conceptual knowledge base to recognize, diagnose, and remediate readers with dyslexia in their classrooms. As such, our teacher preparation programs do not seem to meet the standards advocated by the National Joint Committee on Learning Disabilities (1998), which state that educators "be prepared to meet the needs of all students, including students with learning disabilities who have unique needs" (p. 1).

Improving preservice teachers' understandings of dyslexia must be connected to meaningful, hands-on experiences including formal field experiences such as tutoring students with dyslexia. Understandably, preservice teachers' lack of classroom experience emerged as a significant obstacle to their ability to define dyslexia or to identify students with dyslexia in their future classrooms. This experience could be gained if teacher education courses in both reading and special education incorporated field placements in which preservice students provided instructional support for readers with dyslexia. Preservice teacher coursework could include assignments such as case studies focusing on readers with dyslexia, one-on-one tutoring of a child with dyslexia, informational interviews with literacy specialists who provide

Table 2: Sources of Preservice Teachers' Knowledge

Participants' Response	Responding Percentage of Preservice Teachers
Lack of experience / no idea	33%
A close friend / family member diagnosed with dyslexia	22%
Undergraduate / Graduate coursework	18%
Conversations with peers / colleagues	11%
Identified self as dyslexic	9%
Media (including television and films).....	6%
Enrolled in school / classes with students with dyslexia	4%
Working with students with dyslexia	4%
Online research	Less than 1%
Textbooks	Less than 1%

explicit instruction for readers with dyslexia, research about the myriad of programs and instructional approaches to remediating readers with dyslexia, and classroom observations of readers with dyslexia in whole-group settings. If geographically feasible, preservice teacher preparation could include observations at private and public schools specifically dedicated to meeting the needs of children with language-based reading disorders. Examples of these schools include the Center School in Philadelphia, the Greenwood School in Vermont, the Windward School and the Gow School in New York, the Oakland School in Virginia, the Greengate School in Alabama, the Prentice School in California, and the Rawson-Saunders School in Texas. Preservice teachers must construct their knowledge of dyslexia not merely through class lectures or textbook readings, but with practical applications to classrooms and students.

Improving preservice teachers' understandings of dyslexia must be connected to meaningful, hands-on experiences including formal field experiences such as tutoring students with dyslexia.

All preservice teachers must be involved in these crucial experiences, both at the elementary and secondary levels. Though literacy acquisition is very much the central focus of elementary education, secondary teachers must be able to recognize readers with dyslexia in their content-area classrooms. By understanding effective curricular modifications to meet the needs of diverse learners, secondary teachers may then be able to help students with dyslexia who struggle with issues of fluency and comprehension when reading their content-area texts.

Finally, we hope these findings will encourage reading researchers and teacher educators to continue their efforts to both conduct research that informs practice and to disseminate these findings in preservice teacher education. Though researchers have clearly made significant strides in understanding dyslexia, we need to make concerted efforts to translate this knowledge to the practical level of future teachers. We find much truth in Edwards' (2003) plea for practical applications to research:

We must commit ourselves to conducting research that has implications for practitioners, and we must do the work of disseminating that research. We need to answer the "so what?" question of significance, not only in terms of our own scholarly ambitions, but we need to know and understand how our research will impact literacy teaching and learning in classrooms across the country. (p. 100)

Thus, we offer these findings in hopes that reading researchers and teacher educators will see the potential and the possibilities of filling the gaps in preservice teachers' knowledge.

It is our hope that this study will pave the way for substantial follow-up work. Though our original intent was to compare preservice teachers certified in general education to those certified in special education, such analysis was not feasible with our data. Thus, this comparison is a logical starting point. We would like to conduct similar research across more states as to see whether differences among states in their required number of special education courses would yield different results. We also hope to conduct similar research with preservice teachers at the beginning of their teacher education coursework to understand what information these future teachers bring with them into schools of education; this might also lead to longitudinal research which follows preservice teachers through their courses of study to examine how their initial knowledge and beliefs evolved over time and coursework. Because our research is inherently linked to the nature of teacher education, we are also interested in surveying how teacher educators in graduate schools of education prepare preservice teachers with knowledge about students with dyslexia. This extension of our work might serve two purposes: we might discover interesting information about how well informed our teacher educators are regarding dyslexia and how teacher educators incorporate information about students with dyslexia into graduate coursework.

