Department of Education
Carmen Fariña, Chancellor

Testimony of the New York City Department of Education
on Teacher Recruitment and Retention
before the New York City Council Committee on Education

January 24, 2017

Testimony of Amy Way, Executive Director,
Office of Teacher Recruitment and Quality, Division of Human Resources

Good afternoon Chair Dromm and Members of the New York City Council Committee on Education. My name is Amy Way, and I am the Executive Director of the Office of Teacher Recruitment and Quality within the Division of Human Resources at the New York City Department of Education (DOE). I am joined by Anna Commitante, Senior Executive Director of the Office of Curriculum, Instruction and Professional Learning within DOE's Division of Teaching and Learning. We are pleased to be here today to discuss this important issue.

While the strength and diversity of our schools and neighborhoods make New York City an attractive place to teach, we are confronted with challenges common to public school systems across the country—including a national shortage of qualified teachers, particularly in high-need subject areas. This Administration has taken a vigorous, proactive approach to recruiting high-quality educators to ensure all our students have the excellent teachers they deserve. Recruitment and retention is a central priority at every level of our organization. Our partners, some of whom are in the room today, include schools of education, community-based organizations, our superintendents, and, most importantly, the more than 78,000 educators who are in classrooms today.

In a system as large as ours, the driving experience for teachers and students is at the school level. While in the past candidates were recruited centrally and assigned to schools—often without regard to the wishes of the teachers or principals involved—today, teacher hiring is a matter of mutual consent between the candidate and the school. The concept of mutual consent is critical to a school's ability to deliver a high-quality education for its students and remain a competitive and desirable place to work. The empowerment of school leaders and teachers to find the best fit for their school communities is an overall strength of our approach.

In order to meet the needs of our City's schools, the DOE must hire around 6,000 new teachers before the beginning of each school year. The hiring demands are driven by the scale of our system, growth of teaching positions in priority areas—such as the Pre-K for All or changes in requirements for serving English Language Learners—as well as resignations and retirements. These teachers must meet the certification requirements set forth by the New York State Education Department.

To meet this substantial need, teacher recruitment is not an annual event but an ongoing process of building short- and long-term pipelines of high-quality teachers in order to support school-

level teacher recruitment and retention. Our system's talent needs are highly complex, but we believe that DOE is unmatched in the scale and innovation of our efforts.

Our recruitment pipeline draws from a variety of sources. We have deep partnerships with over 20 local schools of education, collaborate with local community-based organizations to cast a wider net for teaching talent, and engage current DOE talent, including the paraprofessionals who serve students in our classrooms every day. We seek talent at all levels of experience, from veteran teachers to current students at institutions of higher education to career changers, and are working to build interest in the teaching profession among our high school students. This past school year, we established a relationship with Educator Rising, a national nonprofit organization through which the DOE is creating opportunities for high school students to build teaching skills and establish pathways into the profession with local schools of education. Having a mix of pathways strengthens the DOE's approach and allows optimal choices for principals.

Our partnership with schools of education in area colleges and universities is especially important in our recruitment efforts—not just in terms of numbers but in ensuring that new teachers are as prepared as possible to meet the needs of the system and their students from day one. Toward that end, we have regular meetings with leaders of the local institutes of higher education—together with my colleagues from Division of Teaching and Learning—about our instructional initiatives and vision, and our hiring projections. We also share data that provides these schools with useful information on their own graduates and what we know about their pipelines. A centerpiece of our collaborative efforts is finding ways to increase and further develop the opportunities for student teachers to be prepared in our schools in a robust and structured apprenticeship experience.

To reach a broad range of potential candidates, we employ an extensive marketing strategy including internet, taxi, and subway campaigns, and small- and large-scale events. This past October, the DOE sponsored its first pathways into teaching conference attended by nearly one thousand interested individuals. Current teachers and principals support our outreach through events and webinars. The Chancellor is personally engaged in these efforts and speaks at recruitment events and through videos about her vision—emphasizing that teachers and teacher development are at the center of school success.

We do not just wait for the summer to begin this school-based recruitment, especially as evidence shows early hiring to be an important way of attracting the best teachers to schools. In 2016, we launched a more targeted early hire program for high-need areas of our system so that schools and candidates could make matches starting in the late winter. We provide other supplemental hiring support for the highest-need schools, like our Renewal Schools, through targeted events as well as via the Teachers of Tomorrow grant, which provides a financial incentive to attract teachers to these schools

The DOE's Field Support and Superintendents' offices also play an important role in supporting schools as they seek to recruit, select, and retain candidates to meet their needs. These offices work to facilitate strong talent matches between principals and the pool of applicants through

events, interview opportunities, school tours and open houses. A robust online tool also allows principals to do their own search and recruitment of the applicant pool.

A critical priority in our recruitment work is improving the diversity of our teaching workforce for our diverse student population, and we have adopted innovative strategies in support of this goal. Working with the Mayor's Office, we launched the NYC Men Teach initiative in 2015 with the goal of recruiting 1,000 men of color in the classroom or pipeline by 2018. The initiative involves partnerships with multiple City agencies, the City University of New York, and teacher training programs including our own New York City Teaching Fellows. In addition to working closely with community organizations, we have sent recruiters to historically black colleges and to other cities including Philadelphia, Atlanta, and Chicago, and have sponsored a series of in-person recruiting events, workshops, and school visits for candidates. Teachers hired through the initiative will be supported by dedicated mentors during their first year on the job.

The overall national teacher shortage can pose challenges in subject areas such as STEM, special education, and for English Language Learners. Alternative routes to teaching are particularly important to our recruitment of candidates in such areas. Our Teaching Fellows program offers a pathway for individuals with no formal training to become certified to serve as educators in these shortage areas through a subsidized master's degree program; each year, we attract about 1,000 new Teaching Fellows into our schools. We are also able to provide financial support for existing teachers to earn additional credentials to teach in such high-need subject areas.

Investing in teacher talent is a critical part of this Administration's Equity and Excellence for All agenda. Special initiatives within our overall recruitment work focus on recruiting candidates to support the City's educational priorities including Pre-K for All and the expansion of our arts education and physical education instruction. In order to support special initiatives, as well as the overall increase in our education workforce made possible by additional funding to our schools, we negotiated to increase starting teacher salaries by $1,000. This September, a new teacher with a master's degree will earn just under $61,000 and in September 2018 the starting salary will increase to almost $64,000.

We provide support through every step of the recruitment and hiring process, from screening applicants to ensure they meet the State's certification requirements, to sponsoring online search tools and in-person recruitment fairs, networking events, and interviews, to the use of additional resources where necessary to facilitate hiring in high-need areas. While we are proud of the progress we have made, we are always seeking to improve. Indeed, the Chancellor is currently discussing recruitment and retention ideas with her teacher advisory committee, which is made up of our Big Apple Fellows, who are winners of our teacher excellence award, and recruitment and retention is a priority echoed throughout the DOE.

As I turn this over to my colleague to talk more about retention, I will set the context that despite the complexities articulated, our system retains more than 93 percent of our teachers year over year—significantly outpacing national averages. When we look more closely at our early career teachers, the DOE continues to exceed national statistics by retaining 91 percent of our first-year

teachers and nearly two-thirds over five years. While we recognize there are still challenges in this area, we are on the right track.

Thank you again for the opportunity to testify today.

Testimony of Anna Commitante, Senior Executive Director, Office of Curriculum, Instruction and Professional Learning, Division of Teaching and Learning

Good afternoon Chair Dromm and Members of the NYC Committee on Education. I am Anna Commitante, the Senior Executive Director of DOE's Office of Curriculum, Instruction and Professional Learning (CIPL) within the Division of Teaching and Learning. Thank you for the opportunity to testify today about our efforts to support our City's educators to sustain long-term careers in our schools.

None of us forget the teachers who, with a gentle nudge or a kind word, convinced us that we could achieve our dreams. One great teacher truly can transform a life. In New York City, we have tens of thousands of public school teachers who transform countless lives each day. The student who goes on to become the first person in her family to graduate from college. The student who has a career because a teacher cared enough to see the potential others missed. These are the reasons our teachers teach.

One of the most important initiatives that Chancellor Fariña took on immediately was to shift the culture within our school system from one of "competition" to one of "collaboration." As a former teacher herself, Chancellor Fariña understood that in order for teachers to take on the hard work of teaching well—and teaching well is very hard work—they had to be treated as vital and essential partners.

Chancellor Fariña also re-instated the Division of Teaching and Learning in order to strengthen our ability to impact over 1,800 schools in making real classroom improvements. We firmly believe that in order to achieve our vision of equity and excellence—that is, ensuring all students, regardless of zip code, can graduate as critical and independent thinkers ready to succeed in college and careers—we have a responsibility to hire and retain high-quality teachers.

Our strategy to support teachers in sustaining long-term meaningful careers in our schools is multi-pronged. First and foremost, we are pleased that the United Federation of Teachers (UFT) contract signed in 2014 provides every school, in every corner of the City, with 80 minutes of rigorous, weekly professional development. During this time, teachers and principals come together at their schools to engage in deep work to drive classroom improvements. We believe that targeted professional learning surfaced from the ground-up, focused on the needs and strengths of each school, leads to long-lasting school improvement.

To support this critical work, one of the first resources we created was the Professional Learning Handbook, which ended the drive-by, one-day professional development that we knew was not working for teachers. The handbook provides effective strategies for schools to include teachers

in the decision-making process that determines what they themselves need to be better teachers. The handbook also provides the strongest and latest research on effective professional development—which, at its heart, is about highly-effective instruction in the classroom.

Coupled with robust professional development, we provide rigorous, high-quality curricula and instructional materials created by and for educators. When teachers have high-quality materials and resources at their fingertips, they can focus their time and energies on instruction and implementing and adapting the curriculum to meet students' needs. We are continually developing citywide resources based on what is needed to plan strong lessons every single day and to support teachers as they focus on—and improve—their craft. These include: a new, highly-popular, and comprehensive K–8 social studies curriculum, called Passport to Social Studies; a first-of-its-kind comprehensive English Language Arts and writing curriculum for high school teachers; a STEM Framework, along with an updated Science Scope & Sequence; and, strong literacy resources, including a new Vocabulary Practice Guide. All of these rich and hands-on resources are widely available and ultimately help create a common lens around teaching and learning in schools and across the City.

Our office also organizes 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. During the 2015–16 school year, our office held over 3,700 events for teachers, supervisors, and principals citywide and across subject areas—attended by over 43,000 participants.

As a result of these efforts to put real improvements in teaching and learning at the center of our work, in 2016, 38 percent of our students met proficiency standards in English, outpacing the State for the first time. The strongest gains were in the earliest testing grades—third and fourth. Our top priority is to continue building on this progress through more intensive professional development opportunities, as well as continuing to develop high-quality resources.

Furthermore, we believe that an essential part of continuing to build on our progress is by giving our newest teachers ongoing, targeted support and development to make sure they can sustain a long-term and successful career in our schools. Starting in the 2015–16 school year, we expanded training for new teachers to a full week through our New Teacher Week. Previously, they received about a half-day of training. During this week, teachers were able to choose from among 16 targeted sessions setting high expectations for teaching and learning. Approximately 6,000 new teachers enter the profession each year, and all of them now have access to attend a full week of targeted support from teams across the DOE committed to helping them succeed.

Research shows that teachers supported by an experienced and talented mentor are more likely to find job satisfaction and continue teaching long-term. The New Teacher Mentoring program in our Office of Leadership ensures we do exactly that, by providing new teachers with a year of instructional mentoring from an experienced peer at their school. This consists of 10 months and at least 40 hours of conferring, classroom visits, and reflecting on practice, among other

mentoring activities. Each year we train 600 new teacher mentors through a Mentor Course, and a total of about 3,500 teacher mentors are trained Citywide. School-based mentoring builds teachers' skills and self-confidence by equipping them with practical tools and strategies during that critical first year in the classroom. Simultaneously, this opportunity supports mentors by giving them a leadership opportunity to expand their impact beyond their own classroom.

We must also give teachers opportunities to develop and assume additional responsibilities. 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 ready to grow and take on additional challenges are central to this mission. Elementary school teachers with a strength in literacy instruction can apply to become Universal Literacy reading coaches—where they will be at the forefront of our goal to ensure all students are reading at grade level by the end of second grade. Other elementary school teachers are taking on intensive training to "departmentalize" math instruction at their schools as part of the Algebra for All initiative. Across the Equity and Excellence initiative, teachers are raising their bar—taking on training to teach new Advanced Placement courses, to teach new computer science courses, and to implement a college-going culture at their schools. These are 21st-century teaching skills that will prime our students to succeed after high school.

To retain great teachers, we must provide them with opportunities to grow professionally through development and leadership opportunities. Along with the UFT, we believe that extending educators' skills beyond their individual classrooms can make teachers powerful levers of change for school communities. Our contract established an unprecedented career ladder for teachers: Model Teachers who create laboratory classrooms, Peer Collaborative Teachers who coach colleagues, and Master Teachers who drive instructional practices at the school or district level. We are proud to have over 1,200 teacher leaders working across the City, with an emphasis in high-need schools. In particular, we have invested in growing teacher leadership at our Renewal Schools because we know attracting and retaining great teachers is so important there.

We believe that all of our teachers deserve the best possible resources as well as ongoing opportunities to grow and learn. That is the key to delivering strong instruction for our 1.1 million students every single day. We are committed to creating strong and collaborative school communities to put every child on the path to success—and to achieving our vision of equity and excellence for all New York City students.

I thank you for the opportunity to testify before you today, and we will be happy to answer any questions you may have.

TESTIMONY OF
THE UNITED FEDERATION OF TEACHERS

BEFORE THE
NEW YORK CITY COUNCIL
COMMITTEE ON EDUCATION

REGARDING TEACHER RECRUITMENT AND RETENTION

JANUARY 24, 2017

Good morning. My name is Karen Alford, and I am the Vice President of Elementary Education for the United Federation of Teachers. On behalf of the UFT and President Michael Mulgrew, I thank you for the opportunity to testify before you today.

Our teachers are the foundation of our public schools. Every child deserves an excellent teacher in a first-rate neighborhood public school.

In a system as vast as New York's, teacher recruitment is done on a massive scale as thousands of people leave our schools every year. This past school year was no exception. The Department of Education hired more than 6,200 educators, almost the same number as the year before.

As in years past, this group of new pedagogues is incredibly diverse. As we welcome these new educators to our school system, we can do more to make sure they have a successful experience and stay in our schools thus providing a consistent educational experience for students. This is important because where some schools need to fill only one vacancy, other schools may hire 20 or more at a time.

Many who leave are retiring or changing careers after years in the school system. A good number leave for higher-paying jobs in the suburbs. But 10 percent of newly-hired pedagogues leave after one year. During the 2015-16 school year, 5,545 teachers left — 2,916, or 52 percent through resignation and 36 percent through retirement. This pattern is consistent with a longer term trend.

During the past five years, more than 25,000 teachers were hired. In that same period, 25,000 teachers left the system — 12,488, or 49% percent, left through resignation and 10,403, or 40 percent, retired.

In exit interviews, these educators cited a variety of reasons but first and foremost — they found the difficult working conditions and lack of support too overwhelming. Some of this is completely predictable. New hires start calling us on the second day of school, frustrated and upset, and we do see some people quit after a few weeks.

It doesn't have to be this way. We can do better. Today, we want to offer some ideas on what we can do to better recruit and retain educators.

Class Size Reduction
Research has shown the positive effect on student achievement when classes are smaller. For newer teachers who are just learning their craft having large or oversized classes makes it harder to provide individualized attention.

RECRUITING NEW EDUCATORS
New York City typically has not had an issue with recruitment. With the exception in certain titles including math and foreign languages, the DOE is usually inundated with applications. We can do much better, however, in helping new teachers during those grueling first years. The recruitment and hiring process must do more than put a teacher in a classroom. It must include building relationships before applications are submitted, creating residency programs for potential hires and offering summer bridge programs once teachers are hired but before they enter a classroom.

BUILD RELATIONSHIPS WITH TEACHERS BEFORE THEY STEP INTO A CLASS
We should begin with a process that brings future teachers together with in-service teachers and other education professionals. These opportunities should be part of teacher-training programs across the metro area. Think about the potential: Experienced teachers could speak to college students about our profession and give them a feel for the challenges they will face. Master teachers could help them build their skills beyond textbook knowledge by training them on real-world issues including managing a classroom and implementing differentiated instruction.

What's more, DOE's new teachers, those with three years or less, could share the strategies they use as they navigate their first years on the job.

Currently, we are working with Today's Students Tomorrow Teachers (TSTT), an organization created to increase the number of male students of color who are interested in teaching. The program guides them through high school and college into teaching.

We've also been engaged with the Mayor's NYC Young Men's Initiative (YMI) in which schools find ways to increase the number of Black, Latino, and Asian men on school staffs.

CREATE A RESIDENCY PROGRAM
We should begin a residency program for education majors and graduate students. Teacher training programs can't provide all the skills and knowledge new educators need; much of that can only be learned on the job.

Think about how doctors are trained. With that as a model, education students in college, while taking classes, could also spend two semesters in a classroom another observing an experienced teacher at work.

That intensive on-site learning would provide a wealth of knowledge and hands-on experience that would prove invaluable to their growth and career. It could benefit the teacher in the class as well — another person in the classroom provides even more individual attention for students.

CREATE A SUMMER BRIDGE PROGRAM

Schools or districts could create a summer "bridge" program for incoming new teachers. Such a program could last a week or two before classes start and serve as a chance for new educators to work with veterans to prepare for the upcoming school year.

RETAINING EDUCATORS

These three supports during the recruitment process can help us keep teachers once they have been hired. But alone, they are not enough.

The first weeks and months of teaching can be completely overwhelming for new educators who often find themselves for the first time managing a large number of students with diverse learning needs. What's more, they do this mostly alone, isolated in their classrooms, away from other adults with more experience, and they must simultaneously learn the culture of the building.

While many principals work hard to create a smooth transition for their new teachers, other factors get in the way. Class size can quickly become unmanageable. Mentors can be hard to come by or hard to schedule. The curriculum is not always available. Paperwork and compliance issues are complicated, and so it goes, right down to the lack of pencils and paper or finding a legal parking spot near school.

The UFT has always been committed to supporting new teachers. Our work begins with the union's New Teacher Initiative Committee, which puts together a comprehensive series of events in each borough for new teachers. Thousands attend workshops as well as informational fairs on everything from lesson planning and classroom management to understanding their salaries and benefits.

We have also included workshops on financial wellness and student loan debt payback. If we can help our new teachers manage these aspects of their lives so they have fewer worries external to the classroom, we believe our teachers will have more time to focus on their work.

We take an "all-hands-on-deck" approach. Many at the union are devoted to supporting new teachers. For example, our Teacher Centers and our Member Assistance Program collaborate on a special 10-session institute for new teachers. We teach them how to engage students, team teaching strategies, class management techniques, how to handle paperwork, and how to manage their time.

Teacher Centers also help them when it comes to their CTLE, or Continuing Teacher and Leader Education, requirements. Our school-based Teacher Centers provides a comprehensive extended learning package.

To supplement that, our Certification Department offers a series of stand-alone workshops on navigating professional responsibilities and regulations.

We also work with new teachers on developing their own style and voice as well as how to be flexible, which every teacher will tell you is the key to survival. Which teacher among us has

followed a lesson plan exactly? Students throw curve balls at us all the time and we have to know how to hit it out of the park!

For all we do as a union, we cannot do this work alone. We have several recommendations which, properly implemented, could make the difference for the enthusiastic, hard-working teachers who are overwhelmed and want to call it quits.

CREATE A CENTRALIZED INDUCTION PROGRAM

As I mentioned, most teachers work alone in classrooms for much of the day and alone again at night as they plan lessons and grade student work.

Implemented correctly, a centralized induction program would build on the residency and bridge programs that would be part of recruitment. It could help combat that isolation by surrounding new teachers with supports including orientations, comprehensive training and regular meetings with other new teachers as well as veteran teachers. This comprehensive approach should continue through a teacher's first few years.

A centralized induction program could also provide school administrators with a framework to use with new educators in their buildings. While many schools have put together supports and training for new teachers, others don't do much more than hand teachers the keys to their classroom. It's time we support administrators and schools by providing them with a comprehensive core program. We believe the result could be a smoother on-boarding process for new teachers, which translates to a smoother school year for students.

REDUCED TEACHING LOAD

Another idea is to allow new teachers to begin their first year with a reduced teaching schedule. Additional time outside the classroom would allow new teachers time to observe experienced teachers in their classroom and meet with mentors and colleagues.

Other industries already follow a similar model. New lawyers, new doctors and rookie ball players are all given a transition period to help them adjust to a new environment and new responsibilities.

MENTORING

Studies have shown that mentoring has a significant positive effect on new teachers, and we believe this is a critical component in retention of new teachers.

We used to have a central mentoring office, complete with teams of master teachers in each district whose sole job was to work with new teachers in their schools. Unfortunately, that office was a victim of the many cutbacks made by the Bloomberg administration.

Obviously, we think that was a big mistake and said so at the time. We think it's time to bring back a comprehensive mentoring program including weekly meetings between new teachers and mentors. Mentors should have at least five years of classroom experience. We believe we have a

ready-made pool because of our master and model teacher initiatives, professionals who have successfully demonstrated a mastery of instructional strategies, conflict resolution, behavior management and parental engagement.

Schools that have site-based Teacher Centers have a built-in support for new teachers. The Teacher Center staff provides in-class support through demonstration lessons and team teaching. Additionally, one-on-one coaching helps teachers develop their instructional practice and pedagogical skills.

SUPPORT GROUPS

Emotional support is also critical. One of the best ways to combat job stress is to create support groups among colleagues where they can talk about their struggles as well as their successes and collaborate with others in seeking solutions. It's always best when you know you're not alone. Sharing your woes is one way to share the burden and perhaps solve the problem.

LANGUAGE ALLOCATION POLICY (LAP)

Before I close, I want to touch on a specific problem: recruiting and retaining those who teach English Language Learners.

By law, every school must develop its own Comprehensive Education Plan (CEP), which details a school's plan in implementing instructional strategies.

Part of every school's CEP is its Language Allocation Policy (LAP). The LAP describes the specifics around intake, language development program options, and academic achievement for ELL students including both data and narrative accounts.

When we talk about recruiting and retaining teachers for English Language Learners — a huge need in our schools today as you all know — a school's LAP should provide critical information as the blueprint for the day-to-day work.

Unfortunately, many schools gloss over the need for a LAP, sometimes just cutting and pasting a few sentences from the DOE's website rather than thoughtfully designing an ELL program specifically for their building.

Another problem with our approach in providing resources to teachers of English Language Learners is even more basic. It's not clear to us how and where the DOE spends its ELL dollars. When ELL teachers are left without a roadmap, resources and support, they are much more likely to leave.

CONCLUSION

Nationally, reports of teacher shortages around the nation are cropping up. In New York City, we've been lucky to avoid this so far, but we can't keep churning new teachers at the rate we do. It's a waste of money in bringing them on board – hiring and training isn't free – and it's tumultuous for a school to have constant turn-over.

Schools operate well when they have a stable workforce within a calm, supportive, nurturing building. And that means schools — the staff — can spend more time focusing on their children. We all believe that is the goal of all of our work and efforts: to help our students learn, grow and become engaged citizens in our communities.

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TESTIMONY

NYC COUNCIL COMMITTEE ON EDUCATION
CHAIRMAN, DANIEL DROMM

Oversight – Teacher Recruitment and Retention

Presented on
Tuesday, January 24th, 2017

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COUNCIL OF SCHOOL SUPERVISORS & ADMINISTRATORS
Local 1:AFSA, AFL-CIO

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NYC Council Education Hearing

Oversight – Teacher Recruitment and Retention

The Council of School Supervisors and Administrators (CSA), which represents some 17,000 active and retired school supervisors, principals, assistant principals, educational administrators, and directors/assistant directors of early childhood education, feels strongly that the recruitment and retention of high quality certified teachers should be a priority for the Department of Education.

Every school's goal is to hire and maintain highly qualified and certified teachers. To do so, administrators and recruiters must work diligently to ensure all students have teachers with content area knowledge and teaching skills necessary to help its students achieve at the highest academic standards, regardless of their individual learning styles or needs. Substantial funding is needed to recruit, train, reward, and retain highly qualified teachers. To make teaching and learning successful, schools must have the appropriate resources to execute this plan.

Having teachers with most of these qualifications can make a difference in the lives of our students. However, current data show that the demand for new teachers is largely due to teacher turnover. Retaining teachers is the greatest challenge facing schools today!

Although salary is a key ingredient in strengthening the teacher pool, it is not the only reason for teacher shortage. Excessive workloads, high-stakes tests tied to evaluations, and views of teaching as a transitional profession, contribute enormously to teacher turnover. New teachers are likely to be assigned to low performing schools. And, as we know, these precious and needy students should be assigned our very best teachers.

Teaching students with special needs can be tough for even the most seasoned professionals. Expecting that new teachers are up for the task to support and help every student can create an overwhelming burden that may lead to burn out. The result is that new teachers are the most at risk of leaving the profession. Research shows that 14% of new teachers leave by the end of their first year; 33% leave within 3 years of beginning teaching; and almost 50% leave within 5 years. These attrition rates mean students continually face inexperienced teachers and schools face an economic burden of constantly hiring and training new teachers. Additionally, high turnover rates also impact the organizational structure, team building cohesiveness, as well as, planning and implementation of a comprehensive curriculum.

A study of teachers in NYC found that student achievement was most enhanced by having a fully certified teacher who had graduated from a university pre-service program, had a strong academic background and had more than 2 years of experience. Having an inexperienced teacher with a temporary license, which is the teaching profile most common in high-minority, low-income schools with ongoing teacher turnover, hurt students' achievement most. In combination, improvements in these qualifications reduce the gap in achievement between the schools serving the poorest and the most affluent

student bodies by 25%. The requirement that schools staff all classrooms with "highly-qualified teachers" has created challenges for many schools.

Nationally, we know that schools lose between 1 and 2 billion dollars annually in attrition costs because many teachers leave the profession, according to research from the Alliance for Excellent Education. Frequently, this shift occurs among teachers who move from poor to non-poor schools, from high-minority to low-minority schools and from urban to suburban schools.

The result is a spiral of loss that affects high-poverty schools disproportionately. "The monetary cost of teacher attrition pales in comparison to the loss of human potential associated with hard-to-staff schools that disproportionately serve low-income students and students of color," explained Bob Wise, the former governor of West Virginia and leader of the Alliance. "In these schools, poor learning climates and low achievement often result in students- and teachers- leaving in droves." This scenario also applies to our schools in NYC. We need to pay more attention to teacher induction, particularly among new teachers in hard-to-staff schools. Teachers are moving because of job dissatisfaction, lack of pre-service training, class management challenges, and lower salaries.

Some suggestions to improve the current system include targeted financial resources allocated specifically to improve, as well as maintain teacher recruitment and retention. Funding must address the challenges of teacher quality, including teacher preparation and qualifications of new teachers, recruitment and hiring, induction, professional development, and retention. Effective induction and mentoring programs have been shown to increase retention rates in many varied schools. Supporting new teachers with high-quality induction programs that lighten initial class load to accommodate coaching, mentorship, and collaborative planning would accelerate effectiveness. Focused professional development on delivery of instruction, student work, test scores, and linguistic and cultural competence would yield quality instruction for improved teaching and learning.

CSA remains committed to working with the Department of Education to collaboratively improve teacher recruitment and retention practices in New York City.

CSA also maintains that recruitment and retention of school Supervisors and Administrators is a major concern in NYC. We urge the Council to research this topic, and CSA will be ready to assist should the City Council and Administration decide this issue is worth exploring.

Sincerely,

Ernest A. Logan

President

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Testimony to the NYC Council Education Committee on the impact of class size reduction on teacher recruitment and retention
January 24, 2017

Dear Chair Dromm and members of the NYC Council Education committee:

Thank you for holding these hearings today.

Most experts say the challenge of creating an effective, experienced teaching force especially in high-needs urban areas such as New York City derives more from high levels of teacher attrition than to the difficulty of recruitment. As Richard Ingersoll of the University of Pennsylvania has written, "school staffing problems are rooted in the way schools are organized and the way the teaching occupation is treated ... lasting improvements in the quality and quantity of the teaching workforce will require improvements in the quality of the teaching job."[1]

One of the most important determinants of the quality of the teaching profession is whether teachers feel as though they have a chance to be successful, and this in turn largely depends on their class sizes. Studies have linked small class sizes with a variety of cognitive and non-cognitive benefits for students and teachers, both short and long-term. Research shows that class size is an important factor in teachers' decisions to leave or stay in their jobs. Richard Ingersoll has noted that 54 percent of teachers who leave their school report that large class sizes contributed to their decision. [2]

According to a 2004 NYC Council survey of public school teachers, nearly a third (30%) of teachers with 1-5 years of experience said it was unlikely that they would be teaching in a NYC school in the next three years. For those teachers who were considering leaving, the top three changes in their work conditions that they said would most likely to persuade them to stay included higher pay, smaller classes, and better student discipline. [3]

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[1] Ingersoll, Richard, (2003) Is There Really a Teacher Shortage? *Consortium for Policy Research in Education* http://repository.upenn.edu/cpre_researchreports/37

[2] See Figure 15 at: Ingersoll, Richard M., (2015) "Why Schools Have Difficulty Staffing Their Classrooms with Qualified Teachers." *Consortium for Policy Research in Education,* http://blueribbon.sd.gov/docs/Ingersoll%20Presentation819.pdf

[3] NYC Council, (2004) A Staff *Report of the NYC Council Investigation Division on Teacher Attrition and Retention.* http://www.nyc.gov/html/records/pdf/govpub/1024teachersal.pdf

Of course, teacher pay has been increased substantially since 2007; yet at the same time, class sizes have also increased sharply. As for student discipline, many studies demonstrate that disruptive behavior also diminishes significantly when class sizes are smaller, because students are more engaged, can gain more positive feedback from their teachers and develop a more positive attitude towards their schools.

A review of 11 separate class size studies revealed the positive impact of smaller classes on students' behavior, resulting in decreases in disciplinary problems and increases in pro-social behavior, including positive interactions with teachers and other students.[4]

In a report released by the Educational Priorities Panel about the impact of the first year of the state's early grade class size program in 2000, both teachers and administrators described a huge improvement in student learning, but also in their behavior. [5]

One principal of a Harlem elementary school spoke about how suspensions at her school had fallen 60 percent from the previous year, which she attributed to smaller classes. Another principal observed: "Management is easier...There are fewer discipline problems because [student] needs are being met in the classroom. They're not acting out as much; there's been a turnaround in their behavior. For the first time, we have time to invest in the whole child, and relate to the child on all levels."

As a Brooklyn teacher explained, "If you have a child with a disciplinary problem, you can get on top of it faster ...you can re-channel children's attention towards a different avenue and get them to refocus their energies on the work, instead of acting out." As another teacher put it, students "look at each other more as family, and they connect to each other."

Of course, as disciplinary problems are reduced, the time for learning is increased, which leads to further academic advances -- triggering a positive feedback. Teachers almost uniformly reported spending more time on teaching, and less on classroom management as class sizes are decreased.

In the EPP report, many NYC principals independently predicted that the improvement in teacher morale resulting from class size reduction would lead to less staff turnover at their schools. One teacher went as far as to say that she would not remain teaching in the New York City public school system if the program was discontinued: "Now that I've seen the difference a small class makes, I don't want to go back to being a policeman. It would be impossible for me to go back to the old way. If the program disappeared, I'd go elsewhere -- I wouldn't keep teaching in a city public school, I'd teach where classes are smaller. Whatever money I was offered, it's just not worth it."

One of the arguments frequently made by opponents of class size reduction is that it could lead to an influx of unqualified, inexperienced teachers, particularly in schools that were already hard-to-staff. None of the principals mentioned this as a problem. Instead, one interviewed for this report said that it was much easier to

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[4] Finn, Jeremy D., Susan B. Gerber and Jayne Boyd-Zaharias, (2005). "Small Classes in the Early Grades, Academic Achievement, and Graduating from High School," *Journal of Educational Psychology*. www.sfu.ca/~jcnesbit/EDUC220/ThinkPaper/FinnPannozzo2003.pdf

[5] Haimson, Leonie, (2000) Smaller is Better: First-hand Reports of Early Grade Class Size Reduction in New York City Public Schools, *Educational Priorities Panel.* http://www.classsizematters.org/wp-content/uploads/2012/11/SmallerIsBetter.pdf

fill the new openings she had, even among applicants who had already taken other jobs, because she could promise them smaller classes. Indeed, for the first time, she said, she could recruit more qualified candidates to teach in her school, including many with master's degrees and greater experience.

Other studies have confirmed a significant relationship between class size, teacher morale and teacher retention. One study done in California concluded that large classes significantly increased teacher attrition rates.[6] Another study analyzed data from New York districts outside NYC, and concluded that decreasing class size by three students per class significantly lowered teacher attrition. [7]

In a 2014 UFT survey, 99 percent of NYC teachers said reducing class size would be the most effective reform to improve student outcomes – far outstripping any other policy, including implementing socio-emotional learning, expanding universal preKindergarten, community schools, or college-ready standards.[8] Thus reducing class size would likely significantly improve the retention of qualified, experienced teachers, since they would no longer leave the profession or depart to teach in suburban or private schools to experience success.

In the EPP report, one principal described the impact of smaller classes on her staff this way:

> *With my teachers, I was always concerned about burnout. I was a teacher myself and knew how difficult it was having 25 to 30 students ... In this school the staff turnover used to be tremendous; it was in part because they had so many kids, they were doomed to failure and no one wants to fail. Now, my teachers are happy. They are enjoying the art of teaching again. Sometimes, I felt like we were all on an assembly line. Now we can feel satisfaction, because we have results and can accomplish our goals.*

For more studies showing the benefits of class size reduction in improving learning, socio-emotional development, attendance, discipline, school climate, parent engagement and narrowing the achievement gap, see www.classsizematters.org/research

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[6]Loeb, Susanna, Linda Darling-Hammond and John Luczak, (2005), How Teaching Conditions Predict Teacher Turnover in California Schools. *Peabody Journal of Education* 80(3):44-70. http://www.jstor.org/stable/3497042

[7] Pas Isenberg, Emily, (2010). "The Effect of Class Size on Teacher Attrition: Evidence from Class Size Reduction Policies in New York State." *U.S. Bureau of the Census Center for Economic Studies*. Washington, DC. https://www2.census.gov/ces/wp/2010/CES-WP-10-05.pdf

[8] Maisie McAdoo and Rhonda Rosenberg, (2014) What works, what doesn't: Teachers speak their minds, *New York Teacher*. http://www.uft.org/news-stories/what-works-what-doesn-t-teachers-speak-their-minds . Ninety-one percent of respondents said class size reduction was a highly effective reform and another 8 percent rated it somewhat effective, for a total of 99 percent.

Testimony to NYC City Council on Teacher Recruitment and Retention

Maria Gil, Parent Leader from Make the Road New York and Coalition for Educational Justice

January 24, 2017

Hello, my name is Maria Gil. I am a public school parent, the mother of 6 children, and a member of Make the Road New York and the Coalition for Educational Justice.

I am here to testify because teacher recruitment and retention are very important to me as a mother, and to the organizations that I belong to. In particular, we are concerned about the fact that while 85% of NYC public school students are Black or Latino, only 34% of public school teachers are Black or Latino. Our children need qualified, expert teachers in their classrooms who can be role models – teachers who look like them, who come from a similar background and can relate to their experiences. It is not healthy for our children to go through their entire education and never have a teacher who they can look at and say, "that could be me". This creates a cycle where children of color don't have teachers who look like them, and so they don't think that teaching is for them, and then they don't choose teaching as a career. It's also not healthy for white children to go through their whole education and not see teachers of color, or have them as role models.

One thing the DOE could do to address that is to create a "grow your own" program to recruit parents, paraprofessionals and school aides to become teachers, by helping to pay for their education and training. This has been done successfully in other cities.

One part of the problem is that when teachers of color come into our public schools, they don't stay long. They feel alone, they face racism in schools, and they don't have the support they need. The DOE needs to create a system of supports especially for teachers of color, so that they will stay in teaching. The DOE should also help make schools a more positive place for teachers of color by requiring all teachers, principals and other school staff to participate in regular anti-bias trainings where they look at their own biases and how it affects their teaching. This would help to create a safer environment for teachers of color in schools, and encourage them to stay.

Another part of the problem is that there are not enough Black and Latino principals and assistant principals, to be role models for teachers and mentor them. The DOE needs to create a recruitment program specifically for teachers of color to become principals, so they can help make schools a safe space for other teachers of color to grow.

There are so many things the DOE could do to address this problem. We believe that any solution the DOE comes up with has to focus on increasing diversity among teachers. Without that, we will never have the schools that our children need and deserve so they can succeed.

Thank you.

TNTP reimagine teaching

Education Committee Oversight Hearing on Teacher Recruitment and Retention

Testimony of Lesley Guggenheim, Vice President, TNTP

January 24, 2017

Good afternoon. My name is Lesley Guggenheim, and I am a Vice President at TNTP overseeing our teacher pipeline and recruitment work.

For those of you who aren't already familiar with my organization, TNTP is a national nonprofit founded by teachers. Over the last 20 years, we've partnered with more than 200 school systems across the country to help put great teachers and school leaders in front of the kids who need them most. Along the way, we've recruited and trained more than 50,000 teachers, including over 20,000 here in New York City through our NYC Teaching Fellows program.

I'm pleased to be here today to give you a national perspective on the teacher shortages many school districts have struggled with over the last few years. We've helped several districts pinpoint the root causes of their recruitment and retention challenges, and what we've found is that the conventional wisdom about teacher shortages suffers from four big misunderstandings.

First, we often talk about teacher shortages in terms of an overall shortage of applicants. But the truth is that districts usually face a more nuanced mismatch between supply and demand. They don't just need a particular number of teachers; they need specific numbers of teachers in specific subjects and specialties.

For example, many districts struggling to fill all their teaching vacancies have more than enough applicants for elementary school positions, but not enough in subjects like math, science, and special education. In 2016, more than 40 states experienced teacher shortages in these kinds of critical subject areas[1]. It's a trend that's plagued schools for decades, and it's a serious problem—but it doesn't necessarily reflect an overall failure of teacher recruitment or a lack of interest in the teaching profession.

Second, we often frame teacher shortages as recruitment problems, when the truth is that retention matters just as much. Our own research has shown that districts across the country lose thousands of great teachers every year that they should have been able to keep—teachers we call "Irreplaceables," because it's nearly impossible for a school to hire someone as effective when they leave. The more great

[1] https://learningpolicyinstitute.org/product/coming-crisis-teaching

teachers schools can retain, the fewer vacancies they'll need to fill each year, the less likely they are to face shortages.

The third misconception is that we can solve teacher shortages with short-term incentives for new teachers or other quick fixes without addressing larger systemic challenges. These ideas can help on the margins but do nothing to address the barriers keeping huge numbers of talented people from even considering teaching.

I'll give you just one example. We're in an era where teachers—especially those in science, math, and engineering—need to know their subjects more deeply than ever before to prepare students for the challenges of college and a 21st-century career. Yet certification requirements and the structure of the teaching profession itself effectively exclude a huge number of people who fit that bill: experts in other professions who have deep content knowledge and an interest in teaching. That's because most states require teachers to complete a university-based certification program before they can be considered for a permanent teaching license—often requiring a years-long commitment and tens of thousands of dollars in tuition that's too burdensome for most people with established careers and financial obligations.

Consider this from the point of view of someone working in an accounting department at a big insurance company who's always wanted to pursue teaching. The neighborhood high school is desperate for math teachers—the subject she majored in. But her only path to the classroom would be to give up her job, enroll in a preparation program, and ultimately teach full time. She can't afford to do that. She's lost a chance to pursue a passion, and students have lost the opportunity to learn math from someone who knows and loves the subject. It's likely those students will instead end up with a substitute or out-of-license teacher, or perhaps lose the opportunity to take an advanced math course at all because nobody was available to teach the course.

Hopefully that example gives you a sense of the serious consequences that flow from all these misunderstandings. When districts fail to diagnose the real causes of teacher shortages, they can't fix them. The result is persistent vacancies in critical subject areas, too few teachers able to teach to modern college and career-ready standards, and a troubling lack of diversity within the teacher workforce.

That last problem doesn't get enough attention, in my view. We know that students perform better in school when they have teachers who reflect their background and life experiences; yet most students of color are unlikely to have that experience. For example, while 17 percent of the students in K-12 public schools are Black, Black teachers make up just eight percent of the teaching force. Too few Black college students even

consider going into teaching today—a problem that's only exacerbated by the unnecessary barriers into the profession I just discussed.

I promised you four misconceptions about teacher shortages, and the good news is the last one provides some hope. We often think of teacher shortages like droughts—forces of nature that school systems can neither predict nor control. In fact, there's a lot that school systems can do to improve the quality of their teacher pipelines year in and year out and address the underlying problems that lead to shortages:

- Districts can focus on forecasting their teaching vacancies earlier and more accurately, being sure to take into account long-term demographic trends and coordinate with local teacher preparation programs. For example, rising enrollment one district we studied recently will likely require more than 100 new pre-K teachers within the next few years. At the same time, the number of English language learners in the district is expected to grow steadily for at least the next decade. These trends will likely require major adjustments to the district's recruitment strategy—but there's enough lead time for the district to prepare as long as they start immediately.

- Districts can take common sense, low-cost steps to retain more of their top teachers. Sometimes simply encouraging principals to ask their best teachers to stay is enough to make a big difference in retention rates

- Districts can also invest in innovative approaches to teacher certification that create opportunities for paraprofessionals and content experts who are working in other fields. By lowering barriers to entering the profession while holding high performance standards for earning certification, districts could create reliable new sources of teachers who can meet the demands of today's teaching profession in the highest-need subjects.

None of these ideas are theoretical. Many school systems across the country are adopting them—and teachers and students are already benefiting.

Thank you again for inviting me today. I look forward to answering your questions.

Honorable Council Members,

As a New York City School Parent, Thank you for addressing such an important topic. Nothing is more important than our children and our children's future, and without quality teachers, that future looks bleak.

My name is DeJohn Jones and I am a parent leader with the Parent Action Committee. The Parent Action Committee has worked for decades to help address the problem of Teacher Retention and Mentoring. In 2004, the Parent Action Committee as part of the Community Collaborative to Improve District 9 Schools (CC9) reached an agreement with the Bloomberg Administration and the United Federation of Teachers to create a pilot program in ten schools for the Lead Teacher Program. Currently, PAC is collaborating with the New Teacher Center to advocate for Teacher Mentors and my fellow parent leader, Josephine Ofili, will talk about that collaboration in more detail. I would like to share with you today is a personal story.

When my daughter, was in third grade, she made a strong connection with her teacher. She felt that her teacher was a mentor but was both shocked and hurt when she found out at the end of the year that her teacher had left having found a position in another district. My daughter was devastated and she struggled the next year as she had to rebuild her trust and confidence.

I was active in my daughter's school and I frequently spoke to the principal. When I asked him why the teacher had left, he told me that she had completed her master's program and now was going to teach in a different district. He states that it was a revolving door with teachers staying only to get their masters and then moving on to better schools. This was not the only teacher that left my children's schools but it was the most vivid. I don't think it's fair for teachers to build learn with some children only to go teach other children when they are more experienced. The children of the Bronx deserve the same quality of teachers as students of any district or borough. We actually need more support because so many students are English Language Learners. We need to provide incentives for teachers to teach and stay in the more challenging districts in New York City, including monetary or housing stipends. We need to provide trainings to new teachers to adequately prepare them. We need to recruit from the neighborhoods and grow our own teachers in New York City.

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Master Teachers would be hired in those high needs schools, and would work in pairs, providing both a model classroom for new and struggling teachers as well as allowing one of the teachers to support teachers in the classroom. Parents, Teachers and Principals worked together to hire the Lead Teachers in each school and part of the role of the Lead Teachers were to work with the families to develop a Family School Partnership. Each of the ten pilot program schools received the additional funding necessary,

$10,000 per Lead Teacher, to support the program. The Lead Teacher Program was so successful in improving student comprehension and teacher retention that the program was expanded citywide. But unfortunately without including funding for the Lead Teachers themselves or with a structure that supported the role that parents played in the creation and selection of the Lead Teachers. The loss of the parental structure and the additional funding for the program, led to a less than systematic expansion of the program.

Prof. Kelly Parkes
Teachers College, Columbia University
Testimony to the New York City Council Education Committee
January 24, 2017
parkes@tc.columbia.edu

Thank you for the opportunity to speak with you today. I am Dr. Kelly Parkes, an associate professor involved in teacher preparation in the Arts and Humanities, at Teachers College, Columbia University. We are the first and largest graduate school of education in the country, we have approximately 30 teacher preparation programs and our roots are in supporting education to the highest level possible.
We prepare teachers in all the content areas, as well as early childhood, elementary, bilingual teachers, and specialists.

Our Teaching Residents at Teachers College (TR@TC) Program, where we prepare teachers specifically to work in high-need schools in New York, is now in its 7th year, and we are seeing a retention rate of 94% of teachers in their schools. We are deeply invested in preparing teachers for the demands of the profession. Today I want to acknowledge the initiatives the Education Department and offer some insight and feedback to the Council.

The first is the plan of the Board of Regents to remove the exam requirement for certified out of state teachers. For recruitment, this is an excellent initiative however, as an approved teacher preparation school, all our graduating students still have this exam requirement – the ALST, the EAS, a CST, and the edTPA – a cumulative cost of approximately $800 for each student. These costs are prohibitive so we suggest some reconsideration of the requirement for student teachers is now also needed. There is research evidence to suggest that not one of these tests have strong predictive validity for teaching effectiveness or quality so a thorough review of the requirement of these exams for initially certified teachers is now essential. If this requirement is not reconsidered then perhaps teacher preparation programs could receive additional support from the state for our student teachers to access these exams.

Second, I want to underscore that we actively support and encourage the continuation of state funding of initiatives such as the Teacher Opportunity Corps. Our faculty, working within the My Brother's Keeper program, helped many new teachers of color find and keep teaching positions in New York City schools.

Third, I would like to point out that the use of the GRE as an admission requirement for teacher preparation programs is problematic. The GRE requirement does not raise the quality of teachers applying to programs, it essentially prevents many potential teachers from even applying. We want to diversify our student body, which will also increase our teaching workforce diversity, however the GRE does not accurately assess a test-taker's full potential for university level achievement, let alone teaching, and it limits access to graduate schools for many individuals, especially women, students of color and other minority group applicants.

My fourth point acknowledges the initiatives around Teacher Evaluation. These are promising, with student test scores being less prominent in the evaluations of teachers. The concept of multiple measures in teacher evaluation is strongly supported in research and we highly recommend more contextual, formative, and relevant paths of teacher evaluation be explored and implemented, in order to promote professional development and retention in the workforce.

In summary, we would like you to consider private colleges like ours, alongside CUNY and SUNY, as key partners and valuable assets in the preparation of teachers to be recruited and retained to teach in NY schools. This partnership and dialogue will ensure that our teachers are ready and successful. Thank you again for your time today.

One day, all children in this nation will have the opportunity to attain an excellent education.

TEACHFORAMERICA

NEW YORK CITY COUNCIL
EDUCATION COMMITTEE OVERSIGHT HEARING

ON

TEACHER RECRUITMENT AND RETENTION

TESTIMONY OF

CHARISSA FERNANDEZ

TEACH FOR AMERICA – NEW YORK

Good afternoon Chairman Dromm, members of the Education Committee and Council Members. My name is Charissa Fernández, and I am the executive director of Teach For America – New York.

I am proud long-time resident of the Bronx, the borough where I was born. I have committed my entire career to expanding formal and informal educational opportunity for young people in this city with a particular focus on kids of color, kids from low-income communities, and first and second generation immigrants. I spent most of my career working in the out-of-school-time field through Breakthrough (formerly Summerbridge), Liberty Partnerships Program and for more than a decade ExpandED Schools (formerly The After-School Corporation). For the past three years, I have fulfilled that commitment through my work at Teach For America.

Thank you for holding a hearing on this important topic and for allowing me to present my testimony. Identifying, attracting and retaining diverse talent for our schools is urgent. There is a national decline in the number of people entering the teacher force[1]. Further, In New York City, more than 85 percent of the students are students of color but only 40 percent of their teachers are teachers of color.[2] There is also a serious problem of retention. In New York City, a December 2015 report by the UFT[3] indicates a rising rate of teacher attrition, with starting teachers leaving at higher rates over the 2014-2015 school year. A 2012 report by TNTP estimates that the nation's 50 largest school districts lose approximately 10,000 of their highest performing teachers every year.[4]

Background on Teach For America

Teach For America's mission is to enlist, develop and support our nation's most promising future leaders to strengthen the movement for educational equity. Our corps members commit to teach for at least two years in low-income high-need urban and rural schools in 53 regions around the country. The vision that we, Teach For America – New York, are working towards is that one day, every student in New York City will have access to great neighborhood schools that support, inspire and challenge them to be the leaders our city needs. We pursue this vision in collaboration with schools, city agencies, and community organizations.

New York City was one of the charter regions of Teach For America, which was established in 1990. Every year since then, we have partnered with NYC Department of Education to identify teachers for some of the hardest to staff schools in our city. Six years ago we began providing teachers for early education centers as well. We provide intensive training and ongoing support to our teachers so that they can have an enduring positive impact on New York City's students.

Today, there are 2,400 Teach For America educators at work in New York City schools. Our teacher force in New York City includes approximately 400 first and second year teachers – who we call corps members – and 1,700 alumni teachers who completed their two-year commitment (either here in NYC or in one of our other regions) and continue to teach. Collectively, Teach For America teachers serve more than 95,000 students throughout New York City annually. We also have approximately 300 alumni who are now school leaders, including principals, assistant principals and other administrators. This year, our first and second year teachers work in 173 schools in The Bronx, Brooklyn and Manhattan.

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[1] https://www.brookings.edu/blog/brown-center-chalkboard/2016/05/09/what-do-teachers-do-when-they-leave-teaching/
[2] https://www.brookings.edu/blog/brown-center-chalkboard/2016/05/09/what-do-teachers-do-when-they-leave-teaching/

[3] http://www.uft.org/where-we-stand/reports
[4] http://tntp.org/publications/view/retention-and-school-culture/the-irreplaceables-understanding-the-real-retention-crisis

Our teachers are hired in schools and content areas of the highest need, including STEM, special education, and early childhood education. We focus our partnership and hiring work in schools in which 80 percent of students or more qualify for free-and-reduced-priced lunch, and estimate that 83 percent of the students in the schools where our teachers teach live in poverty (as defined by the New York City Department of Education), and that 93 percent of the students are Black or Latino. Our teachers meet critical needs in our city schools. They are concentrated in high poverty neighborhoods:

- East Harlem, Washington Heights, Morningside Heights, Highbridge, Hunts Point, Concourse, Mott Haven, Soundview, Bedford-Stuyvesant, Brownsville, Flatbush and Crown Heights, and

They teach in license areas where the demand far outpaces supply:

- 45% special education
- 14% STEM
- 10% teach early childhood

Recruiting Diverse Talent

National

Teach For America employs over 140 recruiters who recruit students from more than 740 colleges and universities, including a number of historically black colleges and universities. We also partner with African-American and Latino fraternities and sororities. Teach For America has a rigorous selection process. Last year, we accepted 14% of the 37,000 applicants. The average GPA of our new teachers was 3.43. We seek candidates who have demonstrated leadership and experience working in low-income communities. Importantly, we seek people who might not otherwise have considered a career in education.

Teach For America helps to make teaching a viable career choice by removing financial barriers to entry. We provide transitional loans and grants and provide accommodations and food before teachers earn their first paycheck. We also enroll our corps members in AmeriCorps which provides education awards to help cover costs of earning a required master's degree in education.

Local

In New York we have invested in a new Director of Recruitment Partnerships who is dedicated to creating sustainable talent pipelines through collaboration with local non-profit organizations, our current corps and alumni, and colleges where our national recruiters do not have a presence. We recently co-hosted a leadership conference with NYC Men Teach. Other organizations we are actively engaging include: Jumpstart, CUNY ASAP, The Breakthrough Collaborative, Peer Health Exchange, Thurgood Marshall College Fund, Practice Makes Perfect, Community Impact at Columbia University, and Reading Partners.

Teach For America has prioritized teacher diversity because we believe that having more teachers who share the backgrounds of their students will have a positive impact on student outcomes. Our commitment to teacher diversity makes us among the most diverse teacher pipelines in the nation. Nationally, more than half of our incoming teachers identify as people of color; 1 in 2 come from low-income backgrounds; and 1 in 3 are the first in their family to graduate college. More than 50 accepted applicants have Deferred Action for Childhood Arrivals (DACA) status. In New York City, of our 2016 cohort of teachers:

- 62 percent identify as persons of color,
- 43 percent are native New Yorkers,

- 53 percent come from a low-income background,
- 43 percent are first generation college students,
- 8% identify as LGBT, and
- CUNY, SUNY and NYU were the top contributing universities to our teaching corps.

Retention Strategies

We understand the value of teacher retention and encourage our corps members to teach beyond their two-year commitment. We also know that we cannot do this work alone. For example, in October, we partnered with TNTP (formerly The New Teacher Project) to host a workshop for our coaches and partner principals called Retaining Your 'Irreplaceables.' The session introduced concrete strategies to help retain teachers, including but not limited to second year corps members. Our corps members spend the majority of their time in the schools where they teach and teachers, like all professionals, need to feel successful, supported and valued. They also want opportunities for professional and leadership development.

As such, we pay special attention to partner with schools where new teachers will be both challenged and supported. We also believe recruiting teachers who have connections to the communities where they teach will promote retention. We seek to place our corps members in the schools where they are needed and can have the greatest impact.

In addition, TFA provides corps members with ongoing support as well as resources and opportunities that address the challenges of being a new teachers and/or young professional in the workforce. These include:

- Coaches – each corps member has a coach throughout their first two years of teaching
- Fellowships – a ten-week seminar that aims to connect educators, deepen their instructional practices around culturally responsive pedagogy and grow their personal leadership.
- Affinity Groups – safe, supportive spaces led by TFA alumni centered on shared identities that provide for corps members and alumni to engage in critical reflection and honest dialogue.

We're proud that our most recent report on third year teacher retention indicates that 78 percent of our teachers remained in the classroom for a third year.

A Partnership for the Future

Teach For America is committed to building on our progress and we hope that the City Council will provide funding to support us to bring in more diverse talent to the New York City schools that need it most. We are eager to bring in more teachers who share the backgrounds of their students and fill some of the highest needs license areas in New York City including STEM, early childhood, and special education placements.

Thank you for the opportunity to share our experiences. I welcome questions that you may have at this time.

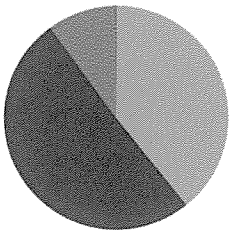
TEACH FOR AMERICA-NEW YORK

OUR NYC TEACHER FORCE

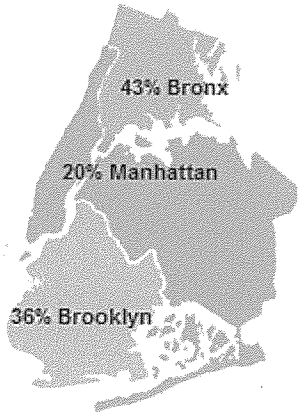
406	+	1,710	=	2,116	→	95,220
Corps Members		Alumni Teachers		TFA Teachers		NYC Students Served

CORPS MEMBERS (1ST & 2ND YEAR TEACHERS)

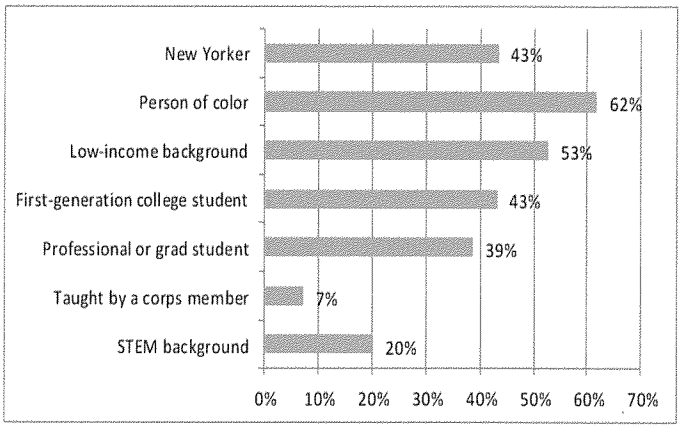
Where they work:



- 51% District Schools
- 39% Charter Schools
- 10% Community-Based Organizations (Pre-K)



About the 2016 corps:



New York 2016 Corps Top Contributors: City University of New York, State University of New York, New York University

What they teach:

179	47	55	73	44	8
Special Education	General Education	Science & Math	Humanities/ Other	Pre-K	Bilingual

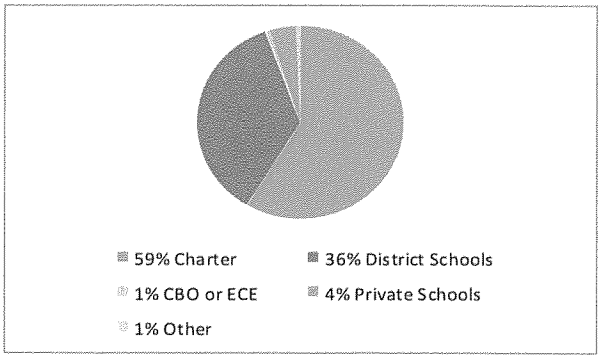
ALUMNI EDUCATORS

Career Paths:

5,230	1,710	732	143
Total NYC Alumni	Teachers	Education Nonprofit	School Leaders

27	23
School System Leaders	Education Entrepreneurs

Alumni teachers:



34% Alumni teachers identify as people of color

Source: TFA Alumni Survey and CM Survey

New York City Council Education Committee
Oversight Hearing on Teacher Recruitment and Retention

Testimony of
David C. Bloomfield
Professor of Education Leadership, Law & Policy
Brooklyn College and The CUNY Graduate Center
January 24, 2017

Chair Dromm and Members to the Education Committee, thank you for this opportunity address the vital topic of teacher recruitment and retention in the New York City Public Schools.

My remarks will be short, supplemented by published materials appended to my written testimony. Also, I will confine my testimony to just a small part of the complex problems of teacher recruitment and retention: the choke point of certification.

Certification defines the pool of applicants available for City Department of Education recruitment and, thus, retention. And if only there was some rational relationship between who gets certified, then recruited, then retained!

But, as I observe in my recent Opinion column for Gotham Gazette, "the system of certification and retention is a sieve that screens more those who persevere through the procedural maze than for talented educators."

So as you labor to recommend changes to the system of recruitment and retention, I urge you to filter out the politically expedient calls for ever more, continuous, and specific standards, credits, tests, and the like. Rather, think how a reasonably able and committed person might prosper throughout a career without being dissuaded by needless procedural B.S. and conditions of employment. What hurdles might be removed, rather than what new obstacles placed in their path? Children need teachers of compassion, learning, and experience, not dogged box checkers inured to bureaucracy so often favored by the present system.

Thank you for your kind attention. I would be happy to answer any questions.

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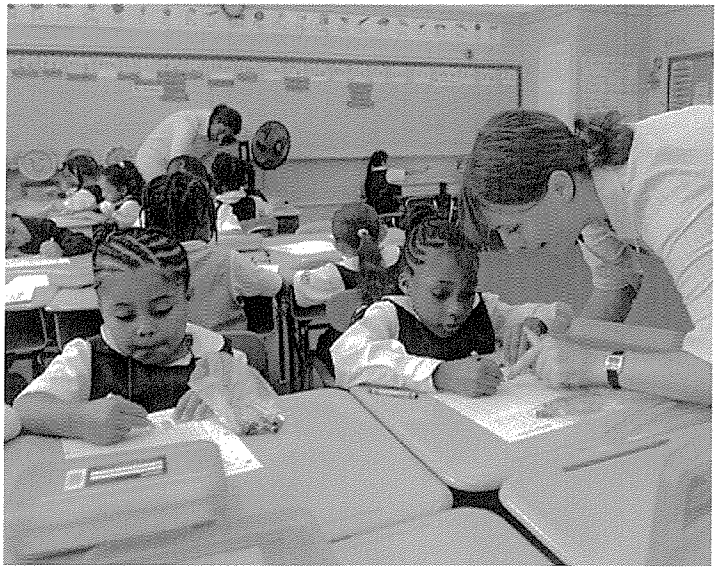
Teacher Certification and Recruitment: Boats Against the Current

GG gothamgazette.com/opinion/6725-teacher-certification-and-recruitment-boats-against-the-current

IT news



(photo: NYC DOE)

First, do no harm. Ha!

On Tuesday, the New York City Council will hold an oversight hearing on teacher recruitment and retention. The Council announcement states that a hearing is necessary because "there's a growing teacher shortage across the United States, although it is impacting some states more than others. This is the result of a nationwide trend that has seen the number of college students enrolled in education majors decrease by 35% in the past five years, as well as an increase in teachers leaving the profession."

This attention follows on the heels of the recent New York State Regents proposal to roll back rigorous 2014 teacher certification requirements and congressional efforts to rescind recently enacted U.S. Department of Education regulations.

We've got to stop the madness.

The constant revision of teacher preparation and certification requirements has real consequences, with the bad far outweighing the good. The reason for the problems identified by the City Council -- to be further illuminated at Tuesday's hearing -- are of our own making. The fact is that policy-makers are in the dark because we really don't know what is required to make a good teacher. Not a great teacher, mind you, since certification, despite the political cant, is about formulating minimum standards for public school job entry. A Google Scholar search of the field reveals hundreds of articles published in the last year alone on this highly technical subject, which no regulatory policy can hope to encompass.

The system of certification and retention is a sieve that screens more for those who persevere through the procedural maze than for talented educators. Every state comes up with its own scheme, blundering around in the politically-appointed regulatory kitchen since no workable recipe has been found. Private school teachers need no certification. Many charter school teachers are uncertified, provided exceptions under state law. Tens of thousands of New York City public school students are taught every day by staff teaching "out of license."

And every time some new half-baked hurdle is raised, an industry of preparation programs and their students is thrown into chaos. I work in higher ed. Curriculum changes are a big deal. Sometimes whole courses need to be developed, taking months to refine and sometimes longer to be reviewed and approved by layers of faculty committees and administration. Even small changes in course content require time for instructors to research, identify readings, determine assignments, and create assessments. And for every new course or curriculum tweak, other once-favored material needs to be adjusted or dropped. Students are whipsawed among confusing mandates, across overlapping certificate categories, with variable, dizzying deadlines. What is easy for politicians and regulators to order becomes a hornet's nest to implement.

And then, once set, it starts all over again as current city, state, and federal actions attest. We run in place with the urgency of lame hamsters on a wheel, every step dictated by some imperfect previous step and the political imperatives of change. Or, borrowing a more eloquent metaphor to describe our vain, pedestrian predicament, "we beat on, boats against the current, borne back ceaselessly into the past."

[Read: Teacher Recruitment, Retention Will Be Focus of City Council Hearing]

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David C. Bloomfield is Professor of Education Leadership, Law, and Policy at Brooklyn College and The CUNY Graduate Center. He is the author of American Public Education Law, 3d edition (2016). On Twitter @BloomfieldDavid.

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Have an op-ed idea or submission for Gotham Gazette? Email opinion@gothamgazette.com

Tags: Education

Teacher Recruitment, Retention Will Be Focus of City Council Hearing

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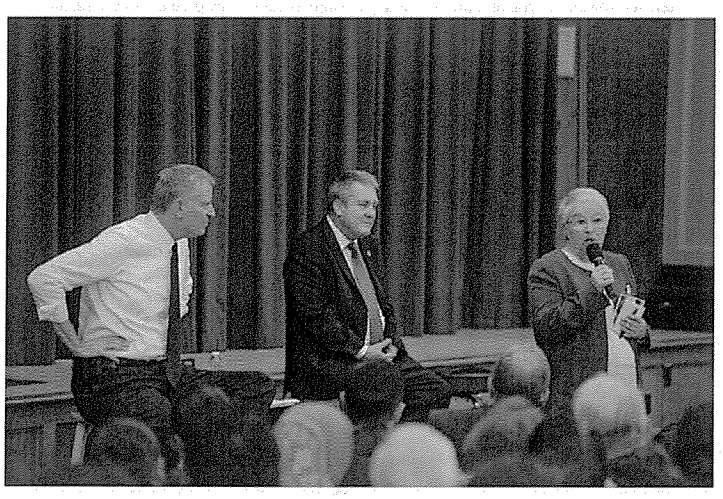
IT news



Mayor de Blasio, Council Member Dromm, Chancellor Fariña (photo: Demetrius Freeman/Mayor's Office)

On Tuesday, the education committee of the New York City Council will hold an oversight hearing on teacher recruitment and retention.

"One of the things I want to draw out is why do we lose 50 percent of our teachers within five years of their starting," said City Council Member Danny Dromm, chair of the education committee and a retired long-time public school teacher himself. "It's a hearing that I've wanted to do for a while," Dromm added in a recent interview.

Representatives from the city Department of Education are among those expected to testify at Tuesday's hearing, which is at 1 p.m. at City Hall. When asked, DOE spokespeople did not provide Gotham Gazette with comment ahead of time or specific data that DOE reps will present at the hearing.

New York City, like many other school systems, has struggled to recruit a diverse teacher workforce, especially men of color, and to retain its teacher -- as Dromm said, the city has an exceptionally high rate of teacher departure from the school system. It's unclear if the rate is quite as high as 50 percent, but data does show that more than one-third of new teachers leave the profession by the end of their fifth year, largely within the first three years.

"What are the contributing factors to that?" Dromm asked, explaining what he hopes to get at in the hearing, "Salary? Lack of support? The evaluation system? What are the reasons that we're losing all those teachers?"

Dromm said he's expecting to hear from the DOE, as well as representatives of the United Federation of Teachers (UFT), and other stakeholders, including advocates. Dromm hopes that several teachers, and perhaps even students and parents, will attend and testify. He said he often likes to schedule his committee hearings for 1 p.m. so that people can come after school hours.

While the UFT has had a strong relationship with Mayor Bill de Blasio and this administration, there have been areas of disagreement or conflict that do relate to teacher retention: the union has criticized the administration's moves to drastically reduce student suspensions, explaining that teachers need more support, and the work climate at the city's most-struggling schools -- those in its Renewal program -- which have continued to see especially high rates of teacher turnover.

Asked in 2015 about high turnover rates at Renewal schools, de Blasio pivoted to discuss teacher retention across the city. "I think the challenge of teacher retention is system-wide," the mayor said at a press conference. "It's very tough work...People who do it, do it because they're true believers...You're talking about, obviously, a lot of kids who come from very disadvantaged circumstances, a lot of kids whose first language is not English, and 171,000 kids who happen to have special needs...Until very recently in this city, teachers were being attacked on a regular basis by the leadership of the school system and the city. We've changed that. We support our teachers and they know it."

David Bloomfield, an education professor and also a former K-12 teacher, believes that "the retention piece really has everything to do with conditions in the schools, such as class size, such as myriad central mandates, on top of the changing Common Core requirements."

The "lack of retention" also creates a snowballing effect, Bloomfield said, where "so many teachers are new, so many of these teachers are just trying to get their feet on the ground" yet they are often employed in the most challenging schools, receive the most challenging course schedules, and do not receive the support they need to feel successful.