Conclusion

Findings from this study indicate that preservice teachers understand dyslexia as a reading disability which both complicates a child's literacy development and presents specific difficulties in the areas of fluency, comprehension, writing, spelling, and decoding. Despite this rudimentary knowledge, many of our participants expressed confusion, uncertainty, or a lack of knowledge about dyslexia – even after coursework in both literacy and special education. These findings suggest that graduate schools must offer preservice teachers more in-depth and accurate information about dyslexia, as well as meaningful field-based opportunities to observe and instruct students with dyslexia. Teacher educators have the enormously important responsibility to prepare preservice teachers to recognize and to teach students with dyslexia – identified or unidentified – in their future classrooms; our findings suggest that there is room for growth in this area. ■

ABOUT THE AUTHORS

Dr. Molly Ness is an Assistant Professor of Childhood Education at Fordham University's Graduate School of Education. Her research interests include reading comprehension, assessment and diagnosis of reading difficulties, and preservice teacher education.

Dr. Gena Southall is an Assistant Professor of English at Longwood University and Coordinator of the Secondary English Education Licensure Program. Her research interests include cooperative learning, grammar instruction, best practices in preservice teacher education.

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Debbie Meyer meyer.debra@columbia.edu; 212.865.6645 twitter @ReadOrPrison

- *Columbia Community Scholar*
- *Board Member, Women Creating Change (Formerly Women's City Club)*
- *Board Member, Decoding Dyslexia- NY*
- *Founding Member, Dyslexia (Plus) In Public Schools Task Force*

NYC Council

Committees on Education & Committee on Higher Education

Oversight Hearing - Teacher Preparation and Training.

Tuesday, June 25 2019, 1:00 P.M.

Council Chambers, City Hall, New York, NY

Until I had a struggling reader, I thought public education was a bootstrap and a silver bullet that could reduce inequality and promote equity. I thought all elementary school teachers could teach reading. But if education were a bootstrap or a silver bullet, we would not allow so many students to flounder in reading. Struggling readers disconnect from school and never reach their potential. They become statistics, rather than leaders. Their frustration in school can spark mental health issues, sometimes as early as grade school. Without very resourceful parents, they are more likely than others to experience child abuse and domestic violence, become homeless, or enter the criminal justice system.

NYC's elite middle schools and high schools are grappling with how to desegregate, but we really offer such an opportunity to take a test the 40% of students: proficient readers. The national discussions on civic education also leave our struggling readers behind. The discussions on "choice" really focus on parents that were able to achieve a good education and make good choices for their kids, again on about 40% of the population. The discussions about college access and the importance of higher education also only apply to 40% of our students. . Not enough attention has been paid to the 60% of students who need more support to read well.

New York lags behind other districts, cities and states that have legislation calling for specific pre-service teacher preparation as well as specific licensing to teach reading. College, university and untraditional teacher training programs must provide much more explicit, evidence-based instruction to pre-service teachers about how to teach young children to read.

Universities have a bigger responsibility: pediatricians, social workers, speech and language therapists, school psychologists and preschool teachers have a role in this as well. The IDEA "Childfind" doesn't work because too often we wait for our children to fail. If screening for risk of dyslexia happened earlier with family history questions, and then social workers could direct families to resources, the playing field could be more level when kids start school.

The neuroscience that continues to study how children learn to read is silo-ed away from other departments that could clearly benefit from the knowledge housed there. Linguists often study this as well. Universities must de-balkanize and create interdisciplinary leadership and courses to inform teaching candidates, our future social workers, our future pediatricians and others about neurodiversity in reading ability and

how best to identify risk for dyslexia, teach reading in early grades, remediate reading skills in later grades for any students (or adults) that have been left behind. Moreover, instruction on language-based learning disabilities like dyslexia must be included in both literacy instruction courses and special ed courses. Dyslexia is the most common learning disability, and its effects are exacerbated because it is also a teaching disability.

Principals and district leaders need to understand the neuroscience, too, because they hold sway over classroom curriculum and training for current teachers. Professional development for working teachers ought to focus on new research and the latest in best practices for helping all students read, rather than methods developed 80 years ago and proven over and over again. Schools offer science, but teachers and principals do not know or respect the neuroscience behind proper reading instruction. We poke fun at those that say the Earth is flat, but we are okay when educators ignore the science of reading.

I recommend a reporting bill on how much money is spent by the DOE and UFT on professional development for literacy instruction that could have been offered in pre-service programs, and how much we spend to outsource the education of dyslexic kids to those well prepared to teach at schools like Windward, Stephen Gaynor, Churchill and the like. My son could have become a statistic, and thus require a lifetime of support from our family and government like those who did not get the opportunities he had. Perhaps the tax payers might start to push the licensing and accreditation agencies if they understood the costs.