"The greatest vacancies are in the most difficult schools," Bloomfield said, "the better schools don't have the vacancies." Additionally, he said, "there are accountability measures in place that make it an unattractive profession."

Research on teacher retention is somewhat mixed, though studies do point to the importance of strong administrators (principals, vice principals) and the value of mentors in reducing teacher departures.

"To improve retention, the organization of teaching would require a sea change in how teachers are employed," Bloomfield said. "The best thing they can do is to improve the school environment. A school is a teacher's workplace: improve facilities, improve classroom conditions, including class size. Even parking," he said with a laugh, but stressed that it can be one of many parts of the job environment that matter to people.

"The other issues are salary and benefits, which have improved under de Blasio, but don't compare to the suburbs," Bloomfield said.

Indeed, referring to both professional development investment in teachers and their high rates of departure, Dromm said, "Our teachers get recruited out to Long Island. We train them and they go out to the Island."

Professional development for teachers is expected to be a key theme of the hearing. Enhancing teacher PD has been a major focus of city schools Chancellor Carmen Fariña, who was appointed to the role by Mayor Bill de Blasio at the start of his term and has been involved in the city school system for five decades, including as a teacher. Fariña's focus on

more PD for teachers includes opportunities to teach new courses as the city has expanded its computer science and Advanced Placement offerings under the mayor's Equity and Excellence agenda.

Mentioning the new weekly professional development block that Fariña instituted for all teachers, Dromm said, "I want to know some of what is going on, how that professional development piece is going...If we hear that the support is not there for new teachers, advocating for that support will be an outcome of this."

De Blasio has stressed the importance of professional development and his administration's focus on supporting teachers, saying at the 2015 press conference, "Until recently, teachers were not getting the kind of support for teacher training...if you're a professional you want to keep getting better -- that training makes a world of difference -- we've double down on teacher training."

"I think we're seriously addressing teacher retention by trying to build the foundation for a rewarding work dynamic," de Blasio said. "But there's a lot more we're going to have to do beyond that."

Agreeing that teachers clearly feel "less under attack" than when Michael Bloomberg was Mayor, Professor Bloomfield said the de Blasio-Fariña regime has "certainly improved the tone so that teachers feel more valued now" and that when it comes to teacher retention, "their positive relationship with the union is probably helpful." To truly improve teacher retention, Bloomfield said, would require major "structural" changes to the profession that simply haven't happened yet.

Aside from shifts in how teachers are treated and their work environments, there are other issues related to retention, but also the recruitment piece, which will also be part of Tuesday's hearing. This is likely to center around how the city is both attracting top teaching talent generally, but especially men of color.

Just 8 percent of the city's nearly 80,000 teachers are men of color, a statistic that led the de Blasio administration to in 2015 launch NYC Men Teach, which seeks to add 1,000 male teachers of color to the city's classrooms by the 2018-2019 school year.

Tuesday's hearing is likely to include an update from the DOE on NYC Men Teach, as well as other recruitment efforts.

In terms of retention and the city's teaching workforce, there are also calls for tougher weeding out of weak teachers in their early years while increasing efforts to hold on to strong teachers well into their careers. This is where debates over "teacher accountability" and tenure come in -- some believe that it is both too easy to gain tenure and too easy to keep your job as a teacher. Questions also persist about a career ladder for teachers so that they can move into mentoring, coaching, and department head type roles without leaving the classroom to become administrators or leaving education altogether.

"It's a very difficult job," Dromm said of teaching, "and I don't think people fully understand or appreciate what teachers have to do. There's a glamorized idea of working 8 to 3:30 and having summers off. But [retention] numbers help show: this is a tough job."

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by Ben Max, Gotham Gazette

Read more by this writer.

FOR THE RECORD

Good afternoon and thank you for this opportunity to speak to you about teacher recruitment and retention, and dual language programming support.

My name is Lucas Liu, I am from CEC3, and the Chair of the CEC3 Multilingual Committee.

I last spoke here on November 22nd in support of Resolution 890 calling upon the New York State Legislature to pass and the Governor to sign A.329/S.554, to implement more foreign language instruction in elementary schools and provide for 100 awards of up to $10,000 each for college students who are working towards certification in foreign languages education, to cover the costs of tuition and materials for their education.

I also spoke of the need for additional funding for dual language programs to support the additional unfunded costs associated with non-ELL students who are enrolled in dual language classes wishing to learn a second language.

Just by the fact that there are: 1) Assembly and Senate Bills to support foreign language instruction and future teachers, 2) a City Council Education Committee Resolution in support of the Bills, 3) the NYC DoE has a program called Subsidized Bilingual Extension Program (SBEP) that will subsidize the cost of achieving the bilingual extension of the teaching certification, and allow a teacher to teach a bilingual class while completing course work toward earning the bilingual extension, and 4) that we are here today talking about teacher recruitment and retention, makes it quite clear that we all acknowledge that there is a shortage of teachers, and specifically dual language teachers.

For dual language teachers, not only is there is extra course work required in becoming a certified dual language teacher, there is also extra work required in running a dual language class.

In addition to preparing lesson plans in both English and the targeted language, teachers:

1) In many instances have to translate the lessons from English to the targeted language either because of the lack of funding to acquire the lesson plans in the target language or because of their desire to modify the lesson plan to better fit the needs of the students.
2) Must seek out bilingual focused professional development courses due the limited offerings by the DOE. These bilingual professional development courses can be more expensive that the regular professional development courses.
3) Homework must be drafted in the targeted language.
4) Other types of targeted language learning opportunities must be identified, researched and incorporated into the learnings.
5) Teach English language learners and non-ELL students interested in learning a second language.

However, dual language teachers are not compensated for this extra effort. There is no incentive to becoming a dual language teacher. Recruitment and retention of dual language teachers would improve if there were additional monetary awards for dual language teachers who are teaching a dual language class, however, I am sure there are also non-monetary awards that can incentivize someone into becoming or remaining a dual language teacher. It will take some creative thinking, and perhaps simply

just asking a non-dual language teacher what would incentivize them to becoming a dual language teacher, or asking a current dual language teacher what would motivate them to stay a dual language teacher.

I am sure properly funding the needs of a dual language classroom would go a long way. Which brings me to my second point that I mentioned earlier. Providing a per class allocation to cover the additional costs of teaching a non-ELL student who enrolls in a dual language class because they want to learn the targeted language.

I have spoken to CM Helen Rosenthal and CM Levine on this issue. CM Dromm, we are scheduled to meet tomorrow the 25th at 2:30pm at your legislative office to further discuss this. We estimate approximately $7,200 per dual language class would be a good starting point to support existing dual language programs at DOE managed schools. The details on the additional funding are laid out in the attached worksheets that I can walk the Committee through if we have time.

There is a 3rd item that deserves further discussion around dual language class size in upper grades of elementary school, middle school and high school. But that can be a discussion for tomorrow.

I look forward to our meeting tomorrow.

Thank you.

Estimate of total number of Dual Language (DL) and Transitional Bilingual Education (TBE) classrooms

Type of School	Number of Schools w/DL or TBE Programs(1)	Grades	DL/TBE Classeroom per Grade (est) (2)	Total DL/TBE Classrooms	Per Class Allocation (50/50) (3)	Total per Type of School	Per Class Allocation (67/33) (3)	Total per Type of School
D79 (9-12)	1	4	1	4	$ 6,555	$ 26,220	$ 8,740	$ 34,960
Early Childhood (PK)	10	1	1	10	5,700	57,000	7,600	76,000
Elem (K-5)	178	6	1.5	1,602	5,700	9,131,400	7,600	12,175,200
HS (9-12)	49	4	1.5	294	6,555	1,927,170	8,740	2,569,560
JHS (6-8)	65	3	1.5	293	6,555	1,917,338	8,740	2,556,450
k-12 (K-5)	1	6	1.5	9	5,700	51,300	7,600	68,400
k-12(6-8)		3	1.5	5	6,555	29,498	8,740	39,330
k-12 (9-12)		4	1.5	6	6,555	39,330	8,740	52,440
k-8 (K-5)	24	6	1.5	216	5,700	1,231,200	7,600	1,641,600
k-8 (6-8)		3	1.5	108	6,555	707,940	8,740	943,920
Secondary (6-8)	6	3	1.5	27	6,555	176,985	8,740	235,980
Secondary (9-12)		4	1.5	36	6,555	235,980	8,740	314,640
	334			**2,609**		$ 15,531,360		$ 20,708,480

Key			
	PK/K-5	PK/K-5	1,837
	6-8	6-8	432
	9-12	9-12	340
			2,609

(1) Based on NYC DOE 2015-16 School Year (latest available on DOE website).

(2) Schools can have 1 - 3 DL/TBE classes per grade.

(3) From Dual Language (Dual Language & Transitional Bilingual Education) vs General Education Class Costs worksheet.

Dual Language (Dual Language & Transitional Bilingual Education) vs General Education Class Costs

	Dual Language(1)	Gen Ed	Difference DL vs GenEd	Startup / Annual(2)
Instructors				
Teacher (excluding benefits)	$ 80,000	$ 80,000	$ -	
Teaching Assistant (ex benefits)	20,000	20,000	-	
Supplemental hours (5 hrs/wk)	8,000		8,000	Annual
Substitute Teacher x 14 Days	3,312	3,312	-	
Paraprofessional	28,000	28,000	-	
	139,312	131,312	8,000	
Textbooks				
Textbooks (foreign language)	900		900	Startup
Textbooks (English)	600	600	-	
Additional Science and Social Studies books	360		360	Startup
Dictionaries	200		200	Startup
	2,060	600	1,460	
Annual Book refresh	2,000	1,500	500	Annual
Class Materials				
Manipulatives	2,000	2,000	-	
Misc Supplies	1,000	1,000	-	
Misc Supplies (For. Language)	500		500	Annual
	3,500	3,000	500	
Classroom Library Books				
English	2,000	2,000	-	
Foreign Language	1,500		1,500	Startup
	3,500	2,000	1,500	
Technology				
Laptops x 2	2,500	2,500	-	
ELMO	2,500	2,500	-	
Online literacy programs (English)	300	300	-	
Online literacy programs (Foreign Language)	300		300	Annual
	5,600	5,300	300	
Professional Development				
10 Days of PD by Expert in Field	500		500	Annual
Mentoring for New Teacher	6,400	4,800	1,600	Annual
	6,900	4,800	2,100	
Furniture				
Bookshelves x 6	1,200	1,200	-	
Desks & Chairs x 32	6,600	6,600	-	
	7,800	7,800	-	
Total	**$ 170,672**	**$ 156,312**	**$ 14,360**	
Classroom - Startup Costs	$ 20,360	$ 17,400	$ 2,960	
Classroom - Annual Costs	150,312	138,912	11,400	
			$ 14,360	

non-ELL vs ELL Student Ratio(3)	Total Additional Annual non-ELL Cost DL per class	
50/50	$ 5,700	(Classroom - Annual Costs/2)
67/33	7,600	(Classroom - Annual Costs/(2/3))

	Additional Annual non-ELL Funding per classroom		# of DL / TBE classrooms (5)	Total Additional Annual non-ELL Funding	
	50/50 (a)	67/33 (b)	(c)	50/50 (a) x (c)	67/33 (b) x (c)
pk-5(4)	$ 5,700	$ 7,600	1,837	$ 10,470,900	$ 13,961,200
6-8	6,555	8,740	432	2,831,760	3,775,680
9-12	6,555	8,740	340	2,228,700	2,971,600
			2,609	$ 15,531,360	$ 20,708,480

(1) Dual Language = Dual Language and Transitional Bilingual Education Classes.
(2) One-time startup costs vs Ongoing annual costs.
(3) ELL's cover 50% & 33% of the additional annual DL class costs.
(4) PK-5 is weighted 1.00, 6-8 & 9-12 is weighted 1.15.
(5) See methodology for determining # of DL/TBE classes on "Estimate of total number of Dual Language (DL) and Transitional Bilingual Education (TBE) classrooms" worksheet.

Good Afternoon Council Members,

My name is Josephine Ofili. I am the Bronx Borough President Appointee for the CEC 9. I am also a Parent Leader of the Parent Action Committee (PAC), a multicultural group of parents and community members whose goal is to improve the quality of education in all schools in New York City.

For so many years, schools in District 9 were underperforming. In terms of state test scores, we were in 2nd to last place. New teachers coming into our district would leave within 5 years. So PAC went into the schools to find out why. We talked to parents, teachers, students, principals and other school staff and found out that new teachers were mostly assigned to the highest-need schools, given few resources and little professional support. They were inadequately prepared for our schools. Most ended up leaving, feeling frustrated; some even left the field altogether, disillusioned. Other issues included lack of classroom management skills, lack of social-emotional support for students, lack of parental engagement, language and cultural barriers, and limited knowledge of the school community and neighborhood. In 2013, PAC released a report, entitled "Persistent Educational Failure" that detailed the problems our district was facing. District 9 was in dire need of a different approach.

Our plight soon came to the attention of Ms. Thandi Center, the Director of the New Teacher Center. With her help and also our partnership with the Department of Education and District 9 Superintendent Ms. Leticia Rosario, a Plan of Action was put in place: Develop instructional mentors, coaches and school leaders to provide the support that teachers need and thereby reduce the high teacher turnover in District 9. Today, the New Teacher Center is in 8 of the highest needs and hardest-to-staff school districts in New York City: Districts 7, 9, 11 & 12 through Department of Education funding and Districts 5,8, 10 & 19 through Federal i3 Scale Up Grant. Teachers are getting on-the-job mentoring from experienced and dedicated teacher peers to help improve classroom instruction and student learning in order to be effective in the classroom and invest in their students and the community.

Since the New Teacher Center program went into effect in 2014-2015 School Year, new teachers (Years 1-3) have seen an improvement in student performance in ELA and Math. To support this work, PAC designed a training manual for teachers and school staff on effective parent engagement that also addressed the challenge that teachers face working with diverse school communities and cultures. Its entitled "Building Family- School Alliances for Effective Parent Engagement". It will be available soon. We also created a video of different role-plays to support the manual.

City and State policies must focus more attention to providing support for teachers. More funding is needed to keep this initiative going. For instance, offer more Lead Teacher and Master Teacher positions, offer financial incentives such as annual bonuses, housing and transportation subsidies, and free parking.

In closing, hiring new teachers to replace those that leave with will not solve the problem of teachers do not get the needed resources and support. The solution must be to retain good, effective teachers already in our schools so as to ensure that our children get an excellent education. Our children deserve the best. Thank you.

Educators for Excellence

New York

Hello. Thank you so much for inviting me to speak here today. My name is Maryanne Kiley, and I am the Executive Director of Educators for Excellence – New York. Founded by district school teaches in the Bronx, we are a growing movement of 24,000 educators across the country, united in belief around a common set of principles about how to elevate the teaching profession so we can deliver a more just education system to the young people in our nation. I am here representing more than 12,000 members across New York City.

In March, Politico revealed that New York State will soon face a teacher shortage, showing that statewide, the number of classroom teachers fell by eight percent between 2005 and 2015. A third of the state's classroom teachers are approaching retirement[1] whereas 35% of new teachers leave within five years. [2]One quarter of the teachers hired in 2011 have already left the classroom.[3] Eighty percent left because they didn't like the job, or found a new one.[4]

This disproportionately affects young people of color, and those from low-income backgrounds. For example:

- Black students are 44% more likely than White students to be placed in math classes with teachers rated Ineffective, and Latino students are 15% more likely
- When we look at the quartile of schools with the highest percentage of young people living in poverty and compare that to the quartile with the lowest, we find that young people in poverty are:
    - 2.8 times more likely to be placed with first-year teachers
    - 10.6 times more likely to be placed with teachers who are not "highly qualified"
    - they also experience a 68% higher turnover of teachers[5]

More than two decades of research demonstrate the connection between teacher quality and student learning. In Tennessee, one study has shown

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[1] http://www.politico.com/states/new-york/albany/story/2016/03/as-shortage-looms-state-rethinks-how-it-recruits-and-treats-its-teachers-032004

[2] http://www.uft.org/files/attachments/attrition-report-feb-2015.pdf

[3] http://www.uft.org/files/attachments/attrition-report-dec-2015.pdf

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

[5] http://www2.ed.gov/programs/titleiparta/equitable/nyequityplan072015.pdf

that that students from low-income backgrounds are actually more likely to benefit from instruction by a highly effective teacher than their more advantaged peers. In other words, it is a wiser investment to figure out how to keep excellent teachers in schools that have high concentrations of poverty. However, these schools are much more likely to be staffed by inexperienced teachers, and suffer from high rates of turnover.[6]

E4E teachers in New York City developed three recommendations to elevate the teaching profession and retain teachers, particularly at schools that support young people of color and those who live in poverty.

- First, teacher compensation has not caught up with our increasingly complex profession. New York's steps and lanes teacher compensation system does little to encourage early career teachers to stay in the classroom, as there are only incremental increases in the first 6-7 years – the very years young professionals are thinking about starting families or purchasing homes. [7] To recruit high quality teachers, we must increase the starting salary. By raising the starting salary to more than $60,000[8] the DOE will make teaching more attractive to recent college graduates with Master's Degrees, but we must provide more financial incentives for the early part of their career in order to retain them. Doing so would place teachers in the same intellectual category as other highly educated professions, and would attract a larger, more racially and economically diverse base of talent. Raising the starting salary would also make teaching more enticing to career changers, who are mid-career and often have to take a significant pay cut in order to enter the profession.
- Second, many teachers want increased responsibility and access to career ladders that don't involve leaving the classroom. Growing from a classroom teacher to a lead teacher or master teacher allows educators to share their expertise, increase their impact and grow as professionals. To expect a teacher to be solely in the classroom for

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[6] http://www.aft.org/periodical/american-educator/winter-2002/attracting-well-qualified-teachers-struggling

[7] http://schools.nyc.gov/nr/rdonlyres/eddb658c-be7f-4314-85c0-03f5a00b8a0b/0/salary.pdf

[8] Darling-Hammond, Linda. "Doing what matters most: Investing in quality teaching." National Commission on Teaching and America's Future, Teachers College, Columbia University, 1998, available at http://www.calstate.edu/ier/ reports/LDHRpt.pdf.

their entire career without any additional responsibilities or roles diminishes the effect that high quality teachers have on their peers, and ignores the realities of the economy in the 21st century.

- And third, we must not only make the profession attractive to new teachers. We must create better tools for principals to keep high quality teachers in the classroom. Here in the City, we have started the process to reward and incentivize effective teachers. The Renewal Schools program is a good start, giving principals access to both financial incentives and career ladder opportunities. However, in a system of over 1,800 schools, we need to do a better job of ensuring that all students have access to a high quality teacher. The Renewal Schools program is limited to 94 schools, and serves 3% of New York's students. We need to expand the opportunity for all principals to use these types of incentives to retain high quality teachers.

In order to attract the caliber of professional that the young people of this city deserve, we must modernize the teaching profession for our ever-changing economy. Teachers in New York City are among the most highly educated professionals, and while other industries that compete for their talent have evolved and are adapting to a changing workforce, the teaching profession is being left behind.

One in every 300 Americans is a student in the New York City Department of Education; I believe a future president is sitting in one of our classrooms right now, along with scientists who will make medical breakthroughs and visionaries who will work to bend the arc of the universe ever closer toward justice. New York City is where people of all backgrounds and talents come to make their mark. We need to create a system that will entice more of them to make their mark on future generations.

Bank Street
College of Education

January 24, 2017

Dear Honorable New York City Council Members:

Bank Street College would like to thank you for hearing testimony on the crucial topic of teacher recruitment and retention. Education is vital to our city's future, and good teachers have a powerful impact on student outcomes and on our shared economic and creative interests. When students have quality teachers, they are more likely to do well in school. Successful students go on to live productive, more fulfilling lives. Quality teaching matters for us all: every additional student who finds school engaging enough to persist and graduate saves taxpayers roughly a quarter of a million dollars.[1] We commend you for hosting a hearing on this critical topic.

My experiences as Chief Academic Officer and Senior Deputy Chancellor of the New York City Department of Education confirmed time and again that teacher recruitment and retention are key to improving schools and outcomes for students. I know firsthand that the hiring challenges facing the district are complex—but not always inevitable. Every year teachers leave through retirement, moving, and personal decisions. These are to be expected. But turnover of our early career teachers is particularly harmful and costly, and underprepared teachers leave at rates 2½ times higher than well-prepared teachers.[2] Today, I want to focus my comments in two domains. First, I want to share with you our understanding about the weakness in the system of attracting, preparing and retaining teachers and our strategy for addressing those weaknesses across the country. Second, I want to discuss how this work can translate into better prepared teachers for some of our most high-need students by supporting the high-quality preparation of new ESL teachers working with students from our diverse immigrant communities.

New Hires: Problems and Possibilities

As you probably know, the New York City Department of Education (DOE) hires roughly 6,000 new teachers every year. The enormous job of staffing new teachers is a recurring annual task. I can personally attest that the DOE has a strong, capable staff dedicated to this work. They deserve our appreciation for their tireless efforts to meet the goal of staffing huge numbers of open positions in the system, year after year.

At the same time, I believe we may be focusing on the wrong goal. Instead of getting better at filling recurring openings, we should continue to improve our systems so that we get even better at retaining the teachers we do hire, particularly in the subjects and communities that need it most. We can do that by making sure they are prepared well to succeed in their jobs *before* they are offered contracts.

Within the first year of hiring those 6,000 new teachers, current national trends in teacher retention would predict 500 of them would leave. New York City beats those odds, with only about 400 who don't return for a second year (see slide 1). We think we should try to get that number down even more. These new teachers invested time, energy, and hopes in their chosen careers. The price tag for teacher turnover in urban centers is estimated nationally at $20,000 per person;[3] assuming New York

City is reflective of other big cities, that would be $8,000,000 a year in recurring costs to operate a revolving door for first-year teachers in New York City public schools.

The human costs are also huge. Principals need to hire a new teacher again the following year. School communities, professional culture, and, most importantly, student learning all suffer as a result. And the teachers who left will forever carry with them the bad taste of a failed dream of becoming a teacher in our public schools.

Imagine instead if the $8,000,000 we spend annually on replacing those 400 teachers was invested in providing the best preparation possible for 400 aspiring candidates. Because candidates who have been well prepared stay in the profession longer, even when placed in challenging schools, the numbers of new teachers the DOE would need to hire would diminish every year, ultimately creating a more stable staffing environment for the system and better education for students.

As one of the nation's premier institutions for teacher education, Bank Street College has always prepared teachers who are competent and committed professionals. This year, we are celebrating our centennial and have rededicated our institution to a broad mission of engaging issues of national importance in education. As part of that commitment, we launched the Sustainable Funding Project for Quality Teacher Preparation (SFP) to help states, districts, and teacher preparation providers build the kind of educational ecosystem that can address the challenges we are discussing today.

What Lies Between Recruitment and Retention

During the inaugural year of the SFP's work, we reviewed national and international research on teacher quality and connected with more than 200 organizations and 600 individuals to learn from their challenges and successes in developing quality teacher pipelines. What we have learned is that we *can* address this problem by focusing on a missing piece in the "recruit and retain" concept: the crucial question of **preparation** that occurs between recruitment and retention.

High-quality teacher preparation programs share four key features (see slide 2):[4]

- They ensure candidates who attend their programs have the professional dispositions necessary for success in 21st century schools, qualities like persistence, growth mindset, academic curiosity, and commitment to educating all students.
- They require mastery of academic content areas, of teaching skills that help a wide range of students develop critical thinking skills to understand their subjects, and of principles of human development and cognitive science.
- They embed learning in extended clinical practice such as a "teacher residency," where aspiring teachers spend a full year co-teaching with an accomplished practitioner.
- They design and deliver their programs in deep partnership with local districts, fine-tuning efforts so aspiring teachers' qualifications meet instructional needs of schools and children.

Such programs graduate teachers who remain in the profession longer than their counterparts. They are sought after by principals because of their ability to enrich classrooms and promote professionalism in their schools. Many examples of the positive impact of quality preparation programs exist,[5] including our programs at Bank Street, where graduates have been demonstrated to have positive impacts and to stay in the profession.[6] These programs offer a roadmap for addressing our labor market challenges.

Nationally, residencies have gained favor as a promising policy lever for improving teacher recruitment, preparation, and retention, and that interest is well-founded. A growing research base indicates residencies improve the quality of new teachers and of the teachers and schools that host residents.[7] In countries where school systems have improved dramatically, such as Finland and Singapore, one of the key shifts their nations embraced was to pay aspiring teachers to practice under the guidance of an effective classroom teacher for a full year before seeking certification.[8] When programs have funding for stipends so that candidates can commit fully to their year of preparation, residencies have the power to address persistent challenges facing our nation's schools and districts (see slide 3):

- Attracting a diverse group of promising candidates into the profession,[9]
- Ensuring all teachers have the skills they need to promote student growth and learning,[10]
- Retaining effective teachers, especially in schools serving low-income and diverse families,[11] and
- Creating a teacher development continuum that offers meaningful leadership and learning opportunities for all teachers.[12]

It is true that residency-style preparation is more expensive than other models, but residencies should be seen as an investment. Right now, we're getting what we pay for—and what we are getting is not good enough.

The SFP has models for covering some costs of residency-style preparation by using existing resources in new, more creative ways (see slide 4). What has become clear looking around the country is that districts, cities, and states are finding ways to identify dollars that could be used for residents even as they help the schools meet their current needs. To be clear, we are not proposing cuts to schools, but rather have found that substitute, summer, and after school teacher dollars, assistant teacher lines, and some professional development money can—along with the DOE's regular investments in new teachers—combine to help support residencies.

Equally important, the onus is not—and cannot be—entirely placed on the DOE. By finding efficiencies of scale and designing programs for high-need areas, higher education can reduce costs and support candidates during their residency experiences. By reallocating staff and redesigning professional development and research efforts, both districts and higher education providers can save dollars that can be repurposed to support residencies. There are also important roles states should play in incentivizing this work. Through our combined efforts, it is absolutely possible to create a much more effective teacher preparation ecosystem.

This ecosystem can have real world consequences, as some of the excellent residency programs that have had financial supports have demonstrated. The New Visions/Hunter College partnership has research-based positive impacts on teacher recruitment, quality, and retention. Programs like the Internationals Network residency, which was developed in partnership with Long Island University under their former and Bank Street's current Dean, Cecelia Traugh, trained excellent educators for new immigrants—until its funding streams ran out (see slide 5).

Starting these kinds of programs requires initial investments. The federal government has recognized the startup costs of shifting to residencies, investing $560,000,000 nationwide across 68 different programs. In 2014 alone, the U.S. Department of Education provided $21,000,000 to New York City residencies. Our project has identified ways to significantly reduce the costs compared to some of the

most expensive models. Still, achieving the goal of having well-prepared teachers who remain in the profession will require additional investments before we can shift our outmoded systems towards high-quality, professionalized teacher preparation.

By promoting and supporting residencies, this Council can make an important contribution not only to the general teacher recruitment and retention challenges the city faces, but as part of New York City's current efforts to redouble our support for our diverse, immigrant population.

As New York prepares to make itself a sanctuary city in the age of the threatened deportation of millions by the Trump administration, our schools are struggling to effectively teach immigrant communities English and to meet the basic requirements of the states' Part 154 regulations. We need more ESL teachers who are well-prepared and equipped to stay in the profession for the long haul.

This means that aspiring ESL teachers need to be prepared from day one to meet the needs of the ELL students in their classrooms. As we describe above, one way to accomplish this is to develop a residency program in which aspiring ESL teachers receive stipends during their residency year as well as help offsetting the cost of tuition. By supporting our new teachers in this way, we can enable a much more diverse population of aspiring teachers access to high-quality preparation and help keep teachers in these critical roles for longer. Our research suggests that these kinds of high-quality programs cost approximately $1.2 million to support a cohort for 20 aspiring ESL teachers.

More than 60% of New York State's English Language Learner (ELL) population is concentrated in New York City, constituting 14.5% of all New York City public school students. In the Bronx and Queens respectively, ELL students form 20.5% and 17.2% of the student population.[13] New York City has the most diverse immigrant student body in the country, speaking over 160 languages and immigrating mainly from the Caribbean, Central and South America, East and South East Asia, and Eastern Europe. While it is difficult for schools to respond to the needs of our ELL population, the dismal 39% graduation rate is unacceptable.

New York City schools face many challenges meeting the needs of such a diverse and large group of students—particularly with how to provide an appropriate, safe, and meaningful educational experience for students who are learning English. Historically and presently, ELLs experience segregation and hostility by their peers and teachers due to linguistic, cultural, socioeconomic, and religious differences. In some instances, parents have pulled their children out of classrooms with high numbers of ELLs because they feel teachers "water down" the curriculum for language learners. In a climate of high-stakes testing and accountability, these parents worry that their children won't be prepared for standardized state exams. Teachers also feel challenged by ELLs' lack of English proficiency and struggle to differentiate instruction. In particular, many educators, including school administrators, lack the differentiation skills and dispositions required for working with newcomer/emergent ELL students.

Let us be clear: differentiation of instruction is challenging. It requires excellent teacher preparation and ongoing learning communities in the field. An educator must have an understanding of students' linguistic and academic needs/strengths in order to determine how best to differentiate instruction. Unless students are enrolled in a bilingual program, home language assessments are seldom used, which prevents teachers from accessing ELLs' academic abilities. Moreover, classroom and ESL teachers have limited time together in which to collaboratively analyze data, lesson plan, and develop curriculum. ESL teachers are also burdened by large caseloads spread across many grades and classrooms, finding it hard

to meet Part 154 instructional mandates. In general, many educators are unprepared to use language, literacy, and content formative assessments to gauge ELLs' linguistic and academic progress. Language learners are misdiagnosed at a higher rate and provided with special education services and academic interventions they do not need. An astounding 21.9% of New York State ELLs are classified as having a disability, over-represented in the classifications of speech and language impairment, learning disability, and intellectual disability.

Three-quarters of all ELLs are currently enrolled in ESL programs with the remaining quarter being serviced in bilingual programs.[14] Bank Street College offers two programs to address these needs: (1) Spanish and Mandarin Chinese dual language bilingual programs, and (2) a TESOL program. Our programs were recently re-designed to meet the current demands of the field.[15] ESL teachers need to work practically and effectively in a field that requires:

- Proficiency with state/national standards, rigorous instruction, various curricula, diverse assessments, and complex data analysis;
- Collaboration with a range of colleagues and families across grades;
- And an ability to react flexibly to differentiate for the diverse needs of ELLs by adapting instruction to specific linguistic, academic, and special needs.

We prepare ESL teachers to not only validate language learners' cultural practices and authentic use of language(s), but also to serve as key advocates, critical thinkers, and innovators of language teaching and learning. Given the complexity of the linguistic, academic, and special needs of our ELL population, it is vital that ESL teachers receive quality preparation to provide the support New York City schools so desperately need.

Thank you,
Shael Polakow-Suransky
President, Bank Street College of Education

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SUPPLEMENTAL MATERIALS

We are providing the Council a set of documents that might be supportive of your efforts to improve our teacher recruitment, preparation, and retention practices. We would also welcome the opportunity to work more closely with your Committee and your staff on this important issue.

- *Train Teachers like Doctors:* Our New York Times Op Ed, which frames the issue succinctly.
- *For the Public Good: Quality Preparation for Every Teacher:* A report, with executive summary, on sustainably funding year-long residency-style co-teaching.
- *Selected Research Supporting Sustainable Funding for Quality Teacher Preparation:* A succinct research brief on how funding for residency-style preparation can address persistent teacher pipeline and quality challenges
- *The ESSA Opportunity for Residencies:* A policy document, vetted by the U.S. DOE, that explains how ESSA dollars—and other federal dollars in "schoolwide" programs—can fund residencies.
- *A Coming Crisis in Teaching? Teacher Supply, Demand, and Shortages in the U.S.:* A helpful brief by Learning Policy Institute

ENDNOTES

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[5] Kay Sloan and Juliane Blazevski, "New Visions Hunter College Urban Teacher Residency: Measures of Success" (San Francisco, CA: Rockman et al, March 2015).
[6] Eileen Horng et al., "The Preparation, Professional Pathways, and Effectiveness of Bank Street Graduates" (Stanford, CA: Stanford Center for Opportunity in Education, 2015).
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[8] Marc S. Tucker and Linda Darling-Hammond, *Surpassing Shanghai: An Agenda for American Education Built on the World's Leading Systems* (Cambridge, MA: Harvard Education Press, 2011); Pasi Sahlberg, *Finnish Lessons: What Can the World Learn from Educational Change in Finland?* (Teachers College Press, 2011).
[9] Sloan and Blazevski, "New Visions Hunter College"; Barnett Berry, Diana Montgomery, and Jon Snyder, "Urban Teacher Residency Models and Institutes of Higher Education: Implications for Teacher Preparation" (Chapel Hill, NC: Center for Teaching Quality, January 1, 2008).
[10] Council of Chief State School Officers Task Force on Educator Preparation and Entry into the Profession Members, "Our Responsibility, Our Promise: Transforming Educator Preparation and Entry into the Profession" (Washington, DC: Council of Chief State School Officers, January 1, 2012); Sloan and Blazevski, "New Visions Hunter College"; United States Department of Education, "National Teacher Preparation Data at-a-Glance," *United States Department of Education*, October 2015, https://title2.ed.gov/Public/SecReport.aspx; Shari Dickstein Staub and Sarah Scott Frank, "Clinically Oriented Teacher Preparation: What Do We Know about Effective Practices?" (Urban Teacher Residency United, June 2015).
[11] Matthew Ronfeldt, Nathaniel Schwartz, and Brian Jacob, "Does Preservice Preparation Matter? Examining an Old Question in New Ways," *Teachers College Record* 116, no. 10 (October 2014): 1–46; Mariana Haynes, Ann Maddock, and Liam Goldrick, "On the Path to Equity: Improving the Effectiveness of Beginning Teachers" (Washington, DC: Alliance for Excellent Education, July 2014); Staub and Frank, "Clinically Oriented Teacher Preparation."
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Bank Street College Testimony for New York City Council

Quality Teacher Preparation to Address Teacher Retention

Tuesday, January 24, 2017

Cost Savings to Support High-Quality Teacher Preparation

Every year, teacher turnover creates vacancies that districts need to fill with high-quality candidates. In many cases, teachers leave shortly after entering the profession—creating a revolving door for hiring in the district. Instead of getting better at filling recurring openings, we should improve our systems so that we retain the teachers we do hire. We can do that by making sure they are prepared to succeed in their jobs before they step into the classroom.

New York City hires 6,000 new teachers per year.

400 resign

×

$20k per person

= $8,000,000 total annual cost

Roughly 400 of these hires resign before their second year of teaching. According to national urban averages, each of these resigning teachers costs $20,000 to replace, totalling $8,000,000.*

Imagine instead *if that*

$8,000,000

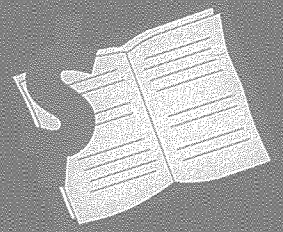
were used to provide aspiring teachers with the best preparation possible.

400 ***aspiring teachers could each benefit from***

$20k ***towards a quality preparation program***

These dollars would create an exciting opportunity to build needed programs.

Well-prepared teachers stay in the classroom longer.



By investing saved dollars in preparation for teachers who will stay in the classroom, the district can decrease the numbers of new teachers hired each year and create a more stable staffing environment for the system.

**To the NYC DOE's credit, this rate of attrition is much lower than the national average.*

Impacts of Sustainable Funding for Quality Preparation

Districts

Reduced recurring costs associated with rapid teacher turnover—recruitment, personnel procession, and certification tracking.

Aspiring Teachers

New teachers can afford to join the profession through an intensive, extended clinical residency that prepares them to succeed from day one in the classroom.

Providers

Providers have stable cohorts of teacher candidates and become partners in districts' teacher development philosophy and strategy.

Schools

The teacher development continuum offers meaningful leadership and learning opportunities for all teachers, building a stable, professional culture in schools.

Students & Families

Students have less need for remediation (summer school, retention, tutoring), and the achievement gap diminishes.

Communities

Taxpayers realize long-term savings and increased quality of life for their communities.

Our Teacher Preparation Vision

In every state, in every district, the norm is for candidates to matriculate through high-quality, sustainably funded preparation programs.

High-Quality

Principle #1

Preparation providers ensure teacher candidates are diverse, committed, and effective.

Principle #2

Preparation providers ensure teacher candidates are experts in human development, content, and pedagogy.

Principle #3

Clinical practice offers year-long pre-service co-teaching ("residencies") in an effective environment.

Principle #4

Districts and providers have deep partnerships that meet candidates' and students' needs.

Sustainably Funded

Secure

Money streams withstand leadership changes.

Viable

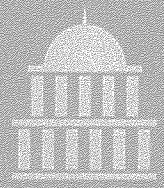
Access to dollars doesn't rely on grants, philanthropy, or individual funding.

Adequate

Funding allows candidates to fully engage in their learning experiences, mentors to focus on their roles, and districts and providers to deliver quality programs.

Reallocate Resources to Sustainably Fund a Residency Program

School districts can adjust existing funding streams to support teacher candidates during their residency year. In partnership with a local insitute of higher education, districts can structure programs to include subbing days for residents, afterschool classes taught by aspiring teachers, and opportunities for professional development and co-teaching that benefit both candidates and mentor teachers. When a residency program is sustainably funded, district, school, and preparation provider leadership see more produtive collaboration between and within institutions.



An average-size district of about 190 teachers spends

$400,000 on substitute teachers

7% of the national teaching force

$660,000 on assistant teachers

11% of the national teaching force

$2,250,000 on prof. development

$6K-$18K per teacher per year

$220,000 on after school

$600 per teacher per week

If that average-size district reallocates...

40%	*of its substitute budget*	$160,000
25%	*of its assistant teacher budget*	$165,000
10%	*of its prof. development budget*	$225,000
10%	*of its after school budget*	$22,000

...$572,000 will be available to fund residencies.

At $15,000 per resident, the district could fund 38 residents.

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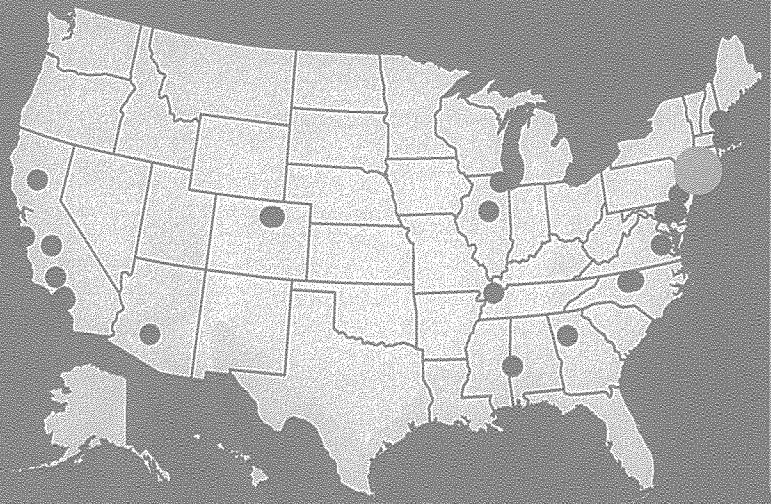
Partnerships in Service of Teacher Preparation & Retention

A strong, high-functioning teacher preparation ecosystem can have real world consequences, as some of the excellent residency programs that have had financial supports have demonstrated. Candidates are better prepared, stay in the profession, and improve schools and student outcomes. Starting these kinds of programs does require initial investments, but achieving the goal of having well-prepared teachers who remain in the profession is well worth it for everyone.



2014 & 2016 TQP award locations

Partnerships in New York City have sought funds to create high quality residencies by coordinating program curricula, staffing, and logistics.

New Visions for Public Schools

Teacher Quality Partnership funded 2014-2019

- **147** residents
- **10** school sites
- Focus on high needs areas
- **$6,395** per resident

I-START at LIU

Transition to Teaching funded 2011-2015

- **21** residents
- **9** school sites
- Focus on TESOL
- **$7,142** per resident

Since 2009, the teacher quality partnership (TQP) grant program has awarded a total of for 5-year initiatives to create model teacher preparation programs.

2014 and 2016 TQP awards will support teacher preparation nationwide with $142,686,196 for nearly 3,500 resident teachers.

$41,490 per resident teacher nationwide.

***for methodology on the computation of these figures, please contact sfp@bankstreet.edu.**

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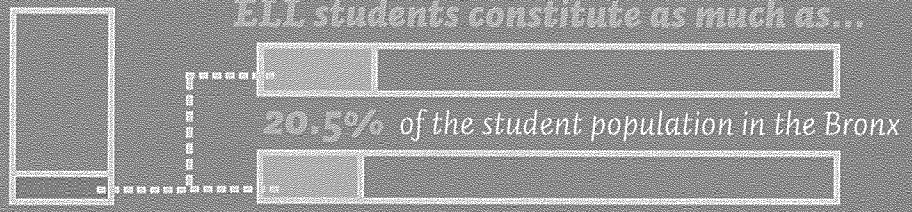
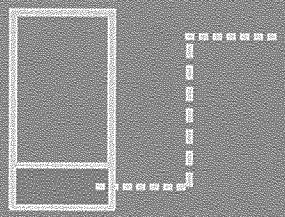
New York State/New York City English Language Learner (ELL) Population

14.5% of all NYC public school students are ELLs

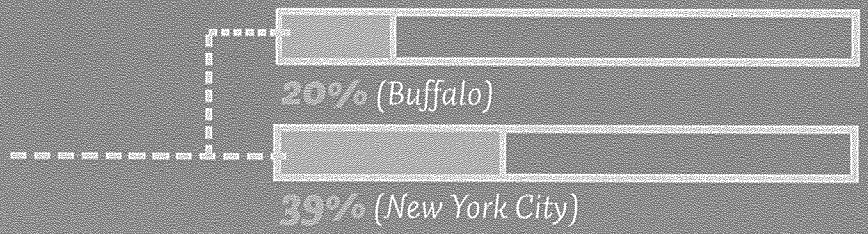


21% of New York State ELLs are classified as having a disability



And are over-represented in the classifications of ***speech and language impairment, learning disability,*** and ***intellectual disability.***

The New York State ELL graduation rates are dismal, ranging from 20% in Buffalo to 39% in New York City



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Challenges Faced by ELLs

Schools have difficulty responding to immigrant diversity - Caribbean, Central and South America, East and South Asia, and Eastern Europe.

ELLs experience ethnic and linguistic segregation and tensions.

ELLs experience hostility by teachers and peers due to linguistic, cultural, socioeconomic, and religious differences; immigrant children are often positioned as the "other."

Lack of understanding of students' linguistic and academic needs/ strengths.

Poor home language assessments lead to teacher ignorance of students' linguistic and academic needs and strengths.

Teachers are unprepared to use language, literacy, and content formative assessments to gauge ELLs' linguistic and academic progress.

Students are over-referred for special education services.

Limited collaboration between classroom and ESL teachers to interpret data and think through instructional implications.

Poor instructional differentiation for ELLs in mainstream classrooms.

Content is test-driven and text heavy.

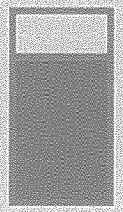
Teachers are challenged by students' lack of English proficiency.

Many teachers have not developed the skills & dispositions for working with newcomer/beginner ELLs.

ESL curricula are loosely defined, non-existent, or poorly connected to mainstream curricula.

Strong ESL and Bilingual Teacher Preparation

75%
of all ELLs are enrolled in ESL programs, with the remaining percentage in bilingual programs.



Given the complexity of the linguistic, academic, and special needs of our ELL population, it is vital that ESL teachers receive quality preparation.

They must work practically and effectively in a field that requires

- *proficiency with state standards, rigorous curricula, diverse assessments, and data analysis;*
- *collaboration with a range of colleagues and families across grades;*
- *an ability to react flexibly to adapt instruction to specific linguistic and academic needs.*

Bank Street teaches ESL teachers not only to validate their students' cultural practices and authentic use of language(s), but also serve as key advocates, critical thinkers, and innovators of language teaching and learning.

Sources: Office of Bilingual Education and World Languages. (2016). Blueprint for English Language Learner success. The State Education Department, The University of the State of New York. Retrieved from http://www.nysed.gov/common/nysed/files/programs/bilingual-ed/nysblueprintforellsuccess.2016.pdf; Menken, K., & Solorza, C. (2014). Where have all the bilingual programs gone? Why prepared school leaders are essential for bilingual education. Journal of Multilingual Education Research, 4(1), 3.

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SELECTED RESEARCH SUPPORTING SUSTAINABLE FUNDING FOR QUALITY TEACHER PREPARATION

In countries where school systems have improved dramatically, pre-service teacher education has become more integrated with the regular school system. Aspiring teachers, while studying for their certification, are paid to practice under the guidance of an effective classroom teacher for a full year before seeking certification.[i] Increasingly, evidence from the U.S. also indicates that such a model is effective. In fact, four persistent teacher quality challenges facing schools and districts can be positively impacted through the establishment of funded year-long pre-service clinical placement.[ii]

1. **Attracting strong, diverse candidates into the profession**: Many alternative preparation providers that offer financial incentives for participation have attracted well-qualified candidates from diverse backgrounds. In addition, high-quality programs have demonstrated that year-long learning opportunities in high-functioning schools can provide aspiring teachers with the hands-on experiences needed to become good teachers. Establishing stipends for quality year-long pre-service clinical placements for all teacher candidates would develop a more diverse and effective teacher pool.[iii]

2. **Ensuring all aspiring teachers have the skills they need *before* teaching children**: Clinical practice expectations currently vary dramatically both within and between states, from a few hours of observation, to several weeks of student teaching, to less common year-long experiences.[iv] Year-long placements should be the norm, since evidence is increasingly clear that aspiring teachers who work alongside an expert teacher during a year of guided learning build bridges between theory and practice, hone their teaching skills, and develop the confidence and know-how needed to be successful in their future roles as teachers.[v] Currently, though, only a lucky few candidates, usually through grant or philanthropic funding, get such practice.

   Other fields have long embraced and financially supported apprenticeship models. Doctors, dentists, nurses, architects, accountants—these professions expect candidates to master content and to perform well throughout extended, paid periods of clinical practice as precursors to being certified as professionals. In fact, the nation spends 11.5 billion public dollars a year—roughly half a million for every newly licensed doctor—to support medical practitioners in their clinical practice.[vi] The same clinical learning focus should be required—and supported—for those entrusted to educate our youth.

3. **Having a strong pool of qualified candidates for high-needs positions**: Current educator preparation pathways are often disconnected from the specific licensure needs of districts.[vii] Many aspiring teachers pursue certifications that do not qualify them for available jobs, so they often seek supplemental licensure that allows them to teach in high-need fields. Unfortunately, supplemental certifications require very little clinical preparation, meaning these teachers are technically qualified but woefully underprepared to serve their students well. In addition, most new teachers did not attend schools like those where districts have the greatest need. Absent programs that ensure high-quality clinical practice in high-need schools, most new teachers are unprepared for the settings in which they most likely will be employed.[viii]

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4. **Retaining teachers, especially in schools serving low-income and diverse families**: Although quick-entry alternative programs have efficiently addressed annual hiring needs, the turnover rate of their graduates precludes districts from building a strong, stable teaching force, which is associated with improved educational outcomes.[ix] Districts spend 2.2 billion a year as a result of turnover costs, including "finders fees" of roughly a million dollars for every 200 recruits to fill these positions.[x] On the other hand, a positive track record exists for candidates who pursued their clinical practice in high-functioning schools while working alongside an expert teacher for an extended period of time. These aspiring educators are more likely to be effective early career teachers and to remain in the profession, even when later hired in schools that are high-need and hard to staff.[xi]

NOTES

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ESSA AND QUALITY TEACHER PREPARATION:

STRENGTHENING INSTRUCTIONAL EFFECTIVENESS & SUPPORTING SCHOOL IMPROVEMENT

THE ESSA OPPORTUNITY FOR RESIDENCIES

The Every Student Succeeds Act (ESSA) provides states and districts with a renewed opportunity to strengthen the quality of teaching and learning in schools by explicitly incorporating well-designed year-long pre-service co-teaching placements ("residencies") into state ESSA applications as an allowable and encouraged use of funds. While "pre-service" teacher preparation is not frequently conceptualized as an allowable use of these federal funds, when well-designed preparation programs include funded, year-long co-teaching residencies, they address many of the goals contained within ESSA and contribute to the systemic educational improvements sought by states and districts.

RESIDENCIES CREATE SYSTEMIC IMPROVEMENTS IN TEACHER QUALITY...

- **Attract diverse, promising candidates:** Providing stipends for aspiring teachers reduces barriers to entry, including for mid-career professionals, and attracts a diverse and talented teacher pool
- **Prepare effective teachers who promote student learning:** Extensive clinical experiences result in increased preparedness and efficacy to promote learning
- **Retain effective teachers, especially in schools serving low-income and diverse families:** Residents who work alongside expert teachers in high-functioning schools during their preparation remain in teaching, even when ultimately hired in high-need schools that often experience greater levels of teacher turnover

PROVIDE SUPPORT FOR SCHOOL AND DISTRICT IMPROVEMENT...

- **Value the professional expertise of current educators:** Effective educators are recognized as mentors and have career-ladder opportunities that don't require them to leave the classroom
- **Develop current teachers' skills:** Mentor teachers gain skills analyzing, reflecting on and sharing their practice, and refine their approaches accordingly; residents bring new pedagogy and theory to the classroom
- **Build stronger school communities:** Professional conversations between mentors and residents promote increased collaboration and relationships among educators across the school and district

AND LEAD TO AN IMPROVED EDUCATIONAL SYSTEM.

A diverse, prepared, and stable teaching force has the professional skills necessary to collaborate with colleagues to promote student learning and well-being, including in high-need schools and hard-to-staff subject areas

States can use flexibility within ESSA to promote pre-service residencies as the first step in teachers' career paths, structuring residencies to improve teaching and learning for all students.

For more information, contact the Sustainable Funding Project at Bank Street College: sfp@bankstreet.edu

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HOW PRE-SERVICE RESIDENCY PROGRAMES CAN BE SUPPORTED UNDER ESSA

TITLE I – IMPROVING BASIC PROGRAMS

Rationale: Where pre-service teachers spend a full year in a school, they can become an essential part of school improvement processes. Pre-service residents can play a role in supporting school improvement plans, and both pre-service residents as well as residency program providers can play a part in providing services aligned with school-wide and targeted assistance programs.

States should encourage districts to consider resources, which, if they include Title I funds, must be used consistent with allowable uses of those funds, to put towards supporting residencies as strategic investments in their improvement efforts.

How Residency Programs Support School Improvement	Related ESSA Sections
Residents can play a direct role in both comprehensive and targeted support plans for Title I schools. Their presence can also allow expert teachers to participate more deeply in school improvement strategies	*Section 1003. School Improvement.*
Residents can support students in meeting challenging academic standards, including providing services before and after regular school hours and/or offering enriched and accelerated curricula, providing supports for students in early college or co-enrollment programs, and offering early intervention services to prevent problem behavior	*Section 1008. Schoolwide Programs*
Mentor teachers and others can participate in and benefit from professional development activities around mentoring, adult leadership, and reflective practice	*Section 1009. Targeted Assistance Schools*
Residency programs can effectively support strategies to recruit and retain effective teachers, including in high-need subject areas	

TITLE II, PART A – SUPPORTING EFFECTIVE INSTRUCTION

Rationale: Well-designed, funded pre-service residencies are instrumental in accomplishing each of the four stated purposes of ESSA's Title II: increasing student achievement, improving the quality and effectiveness of teachers, increasing the number of teachers effectively improving student academic achievement, and providing low-income and minority students greater access to effective teachers (Sec. 2001).

In addition to promoting the incorporation of pre-service residencies across LEAs, states may use their ESSA allocations to facilitate the development of clinically rich teacher preparation programs under Title II Part A.

How Residencies Support Effective Instruction	Related ESSA Sections
Reasonable evidence exists that pre-service residencies (as defined in section 2002(5)) • increase the effectiveness and retention of new teachers, including those working in schools and LEAs serving low-income and minority students • increase the number of effective teachers & improve the quality of the teaching force • lead to improved student outcomes	*Sections 2101 (c)(4)(B)(iii) and 2103 (b)(3)(B)*

The extensive clinical preparation of pre-service residencies increases feelings of preparedness and efficacy and reduces turnover, especially among beginning teachers and including in high-need schools	*Sections 2101(c)(4)(B)(iii) and 2103(b)(3)(B)*
Funded pre-service residencies reduce barriers to entry into the profession, can promote diversity of the teaching force, and can provide incentives to recruit mid-career professionals to teach, including in high-need subject areas	*Sections 2101(c)(4)(B)(v) and 2103(b)(3)(B and C)*
Residency programs can support a shift for preparation providers to become deeper partners in districts' teacher quality and school improvement efforts	*Section 2101(c)(4)(B)(xi)*
Residency programs include a strong mentor teacher selection process, provide development support for mentor teachers, and may include stipends or salary differentials for mentors	*Sections 2101(c)(4)(B)(vii) and 2103(b)(3)(B)*
Residencies include strong partnerships between preparation providers, LEAs, and schools, and LEAs can draw on providers' expertise for school-wide professional development needs	*Sections 2103(b)(3)(E, M, & O) and 2101(c)(4)(B)(ix, xvii, & xviii)*
Residents who work alongside a mentor teacher over the course of an entire school year provide additional instructional support that effectively serves to reduce class size	*Section 2013(b)(3)(D)*

ENGAGING AROUND THIS ESSA OPPORTUNITY

Because research indicates that residencies improve teacher quality and retention, promote student achievement, and, with funding for residents, contribute to stronger and more diverse teacher candidates, states should consider the role of residencies in meeting the strategic goals discussed above. Because well-designed residency models require deep partnerships between districts and preparation providers, states should engage with institutes of higher education and other teacher preparation organizations, as well as with LEAs, as they develop their ESSA applications to set the vision for pre-service clinical experience and deep provider partnerships as mechanisms for improving teaching and learning.

SAMPLE LANGUAGE for STATE ESSA APPLICATIONS

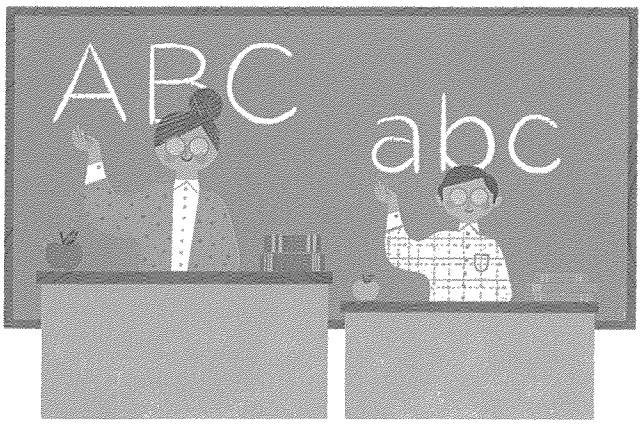
Including language that explicitly encourages districts to explore residencies as one means of meeting state ESSA goals can facilitate the development of residency partnerships. Below is sample language states might consider during their ESSA planning.

Pre-service teacher residencies can help the State and its LEAs meet the goals of ESSA in numerous ways. Individual residents enhance direct instructional services by reducing class sizes and providing personalized supplemental instruction. Well-designed programs also offer systemic effects: attracting and retaining strong, diverse candidates in hard-to-staff schools; promoting teacher leadership; supporting school improvement; and building productive partnerships between preparation providers and districts.

For these reasons, the State encourages districts to consider entering into partnerships with providers to implement year-long, clinically rich preparation programs that incorporate residents fully into instructional and school improvement efforts.

Train Teachers Like Doctors

By SHAEL POLAKOW-SURANSKY, JOSH THOMASES and KAREN DEMOSS JULY 8, 2016



Lydia Nichols

AMERICA is facing a wave of teacher shortages that threatens our ability to deliver on the promise of quality education. Baby boomer retirements and high rates of teacher turnover, coupled with steep drops in enrollment in teacher-preparation programs, have contributed to this growing crisis. Some states, like California, now have shortages in nearly every subject area, affecting students across the state.

State legislatures and school districts have responded with shortsighted policies that lower the bar for new teachers, making it easier to enter the profession, which has paved the way for more people with little or no training to become teachers. As has been the case for decades, these policies will hit children in poverty hardest because they are disproportionately assigned teachers with the weakest preparation.

While a number of these teachers will find their way and go on to transform the lives of the children they teach, we know that teachers with little preparation have the hardest time helping students learn. They also leave the profession faster, which creates a revolving door in precisely the schools that need stability. We subsidize these systemic failures with public dollars, spending $2.2 billion annually to replace teachers who leave their jobs.

Higher expectations and standards have made teaching more demanding than ever. Just as we recognize that aspiring doctors need training before they can diagnose and prescribe, we must acknowledge that teaching candidates require an upfront investment. Aspiring teachers need well-designed and well-supported preparation.

Yearlong co-teaching residencies, where candidates work alongside an accomplished teacher while studying child development and teaching methods, offer a promising path. Contrary to fast-track certification programs or traditional student-teaching, which is often a brief experience with limited opportunities to practice, strong residencies pay aspiring teachers as assistant teachers so they become fully integrated into their schools.

Teaching residents participate in the full range of teaching responsibilities and develop deep relationships with students and colleagues. The model also draws on the talent of good practicing teachers who, along with teacher-training faculty, focus on the individual needs of each aspiring teacher, coach them intensively in the areas where they need to grow and help them to integrate theory and practice in the classroom.

Unlike other new teachers, residency graduates overwhelmingly stay in the profession. Upward of 90 percent — including graduates from large programs like Arizona State University in Tempe — remain in the profession after their early years, while nearly half of other new teachers leave. This means that even if residency-trained teachers merely performed as well as their counterparts, the reduced turnover would save millions.

But in fact, residency graduates are likely to improve student achievement. Though evidence is limited, rigorous evaluations of smaller programs, like the New Visions partnership with Hunter College in New York City, show that residency graduates are more successful promoting student learning compared with other new teachers.

While top-tier independent schools, some of the most celebrated charter school networks like Aspire and a handful of innovative school districts like Boston and Washington, D.C., have established teacher-residency programs, these are the exceptions. In most public schools, residency programs are not an option because we have not dedicated the necessary financial resources.

Public funding in other countries — including Germany, Finland, Japan and Singapore — ensures that their teachers get such training. In the United States, though, only a few lucky candidates find programs with philanthropic or grant subsidies that offer a stipend so that they can afford to live while learning their craft. These financial supports allow them to focus fully on developing the skills they need to become successful teachers.

Our nation has faced — and solved — a similar problem before. In medicine, we long ago recognized that significant study and practice under the guidance of a skilled practitioner are necessary to ensure that doctors are qualified to serve the public. After World War II, we increasingly invested public money in a range of efforts to strengthen doctors' preparation, including stipends for training. We now spend $11.5 billion a year on medical education, roughly $500,000 for every new doctor. For a fraction of that cost we can build a strong system of teacher preparation — good residency programs cost about $65,000 per candidate, including tuition and stipends, according to our calculations.

Much of the money could come from reallocating current resources. States and school districts need to do the tough, detailed work to redirect and focus funds that are not being used well. For example, nationally we spend 7 percent of our instructional budget on substitute teachers, 12 percent on

teaching assistants and between $6,000 and $18,000 annually per teacher on professional development that many teachers describe as ineffective. Redirecting a portion of these budgets could help us transform teacher preparation.

Minimal training for teachers is simply not good enough. Legislatures and school districts have proven, affordable options at their disposal. If we are serious about improving public education, we need to invest in our aspiring teachers and ensure they get sustained practice with real coaching and support. The nation will need more than a million new teachers in the next decade. They will be teaching our future doctors, engineers and pilots — all of whom will have high-quality professional training at the side of experts in their field. Our teachers deserve the same.

Shael Polakow-Suransky is president, Josh Thomases is dean of innovation, policy and research, and Karen DeMoss is director of the sustainable funding project at Bank Street College of Education.

LEARNING POLICY INSTITUTE RESEARCH BRIEF SEPT. 2016

A Coming Crisis in Teaching?

Teacher Supply, Demand, and Shortages in the U.S.

Leib Sutcher, Linda Darling-Hammond, and Desiree Carver-Thomas

Abstract

Recent media reports of teacher shortages across the country are confirmed by the analysis of several national datasets reported in this brief. Shortages are particularly severe in special education, mathematics, science, and bilingual/English learner education, and in locations with lower wages and poorer working conditions. Shortages are projected to grow based on declines in teacher education enrollments, coupled with student enrollment growth, efforts to reduce pupil-teacher ratios, and ongoing high attrition rates.

If attrition were reduced by half to rates comparable to those in high-achieving nations, shortages would largely disappear. We describe evidence-based policies that could:

- create competitive, equitable compensation packages for teachers;
- enhance the supply of qualified teachers for high-need fields and locations;
- improve retention, especially in hard-to-staff schools; and
- develop a national teacher supply market.

The full paper can be found at https://learningpolicyinstitute.org/product/coming-crisis-teaching.

And follow the conversation on Twitter at #SolvingTeacherShortages.

Introduction

As the 2015–16 school year got underway, headlines across the country broadcast severe teacher shortages:

> "Nevada needs teachers, and it's shelling out $5 million to get them."[1]

> "First marking period in Philly ends with many teacher shortages."[2]

> "[San Francisco] Principals say state teacher shortage now a crisis."[3]

> "Why Oklahoma is racing to put nearly 1,000 uncertified teachers in its classrooms."[4]

These headlines were among the more than 330 articles covering teacher shortages between June 22 and November 22, 2015. There were only 24 such articles during the same time period two years earlier.[5]

Many of the advertised shortfalls have been in mathematics and science. In the majority of states, there are also shortages of bilingual education teachers and others who teach new English learners. Special education is seeing the greatest shortages of all. Forty-eight states plus the District of Columbia have identified shortages of teachers in special education and related services: Half of all schools and 90% of high-poverty schools are struggling to find qualified special education teachers.[6] As these statistics suggest, teacher shortages often have a disproportionate effect on the most disadvantaged students. One *Washington Post* headline warned: "High-poverty schools often staffed by rotating cast of substitutes."[7]

These shortfalls mark a dramatic change from the years of teacher layoffs that occurred during the economic recession of 2008 and the several years that followed. In those years, tens of thousands of pink slips were handed out each spring informing teachers they would not be needed the following school year.[8] State austerity measures resulted in eliminating support staff, reducing the number of new teacher hires, and increasing class sizes.[9] The recession left the public accustomed to a surplus of teachers, with policies aligned to this reality.

However, as the economy improved and money began to come back into the system, districts have begun to hire again. Teacher demand has rapidly

increased as schools have begun to lower pupil-teacher ratios, and reinstate classes and programs that were reduced or eliminated in the Great Recession. This hiring increase comes at a time when teacher attrition is high, and as teacher preparation program enrollments have fallen 35% nationwide in the last five years, a decrease of close to 240,000 teachers in total.[10]

Teacher demand has rapidly increased as schools have begun to lower pupil-teacher ratios, and reinstate classes and programs that were reduced or eliminated in the Great Recession.

Tens of thousands of teachers were hired in the fall of 2015 on emergency or temporary credentials to meet these needs, and the same pattern has emerged as schools opened in 2016. In addition to hiring individuals who are not prepared to teach, districts and schools facing shortages have a small number of undesirable options: They can increase class sizes, cancel classes, use short-term substitutes, or assign teachers from other fields to fill vacancies. All of these stopgap solutions undermine the quality of education, especially for the students who most need effective schools.

Has the United States moved into an era of teacher shortages? If so, how large is the gap between supply and demand? Where and in what fields are they most severe? Will they persist? Most important, what can be done to prevent and mitigate the negative effects of such a teacher shortage?

This brief describes the findings of a report that examined the current indicators of a national teacher shortage and used several national data sources to model supply and demand in the coming years.[11] The report also reviews research and makes recommendations about policies that could help create a sustainable supply of well-prepared teachers in the subjects and states where they are needed.

The Nature of Current Shortages

A shortage is typically defined as the inability to fill vacancies at current wages with individuals qualified to teach in the fields needed. Using this definition, some states are clearly experiencing high rates of shortages. For example:

- In California, the number of emergency and temporary permits has tripled in the last three years. In 2014–15, fully 7,700, or just over one-third of the credentials and permits issued that year, went to teachers who were not fully prepared for their teaching assignments.[12]

- In Arizona, 62% of school districts had unfilled teaching positions three months into the school year in 2013–14.[13] In the same school year, close to 1,000 teachers were on substitute credentials—a 29% increase from the previous year.[14] With one of the highest turnover rates of any state and 24% of the teacher workforce eligible to retire by the end of 2018, the outlook for Arizona's future points to continued shortages.[15]

- In Oklahoma, imbalances in supply and demand in the southern half of the state have led to a tenfold increase in the number of emergency credentials issued to underprepared teachers, from 98 in 2010–11 to more than 900 by 2015–16.[16]

Certain fields are also experiencing significant shortages. In 2015–16, 48 states identified special education as a shortage area in their reports to the U.S. Department of Education. In addition, 42 states reported shortages in mathematics, and 40 states reported shortages in science. More than 30 states identified high levels of shortage for teachers of English learners.[17] The District of Columbia reported shortages in these areas as well.

Why Is There a Growing Teacher Shortage?

Teacher demand is growing. If current trends continue, we will see about a 20% increase in annual teacher demand from 2015 levels, reaching 316,000 teachers per year by 2025.

- **Student enrollments** are projected to grow by 3 million (to 53 million total) in the next decade, driven by higher birth rates and immigration.
- **Pupil-teacher ratios** are projected to shrink from about 16 to 1 to pre-recession levels (about 15.3 to 1), requiring an additional 145,000 teachers by 2025.
- **Teacher attrition** remains high, at 8% annually. Two-thirds of leavers depart before retirement age, most because of dissatisfaction with aspects of their teaching conditions.

Teacher supply is shrinking. If current trends continue, we would see as few as 200,000 available teacher hires each year by 2025, resulting in a gap of more than 100,000 teachers annually.

- There are **fewer new entrants**, with teacher preparation enrollments having dropped by 35% and teacher preparation graduates having dropped by 23% between 2009 and 2014.
- Although **re-entrants** who are former teachers typically comprise one-third to one-half of hires in a given year, the number willing to return is currently not enough to make up the difference.

These shortages have been emerging as teacher education enrollments have taken a deep dive, while demand for teachers has begun to climb, largely due to district efforts to return to pre-recession staffing levels.

In addition, student enrollments are beginning to climb again, and teacher attrition remains at a high level: At 8% annually, it is about twice as high as teacher attrition rates in countries like Finland and Singapore, as well as in neighbors like Ontario, Canada. Under the current conditions, shortages are likely to grow worse before they improve.