My son is a success story. A once-illiterate fourth-grader, he left public school to find appropriate instruction. Earlier this month, he graduated from Eighth Grade at Windward School for Children with Dyslexia and Language Based Learning Disabilities. Next fall he will return to public school and attend Bard High School Early College. With the science of reading in place across New York City, many more students like him could enter our most coveted high schools.

Molly Ness
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Committee on Education
Committee on Higher Education

June 18, 2019

Dear Committee Members,

My name is Molly Ness. I am an associate professor of childhood education at Fordham University. I am the author of three books and multiple peer-reviewed articles in the areas of effective literacy instruction and teachers' instructional knowledge and beliefs. I earned my doctorate in Reading Education from the University of Virginia, where I was fortunate to have intensive training and experience working with struggling readers.

In 2010, I published a frequently cited article in *Reading Horizons* titled "Preservice teachers' knowledge of dyslexia". The purpose of the research was to explore preservice teachers' knowledge bases regarding dyslexia as a language-based reading disorder. Working in collaboration with a Virginia-based colleague, we surveyed nearly 300 preservice teachers in three states. In the survey, participants defined dyslexia, identified the characteristics of students with dyslexia, provided ideas for effective instruction for students with dyslexia, and cited the sources which informed their knowledge. It is important to note that all participants had completed all of their coursework in literacy instruction and special education; in other words, they were almost entirely finished with their coursework and field placements and soon due to take over their own classrooms.

We were alarmed to find that despite their coursework and field experiences, our sample was significantly incorrect about dyslexia. An alarming number of participants gave popular misconceptions and misunderstandings about the nature of dyslexia. In fact, 74% of participants believed word, number, and/or letter reversal and inversion was an early identification marker for students with dyslexia. Examples of this belief included the following: reading or writing from left to right rather than from right to left; seeing words, letters, and numbers backwards; transposing, flipping, or confusing letters (d/b or q/p); and decoding words in a "jumbled" fashion. Sadly, only 2% of our population understood dyslexia as a language-based reading disorder. Additionally, too many of our survey participants were unable to provide accurate information about how to effectively instruct a child with dyslexia. In the time since this publication, my findings have been echoed by additional research (Hikida et al., 2019; Knight, 2018; Washburn et al., 2011; Washburn et al., 2014). The implications of our work are clear; too many teachers enter their classrooms with incomplete knowledge of dyslexia.

As a teacher educator, I have committed to producing the best-informed candidates who leave my higher-education institution with current knowledge and practical skills on how to recognize and instruct children with dyslexia. However, I am only one educator; the children in our New York

schools deserve equally prepared teachers – regardless of where they completed their programs of study. These sentiments are echoed by multiple organizations from the fields of teacher education, special education, and language and literacy (American Federation of Teachers, 1999; Brady & Moats, 1997; International Dyslexia Association, 2018; International Reading Association, 2003; National Joint Committee on Learning Disabilities, 2000), who have addressed teacher knowledge about reading disabilities in their standards and position statements.

Currently, we seem to be stuck in a blame game; the public blames teachers for not knowing enough, teachers point the finger of blame to their preparation programs, and so on and so forth. It's time to push aside this neverending cycle of blame and instead come together in the best interest of our students. These collaborative efforts entail cooperation from the following:

- Neuroscience labs and reading researchers who not only conduct research that informs practice, but those who make concerted efforts to translate this knowledge to the practical level of teachers
- Schools of higher education and teacher educators who critically examine their coursework and field experiences and who embrace the opportunity to improve such instruction with current research findings
- Local school boards and boards of education who fund innovative approaches for updated professional learning opportunities for all teachers in all stages of their careers

Though we've made significant strides in understanding both the underlying origins of dyslexia, this information is not yet in the hands of those who need it most: teachers working every day with the 5-15% of school-aged children who are dyslexic. Thank you for your time.

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1 of 2

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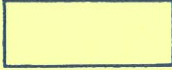
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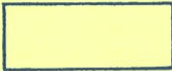
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I represent: Hunter College / CUNY

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Name: Paula White

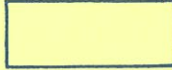
Address: 25 Broadway #128 NY 10005

I represent: Educators for Excellence - NY

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Name: Phillippa Bishop-Alexandra

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I represent: Educators for Excellence - NY

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I represent: E4E New York

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I represent: E4E-NY

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I represent: District 20 parents / CCSE

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Name: Greg Waltman

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I represent: G-One-Quantum

Address: _____

Please complete this card and return to the Sergeant-at-Arms