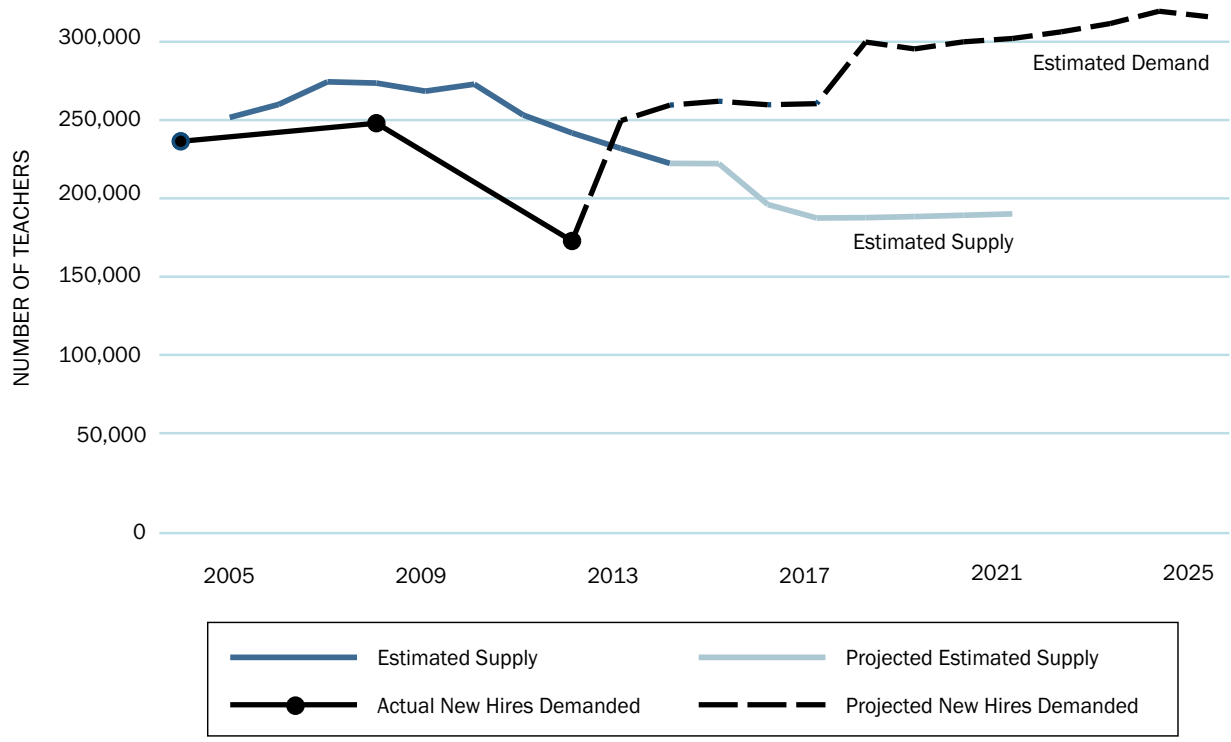
As Figure 1 shows, the relative balance in supply and demand that occurred in the early 2000s turned into a surplus in 2010 through 2012, when school budgets declined and teachers were being laid off. By 2014, however, as the economy recovered, demand began to rise and then took a steep upward turn in 2015, while supply continued to remain low and declined further. During this period, the teacher labor market moved into a shortage condition.

Currently, there are not enough qualified teachers applying for teaching jobs to meet the demand in all locations and fields. We estimate that the shortage during the 2015–16 school year was approximately 60,000 teachers. This is the rough number of positions that were not filled at all or were filled by people not qualified for that teaching assignment. This estimate is in the same ballpark as state reports of the numbers of substitutes and underprepared teachers hired when qualified applicants could not be found.

If supply trends were to persist at these current lows, by 2018, the annual shortfall could grow to 112,000 teachers. Although some increase in the number of individuals entering teaching is expected in response to greater demand, even if the supply reaches pre-recession levels of 260,000 teachers a year, demand would still outstrip supply by about 40,000 teachers. Furthermore, the perennial areas of acute shortages

Currently, there are not enough qualified teachers applying for teaching jobs to meet the demand in all locations and fields.

Figure 1. Projected Teacher Supply and Demand



Note: The supply line represents the midpoints of our upper– and lower–bound teacher supply estimates (see Figure 10 in the report for full analysis).
Source: U.S. Department of Education, multiple databases (see Appendix A in full report).

(mathematics, science, special education, and bilingual education) thus far show little sign of response to labor market demand.[18]

The Importance of Teacher Attrition

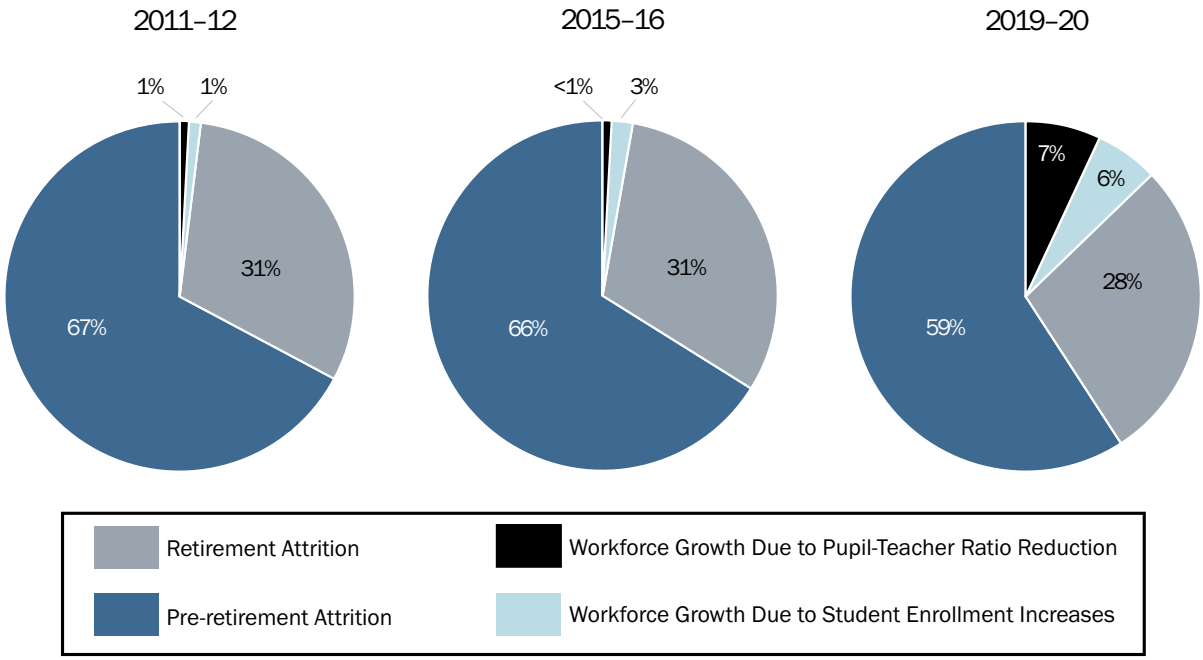
Although policymakers often focus on how to recruit more teachers when there are shortages, keeping existing teachers is at least as important. As Figure 2 shows, the lion's share of the demand for teachers is caused by attrition. In recent years, it has accounted for more than 95% of demand, and in the years to come, attrition will continue to account for at least 85% of annual demand, if it remains at the current levels.

> Pre-retirement attrition accounts for the largest share of turnover—and most of the teachers who leave before retirement list dissatisfactions with teaching conditions as their major reasons.

Only about one-third of teacher attrition is due to retirement. Pre-retirement attrition accounts for the largest share of turnover—and most of the teachers who leave before retirement list dissatisfactions with teaching conditions as their major reasons. The good news is that the problems they identify may be amenable to policy solutions.

National data indicate that the public school teacher attrition rate of 7.68% in 2012 represented a loss of 238,000 teachers in that year,[19] virtually the entire demand for the following school year. If the attrition rate could be reduced from the current rate of 8% to 4%, closer to where it is in some other countries,[20] U.S. hiring needs would decrease by around 130,000 teachers annually,

Figure 2. Components of Teacher Demand



Source: U.S. Department of Education, multiple databases (see Appendix A in full report).

cutting annual demand by nearly half. This large reduction would virtually eliminate teacher shortages and allow for increased selectivity in hiring, which could, in turn, boost the quality of teachers in the nation's classrooms.

Reducing attrition would also significantly reduce the substantial costs for replacing teachers who leave. A decade ago, these costs—estimated to reach up to $18,000 per teacher in an urban district—produced an estimated national price tag of over $7 billion a year.[21] With inflation, these costs would be more than $8 billion today. A comprehensive approach to reducing attrition would both lessen the demand for teacher hiring and save money that could be better spent on mentoring and other strategies to improve instruction.

In addition, attrition can impose very large educational costs on some schools. High teacher turnover negatively affects student achievement,[22] and the detrimental effects extend to all of the students in a school, not just those students in a new teacher's classroom. A vicious cycle is often created in hard-to-staff schools, as these schools typically end up with a disproportionate number of relatively inexperienced teachers, who typically leave at much higher rates than other teachers. In times of shortage, many of these teachers are typically also underprepared, which puts them at greater risk of leaving in comparison to teachers who are fully prepared. [23]

The resulting churn undermines student achievement as a function of teacher inexperience, underpreparation, and overall instability. Schools suffer from diminished collegial relationships, a lack of institutional knowledge, and the expense of training new teachers who, oftentimes, will not stay. Research shows that stability, coupled with shared planning and collaboration, helps teachers to improve their effectiveness,[24] and that teachers

Churn undermines student achievement … Schools suffer from diminished collegial relationships, a lack of institutional knowledge, and the expense of training new teachers who, oftentimes, will not stay.

improve more rapidly in supportive and collegial working environments.[25] High teacher turnover undermines these benefits, which are the product of shared knowledge and collaboration among colleagues.

Why Teachers Enter and Leave

Researchers find four major factors that influence teacher recruitment and retention:

1. **Compensation**—Research finds that individuals are more likely to choose to become teachers when teacher salaries are competitive with those of other occupations.[26] Salaries also influence teacher attrition: Both beginning and veteran teachers are more likely to quit when they work in districts with lower wages and when their salaries are low relative to alternative wage opportunities, especially in high-demand fields like mathematics and science.[27] Teachers' salaries, however, have been declining since the 1990s and now amount to only about 70% of the salaries of other college-educated workers. A recent study found that in a number of states teachers with 10 years of experience made less than unskilled workers.[28] In 30 states, mid-career teachers who head families of four or more qualify for three or more public benefit programs, such as subsidized children's health insurance or free or reduced-price school meals.

2. **Preparation**—A growing body of evidence indicates that attrition is unusually high for those who lack preparation for teaching.[29] Several studies have found that teachers who receive little pedagogical training are two to three times more likely to leave teaching after their first year than teachers who had received a comprehensive preparation.[30] A key issue, however, is how candidates can afford adequate preparation—especially when they may have had to go into debt to prepare to enter a profession that earns less than others. Research shows that the more debt college students incur, the less likely they are to choose to work in a lower wage profession like teaching. The influence of debt on job choice is "most notable on the propensity to work in the education industry." [31]

3. **Mentoring and Induction**—Well-designed mentoring programs improve retention rates for new teachers, as well as their attitudes, feelings of efficacy, and instructional skills.[32] The keys to success include having a mentor teacher in the same subject area, common planning time with teachers in the same subject, and regularly scheduled collaboration with other teachers. Beginning teachers' practice is enhanced further when their mentors also receive formal training and are released from some of their own classroom duties to provide one-to-one observation and coaching in the classroom, so they can demonstrate effective methods and help new teachers solve problems of practice.[33]

4. **Teaching Conditions**—Surveys of teachers have long shown that teaching conditions play a major role in teachers' decisions to change schools or leave the profession. The relatively poor teaching conditions in many high-poverty schools are a major reason why teachers in these schools are more than twice as likely to leave due to dissatisfaction as those in low-poverty schools.[34] Beyond resources, teachers' plans to stay in teaching and their reasons for actually having left are strongly associated with how they feel about administrative support, collegial opportunities, and teacher input into decision-making.
   When these elements are present, retaining teachers is much easier.

Of teachers who left in the year after 2012, only 13% said the most important factor for their departure was retirement. Fifty-five percent reported areas of dissatisfaction as important reasons for leaving. These range from teaching conditions, such as class sizes and salaries, to unhappiness with administrative practices (such as lack of support, classroom autonomy, or input on decisions) to policy issues, such as the effects of testing and accountability. Accountability pressures focused on test preparation and leading to sanctions comprised the most frequently cited area of dissatisfaction, listed by 25% of teachers who left.[35]

Rates of leaving are higher for certain categories of teachers:

- New teachers leave at rates of somewhere between 19% and 30% over their first five years of teaching.[36] These rates are higher when novices do not get high-quality mentoring in their early years.[37]
- Teachers with little or no preparation are more than twice as likely to leave teaching as those who are fully prepared.[38]
- Mathematics and science teachers change schools and leave teaching at higher rates than humanities teachers and general elementary teachers. Special education teachers and teachers of English language learners leave and move at even higher rates.[39]
- Teachers in Title I schools leave at rates nearly 50% greater than those of teachers in non-Title I schools.[40]
- Teachers of color have higher turnover rates, as do teachers working in high-poverty, high-minority schools. More than three-quarters of teachers of color work in these schools, which are often under-resourced and plagued by poor working conditions.
- Teachers in the South are more likely to leave than those in other regions. Southern and Midwestern cities have the highest rates of teacher turnover, followed by Southern suburbs, towns, and rural areas. The higher spending Northeast averages the lowest turnover rates across all district types.

Researchers have identified a number of workplace conditions associated with teachers' decisions to stay or leave, including the quality of instructional leadership, school culture, collegial relationships, time for collaboration and planning, teachers' decision-making power, experiences with professional development, facilities, parental support, and resources.[41]

Policy Recommendations

Many policy decisions can be considered to relieve teacher shortages. These are generally aimed either at increasing the attractions to teaching or lowering the standards to become a teacher. Short-term solutions may temporarily curb the fear of empty classrooms, but they can often exacerbate the problem over the long haul. For example, if teachers are hired without having been fully prepared, the much higher turnover rates that result are costly in terms of both dollars spent on the replacement process and decreases in student achievement in high-turnover schools. Long-term solutions focusing on recruitment and retention can ease shortages, while also prioritizing student learning and a strong teacher workforce. To accomplish this, research suggests that policies should:

1. **Create competitive, equitable compensation packages** that allow teachers to make a reasonable living across all kinds of communities.
    - **Leverage more competitive and equitable salaries** by **providing district incentives** to raise teacher salaries, **increasing statewide salary schedules**, and/or **using weighted student funding formulas** that direct resources to districts in relation to the students they serve (e.g., those in poverty, English language learners, youth in foster care).
    - **Create incentives that make living as a teacher more affordable** by offering other financial incentives, including: mortgage guarantees, down payment assistance, or other housing support, in exchange for service commitments; child care supports; and opportunities to continue teaching and mentoring after retirement, while maintaining retirement benefits.

2. **Enhance the supply of qualified teachers into high-need fields and locations** through targeted training subsidies and high-retention pathways. In critical shortage fields—mathematics, science, special education, and bilingual/ESL education, and in urban and rural areas with perennial shortages—schools don't just need more teachers, they need more teachers who will spend lasting teaching careers in those fields and locations. I**ncreasing access to strong teacher preparation can increase the pipeline of qualified, committed teachers to high-need positions.** However, becoming well prepared should be affordable.

    - **Offer forgivable loans and service scholarships.** The federal government should maintain a substantial, sustained program of service scholarships that cover training costs in high-quality undergraduate or graduate preparation programs for those who will teach in a high-need field or location for at least four years.

    - **Create career pathways and "Grow Your Own" programs.** The federal government and states can increase the supply of teachers willing to teach in urban and rural areas by recruiting and supporting high school students and other community members from those areas.

    - **Establish teacher residency models in hard-to-staff districts.** Urban and rural residency programs place candidates who will eventually teach in shortage fields in high-need urban and rural schools into paid, yearlong apprenticeships with expert mentor teachers, while the candidates complete tightly linked credential and master's degree coursework with partnering universities. In exchange, candidates pledge to teach in the district for 3–5 years.

3. **Improve teacher retention, especially in hard-to-staff schools**, through improved mentoring, induction, working conditions, and career development. If a teacher receives mentoring, collaboration, and extra resources, and is part of a strong teacher network, first-year turnover is cut by more than half (from 41% to 18%).[42] But just 3% of beginning teachers had such a comprehensive set of supports in 2012.[43] In addition, school working conditions—including access to resources, administrative support, collegial opportunities, teacher input in decision-making, and pressure related to accountability measures—strongly influence teachers' choices to continue teaching in their schools.

    - **Develop strong, universally available mentoring and induction programs.** With federal or state matching grants, districts can support every new teacher using induction strategies that work: mentoring by a trained mentor in the same teaching field, learning opportunities for beginners in key areas of need, classroom visits, a reduced teaching load, and joint planning time.

    - **Create productive school environments.** States and districts can allocate funds specifically to improve teaching conditions in hard-to-staff schools. These funds can reduce class sizes, purchase much-needed materials and supplies, and provide time for professional development and joint teacher planning.

    - **Strengthen principal training programs.** Federal and state agencies can offer grant funding and technical assistance for creating and expanding high-quality principal training programs that emphasize effective leadership skills.

4. **Develop a national teacher supply market** that can facilitate getting and keeping teachers in the places they are needed over the course of their careers. The federal government can provide labor market data and analyses for federal, state, and local planning.

- **Support for teacher mobility.** States can support common licensing exams and interstate agreements about credential coursework to facilitate more complete license reciprocity.
- **Support pension portability.** A public/private partnership between states and pension providers can help create a system of pension portability across states, as was done for college faculty by TIAA.

Conclusion

The teacher shortage provides an opportunity for the United States to take a long-term approach to a comprehensive and systematic set of solutions to build a strong teaching profession. Although these proposals have a price tag, they could ultimately save far more than they would cost. The savings would include more than $8 billion now wasted annually on replacement costs because of high teacher turnover, plus much of the expense of grade retention, summer schools, and remedial programs required because too many children are poorly taught.

In the competition for educational investment, the evidence points strongly to the importance of a strong, stable teaching force. Preventing and eliminating teacher shortages so that all children receive competent, continuous instruction in every community every year is, in a 21st century economy, essential for the success of individuals as well as for our society as a whole.

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Appendix: State Data

A-1: State Indicators Influencing Supply and Demand

This table highlights a number of key factors that reflect and influence teacher supply and attrition, and signal whether states are likely to have an adequate supply of qualified teachers to fill their classrooms. Based on these data—which treat compensation, teacher turnover, working conditions, and qualifications —each state is assigned a "teaching attractiveness rating," indicating how supportive it appears to be of teacher recruitment and retention. The data are drawn from national data sources (listed in the footnotes), representing the most recent data available for analysis. Interpretations of the data should keep in mind that, depending on the specific statistic, these sources are from 2012, 2013, or 2014. Some states may have recently experienced changes in policies or conditions that would change the statistic reported if it were collected today. In addition, in some cases, sample sizes are relatively small. We do not report data for states where the samples are too small to meet NCES guidelines for reporting.

Quintile

1	2	3	4	5

Lowest... Highest

	Compensation		Teacher Turnover			Working Conditions					Teacher Qualifications		
State	Average Starting Salary[1] (2013)	Wage Competitiveness Ratio[2] (Teachers to Non-teachers) (2012)	% of Teachers Planning to Leave as Soon as Possible[3] (2012)	Teacher Attrition (Leavers)[4] (2013)	Teacher Turnover (Movers and Leavers)[5] (2013)	% of Teachers Who Feel Supported by Their Administrator[6] (2012)	% of Teachers Worried about Job Security Because of Testing[7] (2012)	% of Teachers Who Report Staff Cooperation[8] (2012)	% of Teachers Who Feel They Have Control in Their Classroom[9] (2012)	Pupil-Teacher Ratio[10] (2014)	% of Teachers Not Certified[11] (2014)	% of Teachers Inexperienced[12] (2014)	Teaching Attractiveness Rating[13]
Alabama	$36,198	71	6.0%	6.8%	13.8%	57%	9%	39.2%	71%	15.8	0.87%	10.7%	3.33
Alaska	$44,166	85	4.7%	†	16.8%	50%	3%	39.6%	77%	16.6	0.88%	10.5%	3.73
Arizona	$31,874	62	11.9%	18.8%	23.6%	46%	15%	39.2%	71%	22.8	5.04%	15.1%	1.50
Arkansas	$32,691	74	5.3%	4.6%	13.7%	58%	8%	43.2%	78%	14	1.45%	11.5%	3.67
California	$41,259*	75	4.4%	4.6%	10.6%	48%	8%	39.3%	72%	24.3	1.49%	8.9%	3.67
Colorado	$32,126	68	8.4%	6.3%	14.6%	46%	15%	38.1%	76%	17.5	11.33%	17.6%	2.00
Connecticut	$42,924	71	4.1%	6.1%	10.9%	37%	9%	35.9%	73%	12.6	1.18%	9.3%	3.42
Delaware	$39,338	75	7.0%	†	17.3%	45%	15%	37.9%	54%	14	1.10%	11.0%	2.73
District of Columbia	$51,539*	68	14.8%	†	23.1%	24%	20%	27.9%	77%	13	17.84%	17.9%	1.91
Florida	$35,166	73	9.3%	6.6%	14.1%	52%	25%	38.0%	58%	15.3	4.20%	28.6%	2.25
Georgia	$33,664	68	5.4%	5.5%	12.7%	55%	11%	43.4%	66%	15.8	2.08%	5.9%	3.25
Hawaii	$41,027	77	†	†	20.5%	51%	†	†	81%	15.9	3.58%	15.3%	2.75
Idaho	$31,159	72	8.9%	†	13.2%	57%	15%	43.3%	79%	19.8	0.66%	14.1%	2.82
Illinois	$37,166	73	2.9%	5.3%	9.6%	44%	9%	36.1%	81%	15.2	0.60%	12.4%	3.42
Indiana	$34,696	70	7.9%	9.3%	15.4%	45%	26%	38.1%	76%	17.5	0.55%	14.8%	2.17
Iowa	$33,226	85	4.2%	7.0%	13.4%	39%	7%	37.2%	83%	14.2	0.01%	9.8%	3.58
Kansas	$33,386	70	7.7%	8.2%	15.1%	55%	7%	40.8%	83%	13	1.29%	12.8%	3.17
Kentucky	$35,166	71	4.2%	14.8%	15.8%	49%	11%	39.7%	71%	16.2	0.65%	9.8%	2.92
Louisiana	$38,655	75	7.0%	9.9%	21.4%	54%	21%	36.8%	61%	15.3	4.33%	12.7%	2.42
Maine	$31,835	81	7.6%	†	10.3%	47%	6%	38.5%	81%	11.9	2.10%	9.1%	3.64

Maryland	$43,235	75	10.9%	†	11.9%	41%	15%	26.9%	59%	14.8	3.16%	14.3%	2.18
Massachusetts	$40,600	69	3.5%	3.0%	13.4%	45%	7%	36.8%	78%	13.6	2.39%	13.8%	3.17
Michigan	$35,901	78	6.5%	10.0%	12.7%	44%	18%	39.5%	76%	18.1	0.49%	9.4%	3.08
Minnesota	$34,505	71	5.6%	10.2%	16.0%	42%	6%	36.5%	83%	15.6	1.72%	11.4%	2.75
Mississippi	$31,184	72	7.1%	†	17.4%	51%	14%	34.5%	75%	15.3	1.70%	12.7%	2.18
Missouri	$30,064	68	5.3%	5.9%	14.0%	53%	11%	44.2%	80%	13.8	0.86%	11.5%	3.33
Montana	$27,274	74	6.8%	†	18.7%	48%	†	31.6%	89%	14	7.68%	11.3%	2.50
Nebraska	$30,844	77	4.2%	†	10.4%	47%	7%	38.2%	76%	13.7	0.20%	12.6%	3.55
Nevada	$35,358	82	11.5%	†	19.8%	48%	14%	30.9%	68%	20.6	0.26%	14.1%	2.27
New Hampshire	$34,280	73	5.7%	†	9.7%	40%	6%	34.1%	82%	12.6	1.14%	7.0%	3.55
New Jersey	$48,631	76	4.4%	8.8%	9.2%	49%	15%	38.0%	73%	12	1.48%	11.2%	3.42
New Mexico	$31,960	78	7.2%	†	23.2%	48%	20%	30.4%	73%	15.3	2.09%	13.8%	2.18
New York	$43,839	81	†	8.2%	11.1%	44%	16%	34.7%	80%	13.2	0.53%	7.9%	3.45
North Carolina	$30,778	67	9.2%	5.5%	17.4%	53%	9%	42.6%	69%	15.4	0.33%	11.5%	2.67
North Dakota	$32,019	70	4.0%	†	14.6%	46%	2%	38.0%	88%	11.8	1.42%	12.9%	3.27
Ohio	$33,096	75	4.0%	4.1%	12.9%	47%	15%	37.6%	78%	16.3	0.69%	10.4%	3.33
Oklahoma	$31,606	67	7.8%	5.6%	17.9%	53%	13%	40.8%	86%	16.2	1.55%	13.2%	2.50
Oregon	$33,549	75	5.6%	†	11.9%	56%	6%	46.2%	82%	22.2	0.40%	9.8%	4.09
Pennsylvania	$41,901	80	4.4%	4.5%	9.3%	45%	13%	40.9%	76%	14.5	0.54%	7.5%	3.92
Rhode Island	$39,196	78	†	†	7.4%	44%	23%	37.9%	63%	14.5	0.94%	6.9%	3.00
South Carolina	$32,306	73	8.9%	13.9%	17.3%	55%	8%	43.9%	71%	15.5	3.10%	11.6%	2.75
South Dakota	$29,851	68	2.8%	†	12.5%	51%	5%	43.3%	86%	13.8	0.26%	12.1%	3.82
Tennessee	$34,098	66	7.8%	†	13.2%	56%	22%	44.0%	69%	15.1	0.48%	10.0%	3.09
Texas	$38,091	69	10.7%	14.9%	20.7%	46%	12%	38.0%	67%	15.4	1.53%	14.4%	2.00
Utah	$33,081	71	5.8%	†	8.5%	56%	11%	44.2%	78%	23	2.27%	15.7%	3.00
Vermont	$35,541	75	5.2%	†	9.9%	45%	2%	34.1%	88%	10.6	0.90%	8.8%	3.82
Virginia	$37,848	63	10.2%	8.0%	14.6%	48%	8%	36.0%	65%	14.1	3.52%	10.4%	2.58
Washington	$36,335	69	7.7%	7.2%	9.7%	51%	9%	40.7%	80%	19.3	0.19%	6.8%	3.50
West Virginia	$32,533	77	†	†	8.7%	53%	6%	38.3%	69%	14.1	3.45%	10.5%	3.40
Wisconsin	$33,546	76	6.2%	10.5%	16.2%	41%	15%	38.2%	82%	15.1	1.07%	15.1%	2.42
Wyoming	$43,269	94	3.7%	†	10.5%	51%	9%	37.7%	79%	12.3	0.19%	13.2%	4.00
United States	$36,141	74‡	6.6%	7.7%	14.2%	48%	12%	38%	77%	16.1	1.9%	13%	–

* NEA salary data are from 2011-12.

‡ Average of the 51 states (including Washington, DC) calculations, rather than a separate average for the United States as a whole.

† Reporting standards not met. Either there are too few cases for a reliable estimate or the coefficient of variation (CV) is greater than 50%.

[1] NEA Collective Bargaining/Member Advocacy's Teacher Salary Database, based on affiliate reporting as of December 2013; see www.nea.org/home/2012-2013-average-starting-teacher-salary.html.

[2] The competitiveness wage index is calculated by dividing the predicted annual wage of elementary and secondary teachers by the predicted wage of non-teachers working in the same state with master's degrees at both age 25 and 45. Baker, B., Farrie, D., & Sciarra, D.G. (2016). *Mind the gap: 20 years of progress and retrenchment in school funding and achievement gaps*. Table 5. Princeton, NJ: Educational Testing Service. pp. 15.

[3] Percent of teachers who plan to leave as soon as possible or until a more desirable job opportunity. Data are from the 2011-12 school year. LPI analysis of Public School Teacher File, 2012, from the Schools and Staffing Survey, National Center for Education Statistics.; Interpret estimates from District of Columbia, New Hampshire, and New Mexico with caution—each estimate's coefficient of variation (CV) is between 30 and 35%.

[4] LPI analysis of Teacher Follow-Up Survey (TFS), 2013, from the Schools and Staffing Survey, National Center for Education Statistics. Interpret with caution—all estimates other than Texas and Ohio have a coefficient of variation (CV) between 30 and 50%.

[5] LPI analysis of Teacher Follow-Up Survey (TFS), 2013, from the Schools and Staffing Survey, National Center for Education Statistics.; Schools and Staffing Survey. (2013). Teacher status file 2012-13. Washington, DC: National Center for Education Statistics.

[6] Percent of teachers who strongly agree that their school administration's behavior toward the staff is supportive and encouraging. Data are from the 2011-12 school year. LPI analysis of Public School Teacher File, 2012, from the Schools and Staffing Survey, National Center for Education Statistics.

[7] Percent of teachers who strongly agree that they worry about the security of their job because of the performance of their students or school on state and/or local tests. Data are from the 2011-12 school year. LPI analysis of Public School Teacher File, 2012, from the Schools and Staffing Survey, National Center for Education Statistics. Interpret estimates from Alaska, Connecticut, North Dakota, and Vermont with caution—each estimate's coefficient of variation (CV) is between 30 and 45%.

[8] Percent of teachers who strongly agree that there is a great deal of cooperative effort among the staff members. Data are from the 2011-12 school year. LPI analysis of Public School Teacher File, 2012, from the Schools and Staffing Survey, National Center for Education Statistics.

[9] Teacher autonomy in the classroom is measured using a Cronbach Alpha-generated construct of classroom control derived from six components: Control over textbooks and materials, content and skills to be taught, teaching techniques, evaluating students, discipline, and homework. The Cronbach Alpha value was equal to 0.76. LPI analysis of Public School Teacher File, 2012, from the Schools and Staffing Survey, National Center for Education Statistics.

[10] National Center for Education Statistics. (2015). *Digest of education statistics.* Public elementary and secondary teachers, enrollment, and pupil-teacher ratios, by state or jurisdiction: Selected years, fall 2000 through fall 2013. Washington DC: U.S. Department of Education. https://nces.ed.gov/programs/digest/ (accessed 5/18/16).

[11] The Office of Civil Rights defines certified teachers as those who have "met all applicable state teacher certification requirements for a standard certificate" for a beginning teacher or one who has completed the state-required probationary period. "A teacher who is working toward certification by way of alternative routes, or a teacher with an emergency, temporary, or provisional credential is not considered to have met state requirements." LPI Analysis of Civil Rights Data Collection, Public-Use Data File 2013-14, National Center for Education Statistics.

[12] An inexperienced teacher is defined as a teacher in his or her first or second year of teaching. LPI Analysis of Civil Rights Data Collection, Public-Use Data File 2013-14, National Center for Education Statistics.

[13] Teaching attractiveness ratings are calculated by assigning point values for each indicator according to the quintile: 5 points for quintile 5, 4 points for quintile 4, and so on. Teacher turnover indicators, teacher qualification indicators, and pupil-teacher ratio are reverse coded such that the 1st quintile is always the least desirable response. Each state's point total was then divided by the number of available indicators to generate an average teaching attractiveness score for each state. This rating represents the average quintile rank for each state.

KEY	
Color	Quintile
	1st Quintile
	2nd Quintile
	3rd Quintile
	4th Quintile
	5th Quintile
†	Does not meet reporting standards
Note: % of Teachers Planning to Leave as Soon as Possible, Teacher Attrition, Teacher Turnover, Pupil-Teacher Ratio, % of Teachers Not Certified, and % of Teachers Inexperienced are reverse coded such that the 1st quintile is always the least desirable response.	

A-2: Distribution of Uncertified and Inexperienced Teachers by State

Drawing on data from the Office of Civil Rights, this table identifies the extent to which uncertified or inexperienced teachers are hired within states and the extent to which they are disproportionately assigned to students of color. Each state is assigned a "teacher equity rating," indicating the extent to which students, in particular students of color, are assigned uncertified or inexperienced teachers.

Quintile

1	2	3	4	5

Lowest... Highest

State	Percent of Teachers Not Certified in High-Minority Schools* (2014)	Percent of Teachers Not Certified in Low-Minority Schools* (2014)	Ratio of the % Uncertified Teachers in High-Minority to Low-Minority Schools (2014)	Percent of Inexperienced Teachers in High-Minority Schools* (2014)	Percent of Inexperienced Teachers in Low-Minority Schools* (2014)	Ratio of the % Inexperienced Teachers in High-Minority to Low-Minority Schools (2014)	Teacher Equity Rating[1]
Alabama	1.569%	0.246%	6.38	12.76%	8.77%	1.45	3.7
Alaska	4.938%	0.806%	6.12	19.70%	7.26%	2.71	2.2
Arizona	7.225%	8.408%	0.86	22.48%	12.59%	1.79	1.8
Arkansas	3.671%	3.026%	1.21	16.61%	9.56%	1.74	2.5
California	2.067%	0.452%	4.57	10.80%	8.49%	1.27	3.7
Colorado	20.964%	4.544%	4.61	25.54%	13.72%	1.86	1.3
Connecticut	5.281%	0.378%	13.97	15.18%	6.53%	2.32	2.5
Delaware	2.070%	0.785%	2.64	15.02%	8.36%	1.8	3
District of Columbia	22.884%	20.686%	1.11	19.47%	18.09%	1.08	2.3
Florida	5.422%	3.964%	1.37	36.67%	29.20%	1.26	2
Georgia	3.336%	1.383%	2.41	8.46%	3.11%	2.72	3
Hawaii	5.030%	4.086%	1.23	14.22%	15.58%	0.91	2.7
Idaho	0.713%	0.522%	1.36	15.82%	12.42%	1.27	3.7
Illinois	1.116%	0.082%	13.54	17.00%	9.91%	1.72	3
Indiana	1.222%	0.472%	2.59	25.61%	10.74%	2.38	2.5
Iowa	0.040%	0.000%	N/A	12.37%	9.69%	1.28	4.2
Kansas	1.538%	1.346%	1.14	16.82%	10.90%	1.54	3
Kentucky	0.538%	0.335%	1.6	9.35%	8.76%	1.07	4.5
Louisiana	11.749%	1.492%	7.87	17.27%	8.71%	1.98	2
Maine	2.175%	3.964%	0.55	12.04%	9.35%	1.29	3.5
Maryland	5.995%	0.501%	11.97	25.39%	6.78%	3.75	2.2
Massachusetts	4.423%	1.343%	3.29	22.89%	10.29%	2.22	2
Michigan	1.179%	0.649%	1.82	13.88%	8.64%	1.61	3.7
Minnesota	2.383%	1.867%	1.28	14.60%	12.39%	1.18	3.2
Mississippi	4.045%	0.685%	5.91	18.88%	9.06%	2.09	2.3
Missouri	2.051%	1.384%	1.48	14.64%	12.91%	1.13	3
Montana	1.820%	0.711%	2.56	17.47%	20.33%	0.86	3
Nebraska	0.884%	0.446%	1.98	15.45%	9.41%	1.64	3.5
Nevada	0.184%	0.620%	0.3	21.67%	9.10%	2.38	3
New Hampshire	2.355%	0.859%	2.74	9.66%	8.82%	1.1	3.8

New Jersey	2.748%	0.638%	4.31	13.90%	9.48%	1.47	3
New Mexico	2.088%	1.440%	1.45	15.04%	12.02%	1.25	3
New York	2.285%	0.099%	23.08	16.72%	5.43%	3.08	3
North Carolina	0.811%	0.297%	2.73	15.46%	8.80%	1.76	3.7
North Dakota	1.898%	0.294%	6.44	12.44%	13.31%	0.93	3.3
Ohio	1.789%	0.172%	10.4	16.62%	9.94%	1.67	3.2
Oklahoma	4.138%	0.319%	12.98	16.31%	10.45%	1.56	2.7
Oregon	0.855%	1.079%	0.79	11.71%	10.72%	1.09	4
Pennsylvania	1.823%	0.170%	10.72	9.47%	7.02%	1.35	4
Rhode Island	3.207%	0.036%	88.99	12.40%	4.62%	2.68	3
South Carolina	7.043%	2.845%	2.48	16.86%	9.27%	1.82	2
South Dakota	0.497%	0.676%	0.74	16.78%	11.29%	1.49	3.3
Tennessee	1.971%	0.308%	6.41	12.55%	8.99%	1.4	3.5
Texas	3.661%	0.776%	4.72	18.80%	11.51%	1.63	2.3
Utah	4.009%	2.355%	1.7	16.82%	13.17%	1.28	2.3
Vermont	0.722%	0.784%	0.92	7.43%	8.19%	0.91	4.7
Virginia	4.180%	0.960%	4.36	14.39%	7.59%	1.9	2.8
Washington	1.003%	0.245%	4.1	9.63%	4.85%	1.99	4
West Virginia	3.664%	4.642%	0.79	11.78%	11.13%	1.06	3.3
Wisconsin	2.897%	0.527%	5.49	21.30%	13.26%	1.61	2.3
Wyoming	0.169%	1.277%	0.13	18.53%	10.75%	1.72	3
United States	3.6%	0.9%	4.0	16.6%	9.9%	1.7	–

* “High-minority schools” are schools in the top quartile of minority enrollment in each state. “Low-minority schools” are those in the bottom quartile of minority enrollment in each state.

Source: LPI Analysis of the Civil Rights Data Collection, Public-Use Data File 2013-14, National Center for Education Statistics.

Note: The Office of Civil Rights defines certified teachers as those who have “met all applicable state teacher certification requirements for a standard certificate” for a beginning teacher or one who has completed the state-required probationary period. “A teacher who is working toward certification by way of alternative routes, or a teacher with an emergency, temporary, or provisional credential is not considered to have met state requirements.”

[1] Teacher Equity ratings are calculated by assigning point values for each indicator according to the quintile: 5 points for quintile 5, 4 points for quintile 4, and so on. (Note: Percent of Teachers Not Certified in High-Minority Schools, Percent of Teachers Not Certified in Low-Minority Schools, Percent of Inexperienced Teachers in High-Minority Schools, and Percent of Inexperienced Teachers in Low-Minority Schools are reverse coded such that the 1st quintile is always the least desirable response.) Each state’s point total was then divided by the number of indicators to generate an average Teacher Equity score for each state. This rating represents the average quintile rank for each state.

KEY	
Color	Quintile
	1st Quintile
	2nd Quintile
	3rd Quintile
	4th Quintile
	5th Quintile
N/A	Undefined (not able to divide by zero)
Note: Percent of Teachers Not Certified in High-Minority Schools, Percent of Teachers Not Certified in Low-Minority Schools, Percent of Inexperienced Teachers in High-Minority Schools, and Percent of Inexperienced Teachers in Low-Minority Schools are reverse coded such that the 1st quintile is always the least desirable response.	

External Reviewers

This report benefited from the insights and expertise of two external reviewers: Richard Ingersoll, Board of Overseers Professor of Education and Sociology at the University of Pennsylvania; and Jason Grissom, Associate Professor of Public Policy and Education, and Director of the Master of Public Policy Program at Peabody College of Education and Human Development, Vanderbilt University. We thank them for the care and attention they gave the report. Any remaining shortcomings are our own.

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About the Learning Policy Institute

The Learning Policy Institute conducts and communicates independent, high-quality research to shape evidence-based policies that support equitable and empowering learning for every child. Nonprofit and nonpartisan, the Institute connects policymakers at the local, state, and federal levels with the evidence, ideas, and actions needed to strengthen the pre-k to grade-12 education system, and address the complex realities facing public schools and their communities.

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For the Public Good:

Quality Preparation for Every Teacher

Bank Street
College of Education

June 2016

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The Sustainable Funding Project (SFP) extends our thanks to countless colleagues across the nation who have informed this document: professional and reform groups, researchers, teachers, preparation provider faculty and leaders, district human resources departments and superintendents, and state and federal policymakers. The time they took to discuss ideas, read drafts, and offer comments—often on multiple iterations of our thinking—helped us grapple with complex issues across the educator preparation sector in ways we could not have done alone. Their insights and feedback were invaluable. We hope we have done justice to their ideas in ways that can continue to move these conversations forward.

The report was authored by the SFP team. Josh Thomases, Sophia Williams, and Karen DeMoss conceptualized the early work. Brigid Fallon, joining mid-project, led research refinements. Katherine Connelly provided editorial support. Karen DeMoss led the writing.

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FOREWORD

The Sustainable Funding Project at Bank Street College of Education was established to address a significant problem in public education: how to ensure that all aspiring teachers are prepared through affordable, high-quality programs so that every teacher enters the profession ready for the demands of 21st century classrooms. This report tackles quality sustained clinical practice as one part of the affordability question.

A financially supported, yearlong clinical co-teaching experience in an effective learning environment would offer teacher candidates an excellent pathway into teaching. This report draws on the success of the many programs that have already created these kinds of opportunities. Their results offer convincing evidence of an effective vision for teacher preparation.

Our work supports districts, states, teacher preparation providers, and others in the education sector to make it possible for more new teachers to enter the profession through yearlong residencies. We are exploring ways to carve out sustainable funding streams, building coalitions to promote policies that will ensure strong clinical preparation for all new teachers, and, in collaboration with others, developing a learning agenda to document the processes, impact, cost effectiveness, and cost benefit of these new models.

In response to requests from colleagues and partners across the nation, we created this framework to introduce the rationale for and pathways towards yearlong co-teaching residencies as an aspirational norm for quality teacher preparation. This document is primarily designed as a resource to support partnerships between districts and preparation providers, both of whom stand to benefit from such models. Acknowledging the role that federal and state policymakers play, we have also included a discussion of the regulatory and policy environments that impact the work of preparation programs and school districts. Because terminology varies vastly between contexts, we have included a glossary at the end of this document to facilitate a common understanding of the terms used throughout the report.

We recognize, of course, that financial support for other components of teachers' development is also critical. Since clinical preparation provides the foundation for teachers' practice, we have chosen to focus here for our first report. As our work proceeds, we will share resources on other aspects of teacher preparation financing, such as aligning preparation programs with the most pressing hiring needs across the country; providing mentoring for co-teachers; and developing induction processes that continue to build new teachers' skills.

As with any endeavor, we know we have much to learn from others and can best improve our work through collaboration. We welcome your feedback and invite you to join our network of individuals and groups committed to strengthening teacher preparation over the next few years. Please sign up for our releases at www.bankstreet.edu/sfp or email us at sfp@bankstreet.edu.

EXECUTIVE SUMMARY

New teachers want and deserve to be well prepared to take on the duties of their profession before becoming the teacher of record for a class. Across the country, teacher preparation providers have strengthened their programs for aspiring teachers, but many new teachers continue to report being less prepared than they would like to be.[1] Expectations for students and teachers have continued to rise, but we have not yet committed the additional time and resources necessary for all teacher candidates to learn and practice sufficiently before becoming responsible for their own classes. Aspiring teachers need sustained clinical experiences, working alongside expert practitioners, to build links between educational theory and hands-on classroom practice so that they are ready for the rigors of the job on the first day of school.

When teachers are not well prepared, student achievement suffers. Turnover rates are high, costing billions and requiring districts to hire more new, underprepared teachers the following year. In particular, high-needs schools, where new teachers disproportionately get their first jobs, often face a revolving door of staff, which thwarts the development of a stable environment necessary for school improvement efforts and places an additional demand on established teachers who must compensate for the needs of their new and underprepared colleagues.[2] For teachers who remain in the profession, a foundational year of teaching without quality support can entrench unproductive survival habits and undermine confidence.[3]

Too many of the nation's new teachers are not set up for success in our current preparation systems. Although they arrive with many skills and work extremely hard—often heroically—the vast majority are denied the time and resources necessary for the clinical preparation that would give them the strongest possible start as professionals.

Fortunately, this is a problem we can address. When aspiring teachers experience a year of clinical practice under the daily guidance of expert practitioners, they learn to translate the best of educational theory into effective practice. By teaching in a well-functioning classroom alongside an effective educator, they gain a deeper understanding of techniques and strategies that are proven to help children learn. By becoming part of a school community, experiencing professional collaboration, and participating in a school's improvement efforts for an entire year, candidates emerge with a solid professional foundation.[4] If we want an educational system where all teachers are effective, such models—generally called "residencies"—should become the norm, an integral part of teacher preparation programs and a preferred qualification in districts' hiring decisions.[i]

"If we want an educational system where all teachers are effective, such models—generally called "residencies"—should become the norm, an integral part of teacher preparation programs and a preferred qualification in districts' hiring decisions."

In countries where school systems have improved dramatically, such as Finland and Singapore, one of the shifts their nations embraced was to integrate teacher preparation with K-12 school systems. Aspiring teachers are paid to practice under the guidance of an effective classroom teacher for a full year before seeking certification.[5] Increasingly, evidence from the United States also indicates that such a model is an effective way of addressing persistent challenges facing schools and districts including

- *Attracting* a diverse group of promising candidates into the profession,[6]
- *Ensuring* all teachers have the skills they need to promote student growth and learning,[7]
- *Retaining* effective teachers, especially in schools serving low-income and diverse families, and [8]
- *Creating* a teacher development continuum that offers meaningful leadership and learning opportunities for all teachers[9]

However, scaling these high-quality programs is an ongoing challenge. Most programs with a yearlong clinical practice for aspiring teachers are funded through grants, making them difficult to sustain and grow. A few programs have designed ways to embed *unfunded* residencies, but in those cases, aspiring teachers do not receive a stipend or other payment for their work and must rely on family resources, take out loans, or work additional jobs on top of their full-time residency in order to cover daily living expenses.

[i] Because terminology varies vastly between contexts, we have also included a glossary at the end of this document to facilitate a common understanding of the terms used throughout the report.

Many programs avoid establishing residency requirements because they can increase financial barriers for entry into the profession and make it more challenging to attract and retain a diverse pool of strong teacher candidates.

Ensuring all aspiring teachers have access to quality preparation programs that include a year of residency will require finding the dollars to provide financial support for candidates. Doing so would improve the diversity, efficacy, and retention of new teachers—and, in turn, improve our educational system.

States, districts, the federal government, and foundations have all recognized the power of this approach, providing tens of millions of dollars over time to support residencies throughout the nation. But most programs are small, short-lived, and not sustained beyond initial grant funding. The result is a paucity of stable, quality residency programs across the nation—and a plethora of new teachers who have had less preparation than the most effective practices would prescribe.

It is time for the nation to recognize teaching as a "clinical practice profession," ensuring that candidates successfully complete rigorous academic and clinical training before being approved to practice.[10] In years past, detractors of the profession may have seen teaching as little more than babysitting or a career of convenience; today, though, education is recognized as a key responsibility of every government in the world and, ultimately, a public service that grows a nation's economy and well-being.[11]

We could show our commitment to ensuring every child has access to good schools in the same way we have offered governmental support for medical preparation. Because having well-prepared physicians is in the public interest, the federal government guarantees funds to support every doctor we prepare, providing stipends for individuals and subsidies for medical teaching hospitals. States also support these medical education efforts. We could make a similar investment in teacher residencies, helping us achieve our national goal of providing a quality education for every child and youth. Realistically, though, we do not yet have the structures, research, or political will necessary to do this at scale. This is the work that the Sustainable Funding Project—along with our partners—seeks to take on.

"It is time for the nation to recognize teaching as 'clinical practice profession,' ensuring that candidates successfully complete rigorous academic and clinical training before being approved to practice."

We believe that districts and teacher preparation providers, working together, can help to build the momentum we need to move towards the professionalization of teaching by creating more publicly funded, sustainable residency programs. Across the nation, preparation providers and districts have begun to reallocate existing resources to fund teacher resident positions that address student and district needs. They have developed creative staffing configurations, redirected professional development and recruitment dollars, and created closer ties with preparation providers to create "exchange of services" models, where programs offer supports to districts in exchange for resources that support candidates in their programs. Districts that currently fund quick-entry programs—programs that enable candidates to enter classrooms as teachers of record with minimal clinical practice—have a special opportunity to help build political will for this sector shift. They could develop a plan to transition the funding spent on quick-entry programs to support high-quality residencies.

Districts stand to benefit significantly from funding residencies and establishing this type of preparation as the desired norm for their new hires. Residency stipends can increase the diversity of the teaching pool, helping attract and retain strong candidates who reflect the backgrounds of the students they serve.[12] These yearlong placements also provide districts and schools with an opportunity to gather detailed, performance-based information that can inform later hiring decisions and, by preparing teachers who stay in the profession longer, they can lead to long-term staff stability that would improve schools.[13] Residencies also have the potential to impact student achievement in other critical ways. As co-teachers, residents effectively reduce class size, providing students with access to well-prepared, relatively inexpensive instructional staff. Residency programs also enhance broader school improvement efforts by providing mentor teachers with leadership roles that develop their "professional capital."[14] Residencies can also incentivize teacher preparation providers to design programs in the fields and geographic locations where districts have the highest need.

We can make a very good start on this effort by more efficiently using existing district funds. For example, substitutes and teacher assistants make up 18% of the instructional staff in the nation,[15] positions that residents could effectively fill. Annual professional development expenses are estimated to be $6,000-$18,000 per teacher[16]—some portion of those dollars could also be redirected to support the residency model.

Improving teacher quality by providing high-quality preparation for aspiring teachers also offers potential long-term cost savings. It could reduce supplemental student support costs—from tutoring to summer school—that are attributable to poor instruction. Administrators could spend less time providing on-the-job training for under-prepared teachers. Ultimately, districts could also save some of the $2.2 billion a year that is currently spent on teacher turnover, since graduates from quality residency programs tend to stay in their positions longer—with research documenting retention rates as high as 93% after 4 years.[17]

Aspiring teachers need access to quality preparation that includes sustained clinical practice. We have every reason to believe this key investment would be a productive step in our nation's effort to transform schooling from the industrial models we inherited to a professionalized system where every school consistently develops the intellectual, practical, social, and emotional skills our youth deserve.

STARTING WITH QUALITY

RISING EXPECTATIONS FOR TEACHERS AND STUDENTS

Since 2001, when the federal No Child Left Behind Act required educators to be "highly qualified," teacher quality legislation has proliferated. All states now have federally approved plans to ensure every child has equitable access to effective educators.[18] In the past two years alone, some 350 new laws to promote good teaching have been enacted.[19] Perhaps no educational issue elicits more agreement or policy activity than the idea that all classrooms need good teachers.

We would argue that these policies also need to address teacher quality *before* individuals are certified classroom teachers, ensuring that aspiring teachers enter the classroom with the best foundation possible. This isn't to say that new teachers are ineffective; they just aren't as effective as they could be. People are not born knowing how to teach any more than they are born knowing how to practice medicine or dentistry, architecture or aviation. As with other professions, aspiring teachers need extended, guided practice at the side of skilled practitioners. They need an opportunity to learn from experts who can demonstrate and explain the nuances of applying a large knowledge base to the needs of individual students, making sense of patterns and addressing unique needs in an everyday context.[ii]

In fact, teacher candidates need more time than ever before to master the growing body of content knowledge and skills that research shows they need to support student learning. Teachers are now expected to understand diverse patterns of human development, including how children with exceptionalities and from different backgrounds learn. They have to plan and deliver

[ii] Identifying effective teachers to serve as co-teaching mentors is a complex yet critical factor in successful residency models. Many partnerships have been able to establish locally-appropriate processes to both identify and support mentor teachers and placement sites. While approaches vary widely, we have found these partnerships to generally embrace shared selection of sites and training of mentors. In some contexts, it can be challenging, though, to find quality placement sites and well-prepared, effective mentors. Partnerships may benefit from developing strong mentors and school settings as a first step in their work to establish sustainable residencies.

Defining Quality Teacher Preparation

Although current research doesn't offer uncontested conclusions on what quality preparation looks like, findings suggest that quality teacher preparation embraces the following features:

1. *Processes for selecting and assessing candidates to ensure a diverse, committed, effective pool of teachers*

2. *Expertise in child development, content and pedagogy—including content- and culturally-relevant pedagogical knowledge*

3. *Sustained clinical practice in a supportive environment with experienced teachers and leaders who promote reflection and improvement*

4. *Deep partnerships with schools and districts to promote alignment across the educational system*

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lessons that go well beyond lectures, applying a growing knowledge base about how people learn to create engaging environments that motivate all students to explore and master disciplinary and interdisciplinary content—both independently and with their peers. Teachers are also expected to have the expertise to design and interpret assessments that capture not only whether students know particular facts or algorithms, but also where they have conceptual misunderstandings, what patterns of performance exist across different populations, and how individuals are progressing over time. In addition to these crucial expectations around their classroom skills, they must demonstrate mastery of more content than we have ever expected before and also be skillful collaborators with other adults in their school buildings.[20] If we want the estimated 1.5 million new teachers the nation will need in the next decade to meet these demanding expectations,[21] they will need our support.

The teaching profession has embraced these standards for educators, but, given the current structures of most teacher preparation programs, few teacher candidates have sufficient time and opportunities to acquire such an extensive range of knowledge and skills. Clinical residencies that include an aligned set of formal study, offering appropriate content and theory as well as opportunities for guided reflection, provide teacher candidates with the time and structure they need to build a grounded, applied understanding of their profession's standards of practice.

FINANCIAL BARRIERS TO QUALITY TEACHER PREPARATION

Many high-quality providers, whether in traditional higher education settings or outside of the academy, are beginning to shift their programs to provide these types of classroom-based clinical experiences. They attract promising teacher candidates, supporting them through challenging coursework and field experiences to achieve high standards during their clinical practice. The strongest programs ensure comprehensive learning opportunities in child development, pedagogy, and content; form deep partnerships with districts; and work closely with candidates during their clinical residencies.[iii] Their graduates have a firm foundation of applied theory to begin their professional teaching careers.[22]

Although they promise to save money in the long run, residencies can cost more upfront than

[iii] The Sustainable Funding Project does not promote a particular model for quality teacher preparation, but research and professional standards do offer important principles that can help providers and districts build a shared understanding of quality teacher preparation. We have compiled a list of the kinds of features most commonly valued in the literature at the end of this report.

traditional models. Sometimes costs are covered through grants and philanthropy, but teacher candidates often bear the burden through tuition and other program costs or unpaid fieldwork experiences that offer no support for living expenses. Not everyone has the resources for those options, and many are forced to seek additional loans and extra jobs or to rely on friends and relatives while pursuing certification. These financial disincentives can mean that those with fewer economic resources or other career alternatives opt for quick, cheap programs—or choose not to enter the profession at all.

Ultimately, as a system, we can't begin to guarantee that every aspiring educator enrolls in the kinds of teacher preparation programs we all want without addressing the financial and opportunity costs incurred by candidates. We need to provide supports for all aspiring teachers to access quality clinical experiences, or we will continue to have a patchwork of pathways that doesn't add up to universal quality preparation, doesn't provide districts with the high-quality early career teachers they need, and doesn't ensure our children all have effective educators from diverse backgrounds.

LESSONS FROM THE TRANSFORMATION OF MEDICINE

We have a strong example to look towards for ideas on how to change the status quo. Healthcare also faced issues of inconsistent quality in medical preparation. In the early years of the 20th century, the "Flexner Report" documented the atrocious state of medical education in many institutions. Though some in the profession were already working to improve physician training, as a whole, preparation was unregulated, standards were low, and graduates were often characterized as "quacks."[23]

The report and its supporters ultimately contributed to significant changes in medical education, including closing low quality and for-profit providers and moving quality programs to academic institutions with traditions of rigor and research. In addition, extended clinical practice became a key component of preparation.[24]

Given some parallel critiques of teacher preparation quality, including both program rigor and clinical requirements, many cite the Flexner Report as relevant to teacher preparation reform.[25] However, those discussions typically leave out the significant financial investments that enabled the reforms in medical education.[26] The Flexner Report and allies in the profession detailed the fiscal supports needed for change and began to rally public will to provide that support. Stipends for aspiring doctors began to rise after World War II, and funding for doctors' training became firmly embedded into the nation's healthcare system when national medical insurance in the form of Medicare was finally passed 20 years later.[27] These investments were instrumental in building the world's best model for medical preparation and top-end medical research institutions.

We now subsidize medical residents' salaries and the increased costs of running teaching hospitals at a rate of $11.5 billion a year—a substantial commitment, but still less than one half of one percent of the federal budget.[28] On average, we make a public investment in training our future doctors that has grown to over half a million dollars per physician.[29]

We can, with a dramatically smaller public investment, forge a similar transformation in teacher preparation—impacting our entire educational system.[iv] Teaching residents—aspiring educators working for a year alongside an experienced, effective teacher—could also

[iv] In medical education, additional expenses beyond stipends drive high costs, including extra staff, state-of-the-art training facilities, and financial incentives related to higher expectations in medical hospitals. For a high-quality teacher preparation system, additional resource investments—though significantly more modest—might also be required, for example, for rooms with two-way mirrors, collaboration between providers and districts, and mentor development. This report focuses primarily on the stipend for residents.

PROGRAM PROFILES

Louisiana: A Statewide Transformation of Preparation

Louisiana's Department of Education has played a leading role in bringing districts and preparation programs together. Through the Believe and Prepare pilot program, school district and preparation leaders have been able to guide the development of teacher preparation and licensure policy.

The work has been an incredibly efficient use of state dollars. Over 99% of the state's education budget goes to schools and districts, leaving less than 1% for the State Department of Education. Through careful budgeting, the Department targeted less than 2% of its budget for the Believe and Prepare partnerships to create stronger clinical preparation experiences across the State. For that small investment, more than 60% of school districts and 80% of preparation providers were incentivized to partner voluntarily to give more aspiring teachers the opportunity to practice with skilled mentor teachers before they earn an initial teaching license. Participants agree that the work has been transformational.

Believe and Prepare pilot programs' experiences have formed the basis for policy changes that would give all aspiring teachers the opportunity to participate in a yearlong teaching residency, bringing theory-based coursework into practical teaching experiences.[30]

be compensated for teaching during clinical preparation, improving teacher quality and increasing access to the profession.

OUR PATCHWORK OF TEACHER PREPARATION

Paid residencies are not foreign to education. Independent schools, public gifted and talented programs, and many charter management organizations commonly hire new teachers as co-teachers or assistant teachers for their first year. Districts also regularly provide financial supports for interns in school counseling to study the nuances of working one-on-one with youth at the side of a skilled professional. Public school teachers would equally benefit from a yearlong residency to master the complexities of effective classroom teaching.

That's not how most of our system works, though. New teachers can legally enter classrooms through quick-entry programs—whether housed in institutions of higher education or outside the academy—with as little as 40 hours of field experience. After summer training, these candidates become classroom teachers, with few opportunities for practice that would enable them to discern between strong and weak teaching strategies. They have little choice but to use personal experiences and intuition to make important decisions that directly affect the welfare of children. How much stronger and more confident would these hard-working individuals be if they had experienced a yearlong residency?

Of course, most new teachers graduate from programs that require many more hours of classroom observation, followed by a semester of student teaching.[31] Those requirements are a substantive improvement over the clinical expectations for quick-entry programs, but candidates are not guaranteed significant instructional responsibilities over the entirety of their student teaching placements. In addition, many traditional programs enroll students who are working in other jobs in order to afford their tuition. Candidates must either forego earnings during their student teaching semester or struggle to focus on the full-time teaching

PROGRAM PROFILES

U.S. PREP: Jointly Planning Curriculum with Districts

Texas Tech University hosts U.S. PREP—University-School Partnerships for the Renewal of Educator Preparation. The name captures the work: institutions of higher education across the nation, including Texas Tech University, University of Houston, Southeastern Louisiana University, Jackson State University, and University of Memphis, have committed to incubating new ways to prepare classroom-ready teachers and to advance learning and innovation in teacher preparation. U.S. PREP builds on successes of the TechTeach program, which has a 100% pass rate on initial certification exams, a 92% job placement rate, and a 90% retention rate for teachers over their first 5 years—outcomes all at the top of the scale for teacher preparation programs.[32]

A critical component of U.S. PREP is a commitment to strong partnerships with school districts. The vision is for school and university leaders "to come together regularly to discuss data, to tackle challenges, to celebrate and learn from successes, and to jointly shape future programming," says Scott Ridley, Dean of the College. U.S. PREP has brought together superintendents and K-12 personnel to develop clarity around important district needs that providers can help to meet. "We believe this type of partnership, where institutions of higher education embrace the role of meeting district needs, is critical to effectively preparing new teachers," says Ridley.

experience and associated coursework while also working to support themselves. As a result, many of these candidates are not as prepared as they could be to make the constant, complex instructional and management decisions every classroom teacher faces.

At the other end of the spectrum are quality residency models, such as The Boston Teacher Residency, and others in the National Center for Teacher Residencies network, the U.S. PREP partnerships led from Texas Tech University, Arizona State University's iTeachAZ, Louisiana's Believe and Prepare program, Relay's Teacher Residency option, Ohio University's professional development school model, Bank Street College's own clinical model with conference group supports—and many others.[v] They provide aspiring educators with extended practice in supportive school contexts under the guidance of accomplished educators. Research has begun to establish that such programs improve student achievement and teacher satisfaction, boost school morale, and reduce teacher turnover.[33] They also mirror approaches other countries have used to transform their educational systems, creating strong linkages between preparation programs and schools—including funding stipends for extended clinical preparation.[34]

THE RESEARCH DEBATE

Researchers caution that we need more information before we will be able say with certainty which features of teacher preparation will improve education in the United States.[35] Studies comparing effects of various preparation methods are inconclusive, largely because comparable and reliable data on the kinds of experiences that candidates have is unavailable. We have more than 26,000 different certification programs in the United States, in licensure fields that cover everything from preschool special education to computer science. These

[v] Not all of these program models have been able to secure the additional resources to offer stipends for residents, which means that some candidates face barriers to entry that could compromise their ability to engage the residency experience. Still, their models offer examples of robust partnerships that could greatly improve our educational systems.

PROGRAM PROFILES

New Visions for Public Schools: A Residency Model with Outcomes

In 2009, New Visions for Public Schools partnered with Hunter College and the New York City Department of Education to launch the Urban Teacher Residency (UTR) to prepare effective teachers for the City's high-need schools. To date, 325 novice teachers have been trained in an 18-month program that integrates clinical experiences in the classroom with graduate coursework at Hunter College. Working in a host school for a full year, UTR residents are supervised by an experienced mentor around all aspects of teaching and learning. Following the residency, candidates receive induction support in their first year as full-time teachers. Mentors also benefit from ongoing professional development that enhances their skills and contributes to their retention.

Independent evaluations confirm the program's impact on teacher retention and student outcomes: UTR residents have a higher 4-year retention rate than teachers prepared through other programs, and students taught by UTR graduates have better standardized assessment outcomes and credit accumulation than their peers. Experienced residency host schools now support other schools in the development of novice teachers to spread these practices across the city. The model has such promise that UTR was selected by the National Center for Teacher Residencies as a National Demonstration Site.

programs are administered through more than 2,100 providers, including institutions of higher education, states, districts, and alternative groups.[36] Some programs serve undergraduates, while others cater to college graduates. Some only accept candidates who already hold certifications, meaning they bring prior experience with them to the program; others only accept aspiring teachers who are new to the profession. Some, within the same program, accept both. Getting reliable, comparable data about candidates' experiences from this patchwork is challenging, so most studies are limited in scope, and they often rely on surveys and self-reports to gather their data.[37] Cautions about causal links between programs and outcomes are, indeed, merited.

At the same time, we have strong reasons to believe that moving towards more universal support for residencies would make a positive difference in our schools. International systems that transformed their educational outcomes—including leaders like Finland and Singapore—shifted to funded, yearlong preparation for their aspiring teachers, offering one source of compelling evidence for longer clinical practice.[38] Most new teachers also report being underprepared, and districts have had to design induction supports to address gaps left by a lack of clinical practice, including how to establish a culture in a classroom that minimizes classroom management issues, how to conceptualize the arc of a curriculum over the course of the full school year, and how to communicate with parents in ways that build strong partnerships.[39] Teacher preparation providers have recognized the same needs for at least thirty years.[40]

Traditional student teaching was designed to fit within the educational silos inherited from the industrial era, meaning that teachers stayed behind individual classroom doors—and expertise was located outside.[42] Cooperating teachers still often serve in roles that are disconnected from preparation programs.

PROGRAM PROFILES

TeachOregon in Salem-Keizer Schools: With Co-Teaching Everybody Wins

Western Oregon University and Corban University, working closely with Salem-Keizer School District, have designed a teacher preparation approach based on a clinical practice model that benefits schools, aspiring teachers, and ultimately, their graduates' future students. With support from the Chalkboard Project, the partners have piloted a residency model that creates learning opportunities across the system. Co-teachers are placed in schools in "clusters"—together with other aspiring teachers—from the first day of in-service to the end of the school year. Professional development, curriculum planning, teaching—they experience everything in their co-teaching role. Clinical teachers also receive days of intensive professional development to support their mentoring efforts, along with ongoing supports to explore how best to guide their co-teachers. Clinical faculty from the colleges spend a day every week in the school, learning deeply about schools' particular needs and building bridges between clinical practice and coursework.

Teachers in the district find that the support they receive through the partnership strengthens their capacity to engage with their professional learning communities and enhance school improvement efforts. District personnel recognize the impact on their long-term human resources system that the co-teaching structures have created, including by allowing the district to vet future teacher candidates during their yearlong placements. Initial data indicate that teachers who graduate from the co-teaching program have outscored traditionally prepared teachers on nearly every observation standard their districts use.[41]

Their contributions to candidates' growth is undeniable, but their expertise rarely informs improvements in the preparation system. These structural realities contribute to a larger problem in the profession: the lack of leadership opportunities for practicing teachers. Without meaningful roles to play in their profession beyond work with their students, teachers can find themselves retreating into their classrooms, seeking growth opportunities outside of the school and district, or leaving the profession altogether.

The lack of connection between pre-service and in-service teacher development can also perpetuate teacher quality issues. Preparation providers, who traditionally have had little say in where student teachers are placed, note that student teachers sometimes serve under ineffective educators, providing a kind of triage support in struggling classrooms. As a result, aspiring teachers' ability to learn from their clinical experiences is diminished, their preparedness for their careers compromised. At the same time, struggling teachers' needs in such situations are masked by the addition of a helping hand in the classroom, enabling a delay in needed supports and interventions.

Although empirical research that tracks student learning outcomes does not currently have the capacity to evaluate these kinds of systemic concerns, research has documented strong outcomes from evaluations of individual residency programs. Their graduates have been shown to positively impact student learning compared to other new teachers in similar schools.[43] They are sought after by employers and known for their ability to promote meaningful learning experiences that help youth master the kinds of 21st century skills that we hold up so often as hallmarks of excellent education.[44]

PROGRAM PROFILES

The Minneapolis Residency Program: Growing Your Own

In an effort to invest in those mostly likely to stay in the district, Minneapolis' Grow Your Own Program supports a pool of qualified and diverse non-licensed staff within Minneapolis Public Schools- behavior specialists, substitute teachers, and employees in other support roles- towards earning their teacher license.

This collaborative program, organized by the University of Minnesota – Twin Cities, the Minneapolis Public Schools, the Minneapolis Federation of Teachers, and the Minneapolis Federation of Educational Assistants Local 59, provides residents with both the theory underlying effective teaching and in-school practice honing their skills in a high-need classroom.

Building on the medical residency model, residents receive a $25,000 stipend along with a reduced tuition rate of $15,000. Residents spend four days a week co-teaching with a cooperating, master teacher, and one day a week taking graduate-level coursework. This model has attracted an eclectic mix of aspiring teachers who not only reflect the diverse students that they serve but also commit to teaching in their district for three or more years beyond the residency.

Teachers who were trained through residency programs have also remained in the profession, including in high-needs schools, at rates above 90% after four years, compared to turnover rates of 40-50% nationwide in the first five years.[45] In itself, if residencies help reduce teacher turnover, districts would benefit, since building expertise in clinical professions like teaching, dentistry, and medicine takes time.[46] As early practitioners log the hours required to become experts, they improve.

Admittedly, as with so much of the research in education, these studies only evaluate individual programs, so other unmeasured features related to selection and curriculum might also influence the findings. For example, in other research literature, programs' academic selectivity has been credited as the reason that their graduates can positively influence student achievement. However, other characteristics not measured in these studies, such as persistence and hard work, might also account for the results.[47] Similarly, we can't say with certainty that the clinical placements themselves are the determinate factor leading to the positive outcomes for residency programs.[48]

Even so, research has found a positive relationship between the quality of a clinical placement—for example, being in a supportive school environment with an accomplished teacher—and future teacher effectiveness.[49] Mandatory student teaching, oversight of the student teaching experience, and the similarity between one's clinical experiences and eventual teaching position are all positively associated with test score gains.[50] Teachers with more extensive clinical experiences feel better prepared and are more likely to stay in teaching.[51] Teachers who feel more prepared have more confidence in their abilities in the classroom, and these traits are associated with longevity in the profession.[52]

Residencies offer these kinds of benefits and provide a significantly enhanced learning

PROGRAM PROFILES

Relay Graduate School of Education: Sold on the Power of Practice

When Relay Graduate School of Education was founded in 2007, its focus was on preparing novice teachers for urban public schools. Through the Relay Teaching Residency, launched in 2014, participants work full-time in school-based roles under the guidance of a master teacher while pursuing graduate coursework at Relay during their first year of the program.

One of the more unique components of the residency is its focus on "deliberate practice." For three hours each week, residents rehearse specific teaching skills in low-stakes settings. After each round of practice, residents receive targeted feedback from Relay faculty experts and peers, and then practice implementing the same skill again, building up their ability to perform key teacher actions, such as checking for understanding or introducing new material. By receiving immediate, real-time feedback, residents can quickly adjust course and develop productive, ingrained procedural habits—"muscle memory"—that effective educators rely on every day. For the residents, deliberate practice also makes them more aware of their own teaching and helps to build their confidence. They can walk into their classrooms the next day ready to implement the strategies they've rehearsed at Relay to better support students' learning. Through the program, residents strengthen their classroom skills consistently and efficiently, supporting the idea that practice is the biggest lever to get new teachers better, faster.

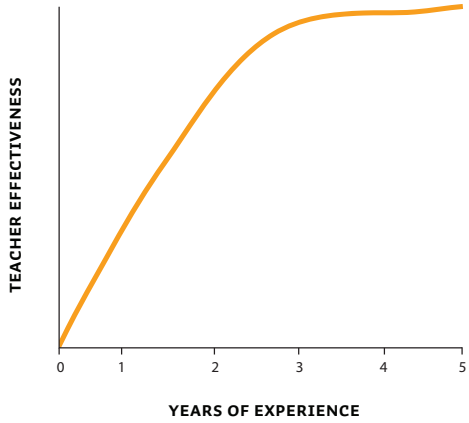
opportunity for teacher candidates in other ways as well. Traditional student teachers aren't integral members of school teams because they come in after the start of the year and leave before it ends. Their cooperating teachers often don't fully integrate candidates into the daily life of a class, first because candidates don't know enough about the students and curriculum to effectively engage their learners and later because they will soon leave, potentially disrupting continuity for student learning. Understandably, teachers are hesitant to risk jeopardizing the long-term goals of their classes by allowing student teachers to experience extended, full-time control over the class. As a result, student teachers often find their defining experiences are stand-alone lessons rather than regular engagement in the full range of responsibilities they will have as teachers.

A yearlong placement, on the other hand, fundamentally shifts the nature of teacher candidates' relationships to their schools. They become integrated into the life of both school and classroom, learning more as a result of their authentic experiences and getting deeper mentoring from their co-teachers, who have ample opportunities over the course of a year to understand where candidates might need more support and practice. By working in one classroom over the course of a full school year, residents have the opportunity to experience firsthand, with expert guidance, the complex interplay of curricular progression, classroom culture, and individual student strengths, needs, and personalities that marks a year in the life of a school.

Finally, studies consistently document that experience is the most important factor in a new teacher's effectiveness, and the steepest learning curve for teachers occurs between the first and second year of teaching.[53] In teaching, experience matters, especially in the early years, but for most teachers the first

year of extended experience happens alone in their classrooms. If we want well-prepared teachers for all our students—teachers who have the kinds of experiences that encourage them to stay in the profession—we need a system that moves educators further along the learning curve *before* they are leading their own classrooms.

As Tony Bryk has argued, we still have a lot to learn about how best to scale or replicate program specifics in ways that ensure better outcomes across the nation.[54] Standards for practice will evolve as we are able to learn more about the intricacies of the many variables that influence teacher preparation and its relationship to teacher quality. In the meantime, though, our children deserve our commitment to work from the best benchmarks for quality that are available.



GETTING AHEAD OF THE CURVE

Experience matters, especially in the early years. Most teachers face their steepest learning curve between their first and second years of teaching. By spending a pre-service year co-teaching at the side of an experienced colleague, new teachers will be further along the learning curve before they take over their own classrooms.

FINANCING TEACHER RESIDENCIES

PREPARATION AS A PUBLIC GOOD

In other industrialized countries, quality teacher preparation programs are part of higher education systems that provide subsidized degrees across a range of disciplines. Frequently, this means that citizens do not pay tuition; even foreign nationals often pay less tuition than the average college student pays in the U.S. In many cases, the nations whose educational outcomes frequently lead the world also provide living stipends for students pursuing teaching careers.[55] In general, education is seen as a public good, and individuals are supported and even incentivized to pursue teaching as a lifetime profession.

In the United States, access to higher education, including teacher preparation programs, relies heavily on individual tuition. In some cases, these costs are subsidized through dedicated funding. For example, if candidates have qualifying loans and choose to teach in high-needs areas or underserved communities, loan forgiveness packages can reduce debt over time. In addition, some preparation providers have been able to design programs that allow candidates access to AmeriCorps or other funds designed to support public service, providing living wages during their training. However, the existing cost structures for teacher preparation in the United States overall can make it challenging for preparation providers to offer opportunities for strong clinical practice through residencies without placing the cost burden on the aspiring teachers themselves.

United States policymakers are beginning to rethink our overall approach to funding higher education participation, which could reduce some of the challenges current programs face in providing quality teacher preparation. In the meantime, we can work within the existing framework in a targeted way to reduce cost barriers for entering teachers to enroll in quality programs. While we don't anticipate we can fully fund residencies for all aspiring teachers out of current budgets, districts and providers could support a significant number of residencies by working in close partnership to reallocate resources and redesign staffing structures in ways that free up dollars to

dedicate to residencies. This would be an important first step in building a nationwide commitment to sustainable funding for high-quality teacher preparation. Such shifts would serve the public well and help us research the benefits of stronger preparation, building the case for additional public funding.

DISTRICT BENEFITS FROM PAID RESIDENCIES

Yearlong teaching residencies offer clear immediate benefits to districts. As in other professions that fund residency-type experiences, teacher residents work as part of teams to meet real needs of those they serve. Although not yet licensed, pre-service teacher candidates typically have the foundational preparation needed to provide many forms of direct service within the profession's standards of practice. Well-designed residency programs offer candidates mentored learning experiences and also provide increased instructional support in the classroom—directly benefitting their students and helping support schools' broader improvement goals.

Residencies also offer employers in-depth knowledge of their future applicants; in effect, candidates experience extended job interviews. Other industries have long recognized the value of getting to know candidates before offering them permanent positions. For example, college cooperative programs in competitive business fields pay interns an average of $17 an hour, affording companies the opportunity to get to know how potential hires might fit their organizations' needs.[56] Districts similarly can gain in-depth knowledge of potential future hires' performance through residencies.

Even though benefits to districts are clear, tight education budgets can make it challenging to consider investing in residencies—but it's critical to note that they *are* more an investment than a cost. They offer district leadership a clear path to address costly systemic issues, including the following:

- Residency programs have been shown to reduce teacher turnover. High attrition rates are estimated to cost $2.2 billion annually across the United States.[57] Lower attrition rates would reduce "finder fees" for quick entry candidates, which are estimated at more than $1 million for every 200 recruits,[58] as well as other recurring hiring costs such as personnel processing and certification tracking.

- Students taught by effective teachers are more likely to stay on grade level, potentially reducing costs associated with summer school, grade retention, and tutoring—itself a multi-billion dollar industry, paid for both by parents and school districts.[59]

- The better prepared teachers are, the better schools can become. Strong schools help students develop in ways that ensure their future success. Quality education is associated with fewer dropouts, better health, less dependence on social services—all of which reduce taxpayer costs in the long run.[60] In addition, states whose populations are better educated have stronger economies and larger tax bases.[61]

REALLOCATING EXISTING FUNDS FOR RESIDENCIES

As districts begin planning to reallocate resources toward teacher residencies, two major considerations emerge: What funding streams can be used to pay for certain costs? And which existing budget line items might address specific instructional needs residents could also fulfill while pursuing their studies?

Funding streams carry with them different requirements and allocation rules. Local and state funding often have fewer regulatory constraints than federal dollars, so districts can generally reallocate dollars from these sources to fund residencies without many restrictions on how that funding is used. In some cases, residency programs are also aligned to federal priorities. For example, reauthorizations of the 1965 Elementary and Secondary Education Act (ESEA) have allowed funding for student supports and school improvement. Both Title I and Title II of the 2015 reauthorization, the Every Student Succeeds Act (ESSA), would allow dollars to be allocated for stipends if programs met federal goals. Similarly, funding in the Individuals with Disabilities Education Act (IDEA) could be used to support residencies that serve students with disabilities, which could also develop a strong pipeline of quality teachers in this high-need area. Supplemental service provision and class size reductions using co-teachers or classroom assistants are already standard expenditures in both ESEA and IDEA. Residents in well-designed preparation programs could effectively meet both of those needs as part of a comprehensive district staffing strategy.

Existing district budget line items offer several resource reallocation possibilities since residents can serve in many roles that are currently paid in schools. Reallocated dollars from these funding streams could be used flexibly—providing monies for the entire residency effort, not necessarily going exclusively or directly to residents' stipends. As full-time students, residents can be paid through internship stipends, which rarely carry benefits and are not subject to Social Security and Medicare withholding, reducing traditional staffing costs for entry-level assistant positions by as much as 45%. Districts that pursue these options can realize significant staffing benefits, increasing the number of individuals supporting students in their schools.

Below are three relatively large budget areas for most districts—staffing, professional development, and recruitment—that offer possibilities to embed more residency funding into standard budget lines.

Current Staffing Dollars

Only 3% of the nation's teaching force each year are new teacher hires who have just graduated from certification programs.[62] Districts typically allocate 70% to 80% of their budgets to personnel; using even a small portion of these staffing dollars to support residents who are likely future hires is a smart investment.

Reallocation of staffing dollars will, though, require attention to three issues. The first is fairness—no one should be let go so that aspiring teachers can have paid residencies. Rather, as natural attrition occurs—retirements, transfers, career changes—districts could explore slowly growing the funds for residencies.

The second is equity. Often, individuals in non-teacher staffing lines are often members of historically underrepresented communities. They are powerful role models, provide bridges between social, emotional, and academic worlds, and build school-community relations. Rather than losing these important contributors to student development, districts might explore "grow your own" programs, supporting aspiring teachers from the local community through college and residency programs.[63]

The third is size of the stipend. Ultimately, stipend levels will depend on the interplay between local markets and district needs. The right level would makes the residency both attractive and viable for candidates.

Residents can work with small groups, tutor, serve in delimited substitute roles, and co-teach, receiving stipends from some of the

savings their residency positions offer in these line item areas.[64] In all cases, questions of quality—both of residents' learning experience and students' classroom learning—should be part of program models.

The examples below come from budgeting strategies that districts and providers across the nation have shared. They have used these approaches to address overall cost challenges in their partnerships. Broadening such strategies could grow the dollars available for residencies.

Assistant teacher lines. The nation spends $25 billion dollars a year to pay a million assistant teachers—12% of the overall teaching force—at a cost of approximately $32,000 per employee.[65] Assistant teachers help lower class sizes by providing individualized attention for students in need of additional supports. Residents are not only qualified to fill such roles, but would be strongly motivated to do so effectively, since they are likely to want a future position in the district.

Substitute teacher lines. The nation hires more than half a million substitute teachers a year—nearly 7% of the teaching force—at an average cost of $30,000 a year per full-time equivalent teacher.[66] Residents could be placed in clusters—5-10 in a school—engaging their clinical practice four days a week and available to substitute as needed one day a week. As members of the school, they would understand its culture and norms, minimizing instructional disruption for students. At the same time, they would gain important experience as teachers. The dollars saved in substitute salaries could go towards overall program costs, and the broader exposure residents would get to educational needs across classrooms would provide opportunity for reflective learning during the residency.

Supplemental school programming. Residents could work in before- and after-school programs, summer school, and other supplemental school programming. For example, after school programs cost an average of over $600 a week per teacher; by restructuring staffing to incorporate resident supports, some of these dollars might be saved and reallocated.[67] Working in supplemental programs with the students they are learning to teach is a far better way to fund residents' living expenses than external employment in unrelated fields.

Professional Development Dollars

In most cases, research has found that it is challenging to show the links between professional development and improved outcomes for students. Some studies have shown positive impacts in math and science, and intensive, sustained trainings are more likely to offer improvements in teachers' effectiveness.[68] But in general, the money we spend on in-service training—estimated between $6,000 and $18,000 per teacher per year—appears not to offer much return on investment.[69] Some of these funds could be redirected towards professional development efforts that strengthen both beginning resident and mentor supports, enhancing the effectiveness of these important district dollars. Preparation providers could design professional development models that not only support their residents but also enhance overall school or district teacher development efforts, potentially adding cost savings. Additionally, the need for intensive new teacher supports might, over time, be reduced, allowing for even more dollars to be allocated towards residencies.

Repurposing Recruitment Dollars

Increasingly, district budgets include a range of expenditures focused on teacher recruitment efforts for high-needs areas.[70] Districts allocate resources for signing bonuses, pay salary differentials for teachers matriculating through quick entry routes and into hard-to-staff fields, hire staff and pay travel expenses for out-of-state and overseas recruitment, create advertising campaigns, and pay expenses for induction programs and relocation supports for non-local recruits. Refocusing dollars on residencies for high-needs fields could meet the same staffing goals and, by building a more stable teaching force, also ultimately reduce the recurring costs associated with teacher turnover.

TRANSFORMING QUICK-ENTRY PROGRAMS INTO RESIDENCIES

In some places, districts already have funding dedicated to teacher certification through quick-entry programs that ensure that there are enough teachers available each fall to teach in high-needs areas and hard-to-staff schools. Often, district costs over and above the first-year teacher salaries for these programs range from $10,000 to $25,000 a year. By strategically supplementing the quick-entry budget, perhaps through philanthropic dollars, and better projecting long-term staffing needs, a district could add a few additional candidates to their summer quick-entry program each year—but place them in quality co-teaching residencies rather than alone in classrooms. The following year, those additional candidates would be well prepared to staff high-needs classrooms, reducing the numbers of teachers needed through the quick-entry program.

For example, if a district currently trains and hires 100 quick entry teachers, supplemental funding for a cohort of 20 people each year would reduce the need for quick-entry teachers by 20 teachers the following year, since those residents would be ready for their own classrooms the following year. Within 5 years, the dollars that had been used for the quick-entry program would be available for 100 yearlong residency stipends, bringing future savings and benefits to the district through increased retention and improved teacher effectiveness.

LOCAL RESPONSIVENESS AND A COMMITMENT TO QUALITY

Each of these financial models offers different possibilities for meeting local needs, and the viability for different combinations of models will vary across the country. For example, in districts where the assistant teacher lines and IDEA funding streams are effectively tied to meeting the needs of special education students, it would not make sense to shift those dollars towards residencies. On the other hand, in districts where teachers and principals have given feedback that professional development is less than helpful, providers and school leaders could design new systems that coordinate staff development with resident training and free up dollars for resident stipends. In districts where schools currently staff large numbers of individuals to provide supplemental services for students, using those dollars to support residents could prove beneficial for all.

Residency focus areas also can vary. Large districts might develop cohorts of residents in high-need areas or hard-to-staff schools, while rural areas might be able to create opportunities for local aspiring teachers—building from the strengths of "grow-your-own" programs—by developing hybrid models that offer virtual supports for portions of the residency experience.

Local contexts can also determine the range of structural possibilities for residents' co-teaching experiences. In some places, residents might serve in co-teaching roles four days a week and engage in coursework and residency reflection the fifth. In others, programs might offer coursework and reflection during the evenings or weekends so that residents have the opportunity to experience substitute teaching or tutoring on the fifth day. Other residents might provide early morning, after school, or summer school supports.

Whatever structures are most appropriate for local contexts, partners should ensure residents' placements are in effective settings, carefully guard their co-teaching time with their mentors, and design coursework and reflective opportunities that maximize candidate learning. Kenneth Ludmerer, perhaps the nation's foremost historian on the transformation of medical education in the last century, captured the kinds of features that make for quality medical residencies in his recent book about the history of the medical residency education:

> ... the quality of the house officers and faculty, the characteristics of the teaching, giving residents the opportunity to assume responsibility in patient management, the availability of time to reflect and wonder, the opportunity for residents to establish meaningful personal relationships with faculty, patients, and each other, the provision of manageable patient loads, freeing residents from too many extraneous chores, holding high expectations of residents, and conducting residency training in an atmosphere of professional excitement.[71]

Similar considerations should be part of district/provider partnerships for teacher residencies. If we restructure programs and fund residencies without attention to these key quality issues, we can't expect the kind of impressive results that well-designed programs have seen.

"Whatever structures are most appropriate for local contexts, partners should ensure residents' placements are in effective settings, carefully guard their co-teaching time with their mentors, and design coursework and reflective opportunities that maximize candidate learning."

PROMISING APPROACHES TO SYSTEMIC PROBLEMS

PROBLEM #1

We have too many barriers for promising, diverse candidates to enter teaching through quality pathways. Quality programs develop excellent teachers, but often have high real and opportunity costs. As a result, high-potential candidates with other opportunities are unlikely to enroll unless they are supported with outside funding. Candidates with limited resources are unlikely to opt for teaching as a career, especially if unfunded residencies are required. As a result, teachers are less likely to reflect the demographics of students in the public school system. It also means that there are typically not enough graduates from high-quality programs to meet district needs.

PROBLEM #2

Insufficient and under-funded preparation is a catch-22 for novice teachers and their students. In exchange for filling district staffing needs, quick-entry options that offer inadequate clinical practice are typically the only pathway to teaching where candidates can receive tuition support and salaries while they are training. Other new teachers find that the certification areas they pursued in college do not qualify them for available jobs, so they seek quick supplemental licensure in high-need fields. Both routes require very little clinical preparation, meaning these teachers are technically qualified, but underprepared to serve their students as well as they could.[75] They can't afford more clinically-rich training, yet they aren't fully prepared to meet the full range of student needs they will find in their classrooms.

PROMISE #1

Financial incentives attract promising, diverse candidates into teaching. Programs with financial incentives for participation have shown that well-qualified candidates from diverse backgrounds can be attracted into teaching[72]—and, as the Albert Shanker Institute recently documented, diversifying the teaching force is not only a civil rights issue but also a win for everyone. In fact, increasing teacher diversity helps diminish the achievement gap since students perform better academically when taught by teachers who share their demographic backgrounds.[73] More broadly, exposure to racially and ethnically diverse teachers for all children can help reduce stereotypes and promote social cohesion across all groups.[74]

PROMISE #2

Residencies develop well-prepared new teachers who are confident in their abilities to support student achievement and social-emotional well-being. When aspiring teachers are supported with the hands-on experiences needed to become good teachers of the students they are likely to serve, they enter classrooms ready to succeed.[76] They have experienced the full range of teachers' responsibilities over the course of the year, so they have the perspective needed to manage their duties. They also have a familiarity with district curriculum, skill promoting student motivation and achievement, experience working with families and communities, and a sense of the continuous need for growth through collegial collaboration that the profession demands.[77] Their students are well-supported in their learning. Funding residencies in districts' high-needs areas also incentivize providers to develop programs that help meet district staffing needs, reducing the need for quick-entry programs.

PROBLEM #3

We have revolving doors of underprepared teachers serving in high-needs areas. Too few candidates are willing and qualified to teach where districts have the most need. Districts are often forced to dedicate significant funding to attract candidates to fill staffing shortfalls in historically underserved schools and in high-needs areas such as special education, English as a Second Language, and STEM (science, technology, engineering, and math) fields.[78] The financial incentives they offer ensure a steady pool of candidates who enter classrooms underprepared. Once teachers have received their subsidized teacher certification credentials, they are also more likely to leave the high-needs schools they were recruited to serve, perpetuating the need for more quick entry teachers.[79]

PROBLEM #4

Schools often lack the professional culture necessary for school improvement. The collection of these problems makes it difficult for schools to improve—especially high-needs schools, which disproportionately have underprepared teachers. High turnover rates preclude schools from building a strong, stable teaching force, lowering educational outcomes. New replacement teachers are also underprepared, resulting in lower student performance and continued turnover. Both turnover and low performance are associated with hard-to-staff schools, perpetuating the cycle. Because these schools are unable to build the kind of professional culture that supports improvement, their students remain trapped in untenable schools.[81]

PROMISE #3

Residents stay in teaching, reducing teacher turnover rates. The extended clinical practice residents receive in high-functioning schools makes them better able to meet the learning needs of all students. They both feel more effective and are more effective as teachers. Teachers who are well prepared are more likely to remain and be effective even when they end up being hired in schools that do not exhibit all the qualities of an effective school. Districts thus face less turnaround among staff across the system, including in high-needs schools.[80]

PROMISE #4

Residency programs build and reinforce schools' professional cultures, ultimately improving student achievement. Diverse candidates who experience residencies learn firsthand about the power of professionalism and collegiality to improve teaching. They bring this knowledge to their schools, remain committed to their schools' improvement, and help develop the professional cultures needed to improve student achievement. The schools hosting residents also benefit from the additional staff and professional development support that teacher preparation providers can offer.[82] Further, mentor teachers find their professional lives are enriched, providing them teacher leadership opportunities in a field that historically has had limited career ladder advancements. They develop deeper "professional capital" that helps the profession consolidate a stronger knowledge base, building expertise and efficacy among partners.[83]

MAKING IT HAPPEN

ALIGNED INCENTIVES OF YEARLONG TEACHING RESIDENCIES

Whether people embrace change depends on how they interpret what change will mean to their own lives.[84] In this case, funding yearlong, co-teaching residencies benefits everyone involved—including aspiring teachers, mentor teacher candidates, teacher preparation providers, schools, and districts.[85] As we begin to move toward preparing more teachers in this way, we could begin a virtuous cycle that incentivizes positive shifts across the entire educational ecosystem.

ASPIRING TEACHERS BENEFIT BECAUSE THEY...

- Access quality preparation for their chosen profession without undue financial strain.
- Avoid the "sink or swim" phenomenon of first year teaching.
- Develop confidence and competence as teachers.
- Learn from guided, hands-on practice with expert practitioners.
- Build a network of professional supports before facing their first year in the classroom alone.
- Make a sound investment in their futures, maximizing opportunities for being hired and experiencing success over their careers.

MENTOR TEACHERS BENEFIT BECAUSE THEY...

- Are recognized for their expertise.
- Access leadership opportunities and support to develop skills as teacher leaders that can support their schools' professional improvement efforts—without leaving their classrooms.
- Have support in their classrooms all year long from a committed novice co-teacher.
- Avoid drawbacks of short-term student teaching placements, where candidates are not always aligned with curricular and pedagogic approaches.
- Influence and benefit from prepartion providers' support for teacher candidates.

PREPARATION PROVIDERS BENEFIT BECAUSE THEY...

- Stabilize enrollment through increased numbers of cohort programs.

- Have access to sustainable residency stipends as a recruiting tool, incentivizing diverse candidates to apply for programs.
- Meet national accreditation demands for close connections between providers and districts.
- Gain important opportunities for applied research partnerships.
- Bring expertise to school improvement efforts.
- Better understand candidates' lived experiences in schools, supporting continuous program improvement.

SCHOOLS AND DISTRICTS BENEFIT BECAUSE THEY ...

- Learn about future applicants to the district through yearlong "interviews" with residents.
- Reduce teacher turnover.
- Improve schools through increased teacher leadership.
- Provide students with additional supports from residents, who enter classrooms with foundational training.
- Raise student achievement in classrooms with early career teachers.
- Reduce the need to provide extensive induction supports for new teachers to address gaps typically left by a lack of clinical practice.
- Influence teacher preparation curricula.
- Realize long-term cost savings.

These incentives are meaningful and real. They could reduce impediments to change we have known about for years, leading the way to a series of shifts that address persistent problems in education.

WORKING TOWARDS CHANGE

Ultimately, finding funding to support yearlong, co-teaching residencies requires a foundational cultural shift in our understanding of teacher preparation and its relationship to educational quality. Districts and preparation providers will need to see preparation as integrated with teachers' career trajectories, co-constructing residency and mentorship supports as part of the teacher development continuum instead of operating with a pre-service/in-service divide.

To be successful, both districts and providers will need to change their approach to the work, including partnering in the following ways:

- Districts and providers will need to collaborate closely on program design, enabling districts to benefit from providers' expertise around disciplinary knowledge, educational theory, and adult-learning systems and for providers to learn from schools and districts about local strengths and challenges.
- Districts and providers will need to identify high-quality placement sites for residents to ensure candidates learn under effective teachers in schools with strong professional norms. These sites need to see their roles as developing the next generation of professional teachers, and their residents need to be placed in classrooms that maximize their learning with positive role models.
- Instead of simply being seen or functioning as "pipelines" for teachers, preparation providers should help establish robust supports for schools that serve as resident-placement sites, becoming more fully integrated into districts' and schools' improvement efforts.
- Mentor teachers will need to develop the capacity to support aspiring teachers well, learning to translate their experience to first year practice.
- To ensure a strong, stable cadre of effective mentors for aspiring educators, districts should design teaching career ladders that value teacher leadership development, and preparation providers should provide training and support for mentor teachers.

THOUGHTS FROM MENTOR TEACHERS

A Model to Build Confidence

Whether we've been teaching 2 years or 20 years, when someone asks us about our first year in the classroom, teachers have a rush of mixed emotions. We all had so many expectations and anxious moments that we often respond now with words like "If I had only known…" or "I never expected…."

My resident is experiencing her first year of in a classroom as an integral part of a supportive environment rather than as a lone teacher in front of a class. Six months ago, she was unsure of implementing effective classroom management and lesson delivery. She is now confident and much more effective. She has experience connecting with students to meet their emotional and academic needs. She has developed a physical and mental endurance that will benefit her as she walks into her own classroom. Our class achievement results attest that she now knows how to create a productive learning environment.

In our co-teaching model, confidence grows, ineffective practices get rooted out quickly, and linkages between theory and practice develop on a daily basis rather than over the course of years. My resident will enter her first year in the classroom with more understanding and less uncertainty because she was surrounded by a support system of experienced professionals—me, my colleagues, our university partners.

She will reflect optimistically on her preparation, knowing she was part of a team providing high-quality instruction. And she will enter the classroom better prepared to educate our children for the future rather than with the anxious "If I had only known…."

—Lisa Allen
Believe and Prepare Mentor Teacher
Ruston Elementary School, LA

- Where districts have particular staffing needs, providers should establish programs and recruit candidates into certification areas that meet staffing projections. Providers should also establish recruitment practices that attract candidates who reflect school demographics.

For these partnerships to be successful, schools, districts, and preparation providers will also need to make changes within their own organizations.

- Districts will need to work cross-functionally and collaborate across teams as diverse as recruitment, professional development, and federal and state grants to find ways to reallocate dollars to support a holistic teacher development model.
- Preparation programs will need to engage in open discussions with districts and embrace curricular shifts that embed this work more deeply and collaboratively into candidates' experiences, including creating more practicum courses, sharing supervisory responsibilities with district partners, and embracing curricular co-development.
- In order to ensure equitable access to quality preparation pathways, providers will also need to adjust their programs so that the number of credit hours and total program costs continue to be reasonable with the addition of a yearlong residency.
- Schools will need to embrace residents as novice educators who are learning their craft and as members of their communities who can offer valuable contributions.
- Districts will need to develop the capacity to project future staffing needs in order to coordinate with preparation providers.

THOUGHTS FROM MENTOR TEACHERS

Teacher Career Pathways: Mentors as Professionals

My family is filled with teachers, teachers who see their work as a calling. Yet, as I pursued my dream of becoming a teacher, my beloved role models sometimes discouraged me from entering the field because it lacked professional opportunities. When my early experiences as a teacher afforded me few leadership opportunities, my family's hesitations became very real to me. I grew frustrated and disillusioned. I knew the role of principal was not the right path for my leadership development; it was too far from the children I wanted to serve. I seriously considered leaving the profession.

We need to keep our best teachers as close as we can to students to help them reach their goals for college and careers, but we also need to provide those teachers with multiple pathways to leadership. Partnerships that embed pre-service preparation programs in schools and rely on excellent teachers to mentor aspiring teachers do just that. Our teachers now have new training opportunities, a platform to share ideas, and a voice—at the local level where we can truly have the most significant impact.

The Believe and Prepare program is breathing new life into its most valuable asset—teachers. It is opening up pathways to leadership that teachers have never considered before. It is saying to our very best teachers: we recognize your talent, we value your perspective, and you've earned a place in our leadership structure.

—Mallory Wall
Believe and Prepare Mentor Teacher
LaGrange High School, LA

ENCOURAGING ACTION

Through conversations with programs that have built residencies, we have identified a number of ways that districts, states, and preparation providers could better align incentives for actors across the system to move toward yearlong residencies, encourage collaboration across sectors, and build a strong cadre of schools and mentor teachers prepared for residency placements.

- Districts could give preference to applicants with residency-style preparation, incentivizing aspiring teachers to enroll in quality preparation programs instead of opting for quick pathways that might save dollars in the short term but won't give them a job advantage.
- States could offer scholarships for individuals entering residency programs that are aligned to districts' high-needs certification areas.
- To support districts and providers in moving toward residency programs, states could establish a policy review committee to identify current policies that might run counter to the goals of yearlong residencies, closing undesirable loopholes for low-quality preparation pathways.[vi]
- To support districts in reallocating funding streams, states could explicitly incorporate language in their ESSA applications that highlights the acceptable uses of federal funds to support residencies.
- States could provide grants for districts to help cover program costs during the time needed to design new approaches that responsibly reallocate other funding.

[vi] For example, recent policies raise the bar for entry and exit from traditional teacher preparation programs. It is true that countries that transformed their educational systems embraced increased selectivity, and strong evidence exists that academic skills are requisite for effective teaching. However, it is also true that undergraduate education GPAs in general college coursework—the two years before becoming education majors—already averages 3.25. Also, GPAs and test scores are neither consistently nor sufficiently predictive of whether a teacher will be effective or will remain in the field. Even more importantly, strict academic selectivity often produces racial and cultural mismatch between teachers and students, further hampering teacher retention and dampening student achievement. It can also result in serious teacher shortages, returning the nation to an era when we lowered teacher standards in order to staff classrooms.

- States could ensure that all providers operate under similar regulations so that all pathways towards certification offer quality preparation and sustained clinical practice. In this work, states should make sure that program approval processes strike a balance between establishing strong certification requirements and providing flexibility to design programs that address district needs.
- States could support restrictions on program costs that do not directly affect teacher quality, such as unreasonable overhead charges on resident stipends if funds come through grants.
- States could encourage deeper collaboration by requiring providers to seek district feedback as an integral part of new program development and overall improvement efforts.
- States could support the development of a cadre of strong mentor teachers by reconsidering licensing and evaluation policies in order to formalize and appropriately reward the mentor teacher role.
- States could incentivize districts to create residency sites in strong schools that serve struggling students to ensure future teachers learn from the best models.
- Preparation providers could encourage and support faculty in collaborating with school and district partners and becoming more deeply involved in clinical preparation work by better aligning reward systems such as promotion and tenure where applicable.

These kinds of shifts will require cooperation and partnership across sectors, including among some players who may have experienced their agendas as misaligned. We believe that working toward a shared vision that can provide benefits and resources for everyone will help carve out space for productive discussions to build the trust and commitments we need for genuine, mutually productive partnerships. By forging alliances that tap into strengths across the system, we can begin to create a more virtuous cycle of interdependence and improvement. Doing so will serve our future teachers and their future students well.

LEARNING FROM LOCAL EFFORTS

In this work, we have a lot to learn from the variety of programs that exist, from both traditional and alternative providers, as we move towards new models that embrace and financially support stronger, longer clinical practice. How providers and districts envision their programs will doubtless vary widely in response to local needs. These local models will carry with them different strengths and challenges, partly related to existing program structures.

For example, colleges historically designed degree requirements with the assumption that students attend classes full-time during the academic year. Although many college-goers don't fit these traditional assumptions,[86] some undergraduate programs have redesigned degree requirements to enable full-year co-teaching placements during the senior year. In these programs, candidates with financial aid packages can cover residency living costs as part of their overall college expenses. However, this model reduces time for academic study and can make it difficult for some candidates to master their subjects—especially for secondary levels.

Other programs have experimented with a 5th year residency requirement, as The Holmes Group promoted 30 years ago,[87] offering more time for mastery of both content and practice. But candidates usually have to forego a year of full-time salary and benefits in such models, and the recent focus on completing college degrees in four years has led some programs to drop their 5th year post-bac requirements.

Graduate programs, which are often designed for specific kinds of candidates—new graduates, career changers, working adults—require anywhere from nine months to three years of coursework for completion and have a range of clinical practice requirements, from quick entry to residency. Similarly, alternative certification programs embrace a wide range of model features.[88] As noted earlier in this report, many of these programs have developed residencies, and the variations across these more differentiated programs also have different benefits and drawbacks in terms of cost, preparation quality, and ease of access.

MARKETS AND ECOSYSTEMS

In 2011, the Organization for Economic Cooperation and Development (OECD) wrote a special report for the United States, pointing out that teaching in other countries was better supported and held in higher esteem.[89] They suggested our nation build a more respectful, professional culture around teaching. Since then, discussions about the profession have taken on a more nuanced tone, and over the past few years both the public and policymakers have seemed more attuned to the interconnectedness of teacher professionalism, teacher quality and diversity, teacher preparation, and school improvement.[90] Funded teacher residencies can influence quality across these kinds of educational arenas—and promote deeper connections among them.

Building these connections matters. Our country's educational system is so loosely coupled as to have been called a "non-system,"[91] making it difficult to influence change through policy alone.[92] Unlike other nations, we have virtually no shared curriculum across states and districts. Legislative and statutory processes to design policy vary widely, as do the actual policies that officials pass. Funding sources and levels, both within and between districts and states, are unequal. Requirements for student assessment, promotion, and graduation bear little resemblance across geographies. Multiple certification pathways into teaching exist in every state, and portability of certifications across states is limited. All these variations and more exemplify the deeply local nature of schooling in the United States.

The kinds of structural shifts and professional connections that funded residencies require will benefit everyone in the local educational ecosystems where schools exist. Myriad factors are at play in these ecosystems, including district budgeting, local implementation of state and federal policies, curriculum selection, professional development,

and leadership, to name just a few. By bringing teacher preparation providers more fully into this ecosystem, schools and providers will have more and better opportunities to strengthen their core work of improving teaching and learning in meaningful ways.

Realizing these important goals, though, requires attention to larger market forces. The current fragmented market for teachers has strong incentives that promote fast and cheap options for teacher certification. These pathways might be expedient, but they do not set teachers or their students up for success. The kind of success we are talking about is not trivial; it is the foundation for a strong economy, a robust democracy, and a just society. Funding a critical mass of high-quality options can shift the market in transformational ways, creating positive incentives for everyone to dedicate the time and effort needed to improve our schools. It's an investment worth making—for us all.

MOVING FORWARD:

THE WORK OF THE SUSTAINABLE FUNDING PROJECT

Funded residencies are currently far from the norm for teacher preparation. To support efforts to make concrete shifts towards funded residencies with deeper district/provider partnerships, the Sustainable Funding Project is developing additional resources for states, districts, and providers. One of our upcoming reports will look more closely at different residency funding models across the country, providing a concrete sense of how programs and districts have been supporting this work. We will also be creating case studies describing the structures and key features of existing quality preparation programs and exploring the costs of these models for other locations that might be looking to adopt them. To support for those embarking on the road towards residencies, we will be creating a roadmap of steps that district/provider partnerships might take.

In addition, we have found a need for resources that address specific situations related to quality teacher preparation. For example, the recently passed Every Student Succeeds Act (ESSA) offers a unique opportunity to support districts and providers interested in partnering to support funded residencies. The increased flexibility in the new law allows states to create a much wider range of programs than those conceived under No Child Left Behind. Doing so would enable districts to design meaningful residency partnerships with providers, opening doors that could facilitate the kinds of changes we have described in this report. We are working with states to craft ESSA applications that create these opportunities and to target remaining No Child Left Behind Title II funds towards supports for mentor and school site development that will set the stage for new residency programs.

END NOTES

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DEFINING QUALITY TEACHER PREPARATION

The goal of the Sustainable Funding Project (SFP) is to establish sustainable funding streams for high-quality teacher preparation. Resources, whether new or reallocated, should always, we believe, be connected to quality considerations. Accordingly, we offer some beginning guidance for what district/provider partnerships might consider when planning quality residencies.

These principles have been developed over the course of several months' research on teacher preparation, drawn from a combination of theoretical, international, case study, and large-scale empirical research. Although current research doesn't offer uncontested conclusions on what quality preparation looks like, findings suggest that quality teacher preparation embraces the following features:

1. Processes for selecting and assessing candidates to ensure a diverse, committed, effective pool of teachers

- ***Entry***
  - Academic standards that reflect a capacity to successfully engage with complex ideas
  - Indicators of commitment to serving the diverse range of students in today's schools
  - Dispositional orientation towards collaboration, resiliency, and persistence
  - Processes to recruit a diverse set of candidates reflective of students in the nation's schools and, to the extent possible, in the particular districts where programs partner
- ***Progression***
  - Evidence of willingness to learn and improve
  - Consistent progress towards the program's exit standards
- ***Exit***
  - Success meeting program standards, inclusive of entry and progression indicators
  - Success meeting licensure requirements for the district/state

2. Expertise in child development, content, and pedagogy—including content- and culturally-relevant pedagogical knowledge

- ***Child and Human Development***
  - Deep knowledge of principles of human development, including the roles of language and culture in development
  - Understanding of developmental variation and learning characteristics
  - Ability to apply the cognitive, social, and cultural aspects of the psychological foundations of human learning to create productive learning environments
- ***Pedagogy***
  - Broad understandings of various pedagogical approaches, their strengths and applicability, and their connection to content and diverse student populations
  - Ability to make pedagogical decisions that support diverse learners to reach educational goals

- Ability to apply the cognitive, social, and cultural aspects of the psychological foundations of human learning to create productive learning environments.

- ***Content Areas***
  - Understanding of disciplinary and interdisciplinary thinking
  - Deep knowledge of content areas related to licensure area, including advanced expertise for secondary licensure
- ***Professional Dispositions***
  - Candidates understand how and are willing to advocate for and with children, adolescents, and families
  - Candidates use reflective skills for ongoing development of practice and understanding of children and adolescents

3. Sustained clinical practice in a supportive environment with experienced teachers and leaders who promote reflection and improvement

- ***Sustained Clinical Practice***
  - Early field experiences, integrated with course-based aspects of preparation, to provide the foundational framework for an effective residency
  - A yearlong placement inclusive of the beginning and ending of a school year
  - Placement settings reflective of district demographic and achievement realities
- ***Supportive School Environment***
  - Placement sites with school climates that promote professional trust and learning
  - Leadership supportive of adult learning and attentive to aspiring teachers' learning needs
  - Collaborative relationships between and among community, staff, and parents
- ***Master Teachers and Mentors Who Promote Reflection and Improvement***
  - Placements under full-time supervision of cooperating teachers with demonstrated teaching excellence
  - Cooperating teachers are given time, support, and inclination to serve as mentors
  - Structured opportunities to reflect on clinical experiences in ways that link theory with practice and support candidates' development of their professional identities

4. Deep partnerships with schools and districts to promote alignment across the educational system

- ***Deep Partnerships with Schools and Districts***
  - Programs meet the existing and anticipated needs of the district in terms of content and grade level certifications
  - Programs develop close relationships with clinical placement sites
- ***Alignment Across the Educational System***
  - Program designs create mutually beneficial learning opportunities for both providers and schools to share and benefit from existing expertise
  - Program and placement decisions maximize long-term system goals, ensuring quality learning for candidates rather than short-term needs of providers or schools

KEY TERMS

Because terminology across educational contexts differs widely, we offer this glossary to ground readers in the ways terms are used in this report.

- **Alternative certification:** Teacher preparation pathways approved by state statutes that allow individuals to enter teaching by meeting a different set of standards compared to those who go through traditional programs. Alternative program requirements vary widely, and they can be housed in non-academic contexts, districts, states, and institutions of higher education.

- **Aspiring teacher:** An individual studying or intending to become certified to teach in Pre-K through grade 12 schools.

- **Candidate:** An aspiring teacher progressing through a preparation program, often at the stage of clinical practice.

- **Clinical practice:** Intensive field-based placements where candidates who have a foundation of content and pedagogical knowledge are supported in observation, reflection, and practice and have the opportunity to hone their craft through gradually increased responsibility for full-time, full-class instruction.

- **Clinical practice professions:** Professions that involve a complex knowledge base, rely on professional judgment for effective decision-making, have clients that are central in the professional's work, and establish both standards for practice and requirements of clinical practice for entry.[93]

- **Co-teaching:** Clinical practice placements where candidates are integral members of the classroom instructional team and have the opportunity to move well beyond extended observation and teaching of individual lessons. Although resident co-teachers are novices, their instructional roles are designed so they participate fully in all class activities, gradually increasing their responsibilities for leading instruction. Many residencies embrace formal co-teaching models,[94] which are aligned with our use of the term "co-teaching" but do not necessarily describe exactly the same structure.

- **Cooperating teachers:** Educators who accept student teachers in their classrooms as part of clinical practice requirements for certification. Historically, these roles have not necessarily carried any formal responsibility for candidates' professional development or assessment.

- **Field experiences:** Recommended or required hours of practice with students that aspiring teachers must complete during early phases of a preparation program. These experiences often occur across a range of educational settings, with aspiring teachers observing and assisting in their host sites before moving on to clinical practice placements.

- **High-quality teacher preparation program:** A teacher preparation program that ensures all aspiring teachers experience and are held to the standards of preparation that research indicates are important for future teachers' success. *Defining Quality Teacher Preparation* offers one way to conceptualize high-quality teacher preparation programs based on this project's review of the research and educators' professional feedback.

- **Mentor teachers:** Educators who serve as co-teacher hosts for residents. They play key roles in supporting candidates' professional growth and serve as partners with the preparation program in assessing their co-teacher's progress. In an integrated teacher development system, mentor teachers also provide supports for early career teachers through induction mentoring.[95]

- **Preparation provider:** Institutions of higher education, districts, and alternative groups that offer programs and pathways for educators to become certified teachers.

- **Pedagogy:** Methods and practices for achieving learning goals that incorporate understandings of individual and cultural differences, knowledge of how people learn and what motivates them, and expertise in discipline-based methods to impart content.

- **Quick-entry:** Pathways aspiring teachers can take that require little or no clinical practice before becoming a teacher.

- **Residencies:** Year-long, co-teaching placements in a supportive school context under the daily guidance of effective practitioners, with continued, aligned learning opportunities facilitated by the preparation provider. The blend of research, theory, reflection, feedback, and practice provides candidates the opportunity to ground their conceptual learning in effective practice.

- **Stipends:** Funds that aspiring teachers are provided during their co-teaching residency to support their basic living costs so they can focus on their learning.

- **Student teaching:** Clinical practice, usually a semester long, that traditional programs require for certification.

- **Supplemental Services:** Additional instructional opportunities that students receive, such as tutoring and one-on-one assistance, to promote learning. These supports can occur within classrooms, but are often provided before or after school.

- **Sustainable funding:** Funding streams that 1) provide adequate supports for quality programs and residents, and 2) are embedded in annual recurring budget lines so that quality programs and their candidates are ensured the resources needed to provide excellent preparation and so that aspiring teachers, regardless of their means, are incentivized to pursue preparation through quality pathways.

- **Teacher development trajectory:** A unified conceptualization of the way that educators develop incrementally over time, reflecting the realities of teaching as a clinical practice profession. In such a conception, aspiring and early career teachers experience structured, well-mentored supports as part of a unified career pathway.

- **Teaching residents:** Teacher candidates who co-teach for a year alongside an experienced, effective co-teacher or mentor teacher.

- **Traditional programs:** Teacher preparation programs in institutions of higher education that require uniform coursework and student teaching placements according to state guidelines.

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ABOUT BANK STREET

Bank Street College is a leader in education, a pioneer in improving the quality of classroom practice, and a national advocate for children and their families.

Since its beginnings in 1916, Bank Street has been at the forefront of understanding how children learn and grow. From early childhood centers and schools to hospitals and museums, Bank Street has built a national reputation on the simple fact that our graduates know how to do the work that is right for children.

Through Bank Street's Graduate School of Education, Children's Programs, and Division of Innovation, Policy and Research, the College has helped to transform the way teachers and children engage in learning. At the Graduate School, students are trained in a model we have honed for a century by combining the study of human development and learning theory with sustained clinical practice that promotes significant development as a teacher prior to graduation. At Bank Street's School for Children, Family Center, Head Start, and Liberty LEADS, the College fosters children's development in the broadest sense by providing diverse opportunities for physical, social, emotional, and cognitive growth. The College further supports and influences positive outcomes for children, educators, and families through professional development programs, research projects, and other key efforts at the district, state, and federal levels.

In 2015, Bank Street launched the Sustainable Funding Project under the leadership of President Shael Polakow-Suransky and Dean of Innovation, Policy and Research Josh Thomases. Led by Director Karen DeMoss, the project's mission is to address a significant problem in public education: how to ensure all aspiring teachers matriculate through affordable, high-quality programs so that every teacher enters the profession prepared for the demands of 21st century classrooms. For the past 100 years, Bank Street has been deeply committed to teacher preparation, professional development, and education reform. This commitment, coupled with the new administration's deep experience in public education, has helped the College identify sustainable funding for quality teacher preparation as a major challenge worthy of our focused attention.

For more information, please visit *www.bankstreet.edu*.

Testimony before the New York City Council Education Committee Oversight Hearing on "Teacher Retention and Recruitment"

Submitted by
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On behalf of
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January 24, 2017

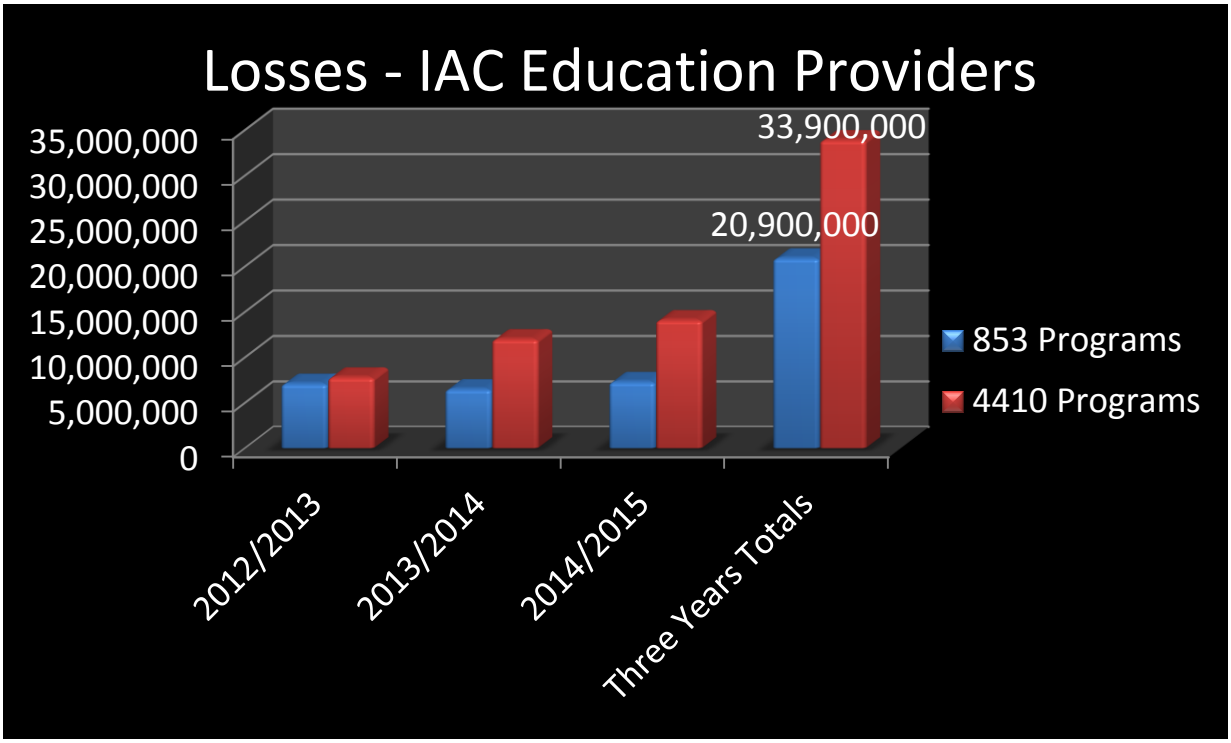
INTERAGENCY COUNCIL
of Developmental Disabilities Agencies, Inc.

IAC Testimony before the New York City Council Education Committee Hearing on "Teacher Recruitment and Retention"

Good afternoon my name is Christopher Treiber and I am the Associate Executive Director of Children's Services for The Interagency Council of Developmental Disabilities Agencies, Inc. The (IAC) was formed in 1977 as a not-for-profit membership organization. Comprised of voluntary service providers supporting children and adults with developmental disabilities in the greater metro-New York area, IAC currently represents over 160 member agencies and organizations helping more than 100,000 individuals and their families in New York City, Nassau, Suffolk, Westchester, Rockland, Putnam and Orange counties. Support programs and services offered by IAC member agencies include early intervention, Pre-K for All, special education preschool and school-age programs, as well as residential services, job training and employment programs, day habilitation programs, home and community based supports, recreation, clinical and health services, and an array of supports to families. The IAC has a long history of working in partnership with the New York City Department of Education to improve the quality of services and programs for young children and families.

On behalf of the IAC and our special education providers I would like to thank the New York City Council Education Committee for holding this public hearing and for the opportunity to provide testimony here today. I am here to inform you about the dire staffing crisis that is impacting our special education providers in New York City and the children they serve. The IAC membership includes 45 preschool special education providers and another 34 school-age 853 state approved non-public schools. The children who attend our member preschool and school-age programs are public school children. They are the children of your constituents. Many of these children have been diagnosed with autism spectrum disorder, cerebral palsy or other developmental disabilities. They are placed in our education programs only after a determination has been made by a local Committee on Special Education or Committee on

Preschool Special Education that there is no other appropriate educational setting available in a local public school. Therefore, there is no other educational option for these students. Our schools serve many of New York City's most vulnerable children, yet these schools have not been provided with funding necessary to meet this challenge. They have suffered for many years without any tuition increases and only in the last two years have they received very small increases. The impact of the growth freeze, and the limited tuition increases have left these programs on the brink of financial collapse. Based on CFR data from fiscal year 2014/2015 IAC member preschool providers lost more than 14 million dollars and our school-age 853 providers lost more than 7 million dollars.



Losses of this magnitude are unsustainable for non-profit providers. This lack of adequate funding is also having a significant impact on our preschool and school-age provider's ability to hire and retain certified teachers and teacher assistants.

In the fall of 2014 our education providers starting expressed concerns regarding the numbers of staff they had lost in a very limited time frame. In order to determine the extent of staff losses and the impact that it had on programs the IAC conducted a survey on staff of our

education providers. We found that from the middle of August until the end of September IAC member agencies lost a total of 285 staff. This year IAC conducted the survey again and the numbers are even more disturbing. Based on data from our education providers from August 1st until September 20th IAC 4410 preschools lost a total of 286 teaching staff. 121 certified special education teachers and 165 certified teacher assistants and our 853 school-age programs lost and additional 52 certified teachers and another 75 certified teaching assistants. The total number of teaching staff lost alone totaled more than 413. We did not ask our schools to report any other staff losses, if we had, the numbers would have risen to over 600 staff. These programs have not been able to fill these vacant positions and as a result our programs are currently operating schools with very high teaching staff vacancy rates. In order to document the vacancy rates for certified special education teacher and certified teacher assistants IAC conducted a vacancy survey of our education provider and we got almost a 100% response from our providers. The data revealed a system in serious crisis. Almost 65% of our preschool providers reported having vacant certified teacher positions and 80% reported missing teacher assistants. The average vacancy rate for certified special education teachers in IAC 4410 preschool programs as of September 30, 2016 is 17% and for certified teacher assistants the vacancy rate is 19%. We have some preschools that have lost more than 50% of their teaching staff. The numbers for our school-age 853 programs are equally concerning. More than half of our school-age programs report having special education teacher vacancies and 62% report needing to hire teacher assistants. The average vacancy rate for certified special education teachers in IAC 853 programs as of September 30, 2016 is 15% and for certified teacher assistants the vacancy rate is 18%. The impact of these staff vacancies on the programs has been significant. In September 2016, there were two IAC preschool providers that were in danger of not being able to open their schools due to a lack of certified preschool special education teachers. The situation has become increasing critical for some programs that have had to close classrooms and are unable to respond to increased needs due to a lack of certified teachers. Many of our programs are currently operating classrooms utilizing program administrators and supervising teachers who have teaching certifications but should be performing administrative roles at the schools.

Our New York City Education Directors have told us that the majority of teaching staff that have left their schools have gone to work for the NYC Department of Education. New York City DOE has been aggressively recruiting staff who works for our 4410 and 853 programs. These schools are provided with less than 72 hours notice by the teacher because NYC DOE informs the teaching candidate that if she/he wants the position they need to report immediately. If a teacher requests time to give notice the DOE recruiter informs the teaching candidate that if they fail to report immediately the position will be offered to the next candidate on the list. It is extremely difficult for any young child when their teacher leaves in the middle of the school year but for children with developmental disabilities this lack of appropriate transition can be heartbreaking and detrimental to their social and emotional well-being.

IAC has always recognized that there would never be parity with the school districts and 4410 and 853 programs in terms of teacher salaries but at one time the salary differential was at least manageable and allowed providers to maintain staff. This situation has now drastically changed and it is very clear that the NYC DOE is able to pay teachers significantly more than our 4410 and 853 providers. Based on salary data that we received from the New York State Education Department we confirmed that NYC DOE pays their teachers on average $20,000 dollars more than our approved preschool and school-age providers. The NYC teacher salary is based on a 10 month school year while our 4410 and 853 schools are paying their teachers on average $20,000 dollars less based on a 12 month school year.

The new salary data documents our belief that the teacher salary differential increased significantly as a result of the tuition freeze for both 4410 and 853. In fact the salary differential increased by 25% in NYC, 40% in Long Island and up to 60 % in the Mid-Hudson region when comparing average teacher salary data from 2006-2009 and 2010-1013. New York City had the smallest increase during that time but it is important to keep in mind that the New York City teachers union did not ratify a new contract until 2014. Since that time the teacher's salaries will be increased by 1-2% each year until 2018.

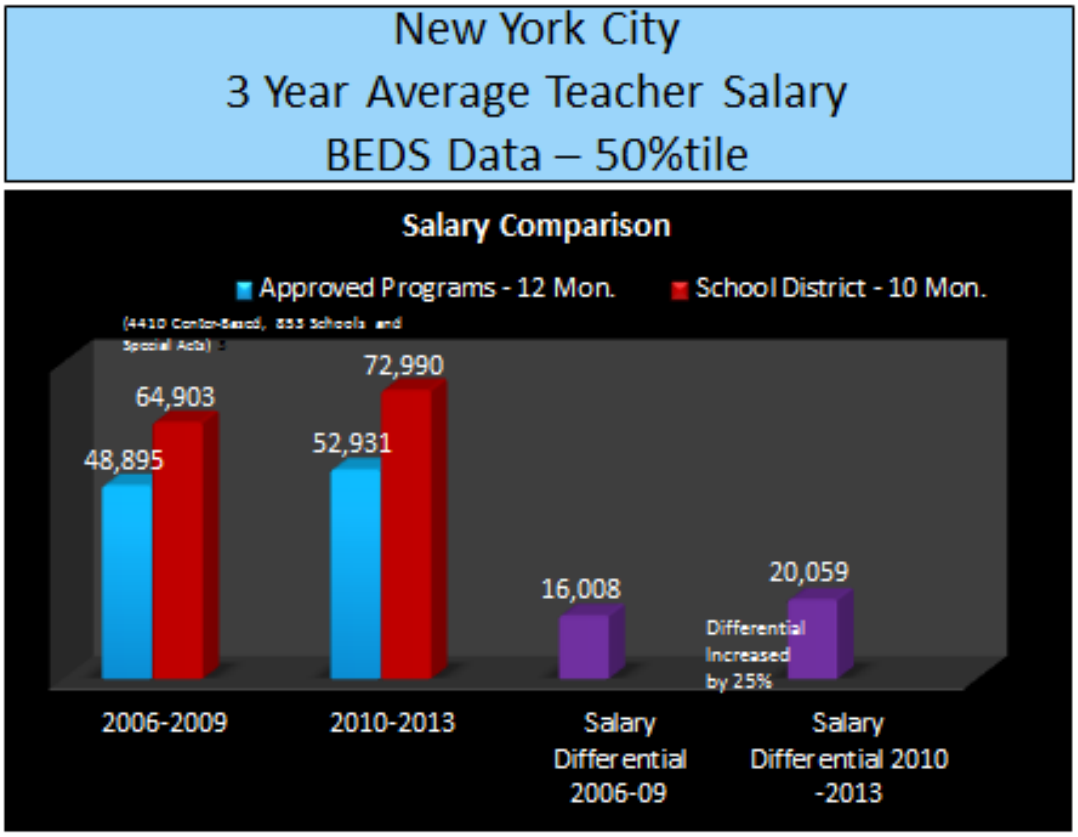
Here is a breakdown of the salary differentials:

Teacher Salary Comparison 2006-2009 CFR Data - 3 Year Avg. Salary- 50% tile

New York City
Approved Programs (853 & 4410) – $48,895 based on 12 months
School District – (NYC DOE) – $64, 903 based on 10 months
SALARY DIFFERENTIAL OF $16,008

Teacher Salary Comparison 2010-2013 CFR Data - 3 Year Avg. Salary- 50% tile

New York City
Approved Programs (853 & 4410) – $52,931 based on 12 months
School District – (NYC DOE) – $72,990 based on 10 months
SALARY DIFFERENTIAL OF $20,059



IAC is submitting this testimony to alert the New York City Council's Education Committee of the serious impending crisis facing our special education providers and the significant impact it could have on the children and families of New York City. The consequence of governments inadequate funding of 4410 and 853 schools is very clear:

- Our schools no longer have the ability to attract and retain certified special education teacher and teacher assistants.
- Children with the highest levels of special education needs are being taught by inexperienced and brand new special education teachers. Any remaining experienced special educators are being aggressively recruited by the DOE.
- Our 4410 and 853 programs now operate with a sense of insecurity fearing that on any given day they may lose more teachers or teacher assistants. They are faced with the possibility of continued high teacher and teacher assistant vacancy rates and no viable options to fill those positions.
- Many of our programs are currently operating classrooms utilizing program administrators and supervising teachers who have teaching certifications but should be performing administrative roles at the schools. This means that there are no experienced educators to supervise and mentor the new teachers.

Our Education Directors are struggling with many challenging questions:

- How much longer do they continue to operate classrooms without certified special education teachers?
- Do they accept children for their summer program or next school year knowing that they do not have enough certified special education teachers for their classes?
- Should they close down some classrooms due to the lack of certified special education teachers and teacher assistants?

The ultimate question that each of our Education providers must soon confront is how much longer can they sustain their education programs given the significant fiscal losses and their inability to recruit and retain certified teacher and teacher assistants. IAC currently has a number of large preschool special education providers who serve more than 500 children who

are debating the answer to this question. What would happen if one of these large providers made a decision to close their program? Is the New York City Department of Education prepared to find preschool special education seats for all of these children?

Government has a moral responsibility to act and prevent a crisis before it occurs. The choices that are made regarding funding for the 4410 and 853 programs in the next few months will have a profound impact on preschool special education services in New York City and the children and families who depend on the critical services these schools provide.

Testimony for the New York City Council Committee on Education
Oversight – Teacher Recruitment and Retention
January 24, 2017

Charlotte Pope, Youth Justice Policy Associate
Naomi Weisel Schear, PhD, Director of Research

The Children's Defense Fund's (CDF) Leave No Child Behind® mission is to ensure every child a healthy start, a head start, a fair start, a safe start and a moral start in life, and successful passage to adulthood with the help of caring families and communities. Through CDF's Cradle to Prison Pipeline® Campaign–a national initiative to stop the funneling of children, especially poor children and children of color down life paths that often lead to arrest, conviction and incarceration–CDF-NY works to replace punitive school discipline and safety policies in New York City schools with social and emotional supports that encourage a positive school climate.

Thank you to Chair Dromm and to the members and staff of the City Council Committee on Education for this opportunity to testify before the oversight hearing on Teacher Recruitment and Retention.

Overview

Teacher retention rates have improved over the past decade in NYC, but we still have a long way to go.[1] In the 2012- 2013 school year 20% of newly hired teachers left their teaching position and 10% left the NYC Public School System, after just one year of teaching. And within five years of starting their teaching career, 64% of teachers have left their school and 41% have left the NYC Public School System.[2] These numbers are troubling and require attention.

In our advocacy to reduce the frequency and duration of suspensions, arrests and referrals to the justice system for school-based disciplinary reasons, we work to ensure that all students and staff have access to positive school climates. Our testimony today will speak to the current state of teacher turnover in NYC and how school climate initiatives can and should be a meaningful part of larger reform efforts to improve teacher retention and, ultimately, student engagement in school.

[1] Krane, S., Mosher, K., Pappas, L., Smith, Y., and Domanico, R. (2015). New York City Public School Indicators; Demographics, resources, outcomes. *New York City Independent Budget Office.* Accessed*:* *http://www.ibo.nyc.ny.us/iboreports/new-york-city-public-school-indicators-demographics-resources-outcomes-october-2015.pdf*
[2] IBID, pg 29.

We understand that high levels of teacher turnover negatively impact student achievement, and also act as measure of many school conditions that lead to low student engagement[3]–including measures of school climate.[4] When schools strengthen the conditions under which teachers work and foster a sustainable, positive school climate, schools experience higher student engagement, lower rates of absenteeism, dropout, and pushout, and increased teacher retention.[5] Our testimony speaks to the possibility of addressing teacher turnover inequity through citywide adoption of best practices in school discipline, including the use of school-wide positive behavioral supports and interventions and restorative justice practices.

Why teacher turnover matters

Among all school resources, well-prepared and experienced teachers are one of the most important determinants of student achievement.[6] Therefore high teacher turnover poses a number of challenges for administrators and students. In high-turnover schools, students are more likely to have inexperienced teachers who are less effective.[7] And our most vulnerable students are often disproportionately impacted. Looking at teacher turnover in schools disaggregated by poverty, there is a steady decline in turnover as one moves from high-poverty schools to low-poverty schools. Teachers in high-poverty schools transfer to other New York City public schools in larger numbers.[8] In addition, high turnover creates instability in schools, which is particularly difficult for schools that are trying to implement reforms.

Moreover, it is costly to continuously recruit and train new teachers. When a teacher leaves a school, there may be separation costs, followed by the expense of finding a replacement and providing the development needed to familiarize the new teacher to the school's policies and practices. This preparation, which consumes time and materials, may be particularly intensive if the newly-hired teacher also is new to the profession. Although these costs are difficult to assess precisely, scholars have estimated the costs of replacing a teacher to be approximately $15,000 per teacher.[9]

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[3] Rondfelt, M, Sloeb, S., and Wycoff, J. (2012). How Teacher Turnover Harms Student Achievement. *National Center for Analysis of Longitudinal Data in Education Research.* Retrieved from http://www.caldercenter.org/sites/default/files/Ronfeldt-et-al.pdf.

[4] Guinn, K. (2004). Chronic Teacher Turnover in Urban Elementary Schools. *Educational Evaluation and Policy Analysis,* 12(42), 1-25.

[5] Losen, D.J. (2011). Discipline policies, Successful Schools, and Racial Justice. The Civil Rights Project at UCLA and National Education Policy Center, citing Muscott, H.S. et al. (2008), *Positive behavioral interventions and supports in New Hampshire: effects of large-scale implementation of schoolwide positive behavior support on student discipline and academic achievement.* Journal of Positive Behavior Interventions, 10, 190-205.

[6] Clotfelter, C.T., Ladd, H.F., and Vigdor, J.L. (2007). Teacher credentials and student achievement: Longitudinal analysis with student fixed effects. *Economics of Education Review*, 26(6), 673–682.

[7] Boyd, D., Grossman, P., Lankford, H., Loeb, S. and Wyckoff, J. (2009). *Who Leaves*? Teacher Attrition and Student Achievement. *National Center for Analysis of Longitudinal Data in Educational Research*, 23. Accessed: http://www.urban.org/sites/default/files/alfresco/publication-pdfs/1001270-Who-Leaves-Teacher-Attrition-and-Student-Achievement.PDF

[8] New York City Independent Budget Office. (2014). Schools Brief, Demographics and Work Experience: A Statistical Portrait of New York City's Public School Teachers. New York, NY: Author. Retrieved from http://www.ibo.nyc.ny.us/iboreports/2014teacherdemographics.pdf.

[9] Milanowski, A., and Odden, A. (2007). A New Approach to the Cost of Teacher Turnover. I*n School Finance Redesign Project*: University of Washington. Retrieved from https://pdfs.semanticscholar.org/a84f/2d53c35afce28cdd8d757d740a4c65936521.pdf.

Teacher retention and school supports

The quality of relationships and the trust between teachers, and between teachers and students, is correlated with student achievement,[10] and when teachers leave schools, previously held relationships are altered.[11] Research has shown that teachers' decisions to leave a school are shaped largely by the contexts in which they work, [12] including whether or not the school follows a consistent approach to discipline and whether teachers feel they have the support needed to sustain positive learning environments.[13] When students and teachers feel their school is a safe environment that is conducive to learning the result is higher teacher retention and larger gains in student achievement.[14]

Initiatives to encourage school safety must consider that data from the past three decades has demonstrated punitive disciplinary policies are ineffective at achieving either school safety or academic success.[15] One study in particular found the risk of teacher attrition to be higher in schools with increased amounts of student discipline[16] while schools with higher retention rates are associated with fewer suspensions.[17] Promising approaches, like restorative practices, provide a proactive way to influence and maintain a safe learning environment that also reduces exclusions and addresses conflict and safety issues with the participation of the whole school community.[18]

Teachers are more likely to stay in schools where they have influence over school decisions and report a climate of collective responsibility.[19] Building the collective capacity for strong student engagement requires creating a school climate in which the improvement of teaching is a collective rather than individual initiative.[20] Teachers are more likely to adapt their teaching practices and successfully encourage student learning in the presence of effective peers.[21] To intervene in potential teacher turnover, schools must be able to equip teachers with the necessary

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[10] Bryk, A.S., and Schneider, B. (2002). *Trust in Schools: A core resource for improvement.* New York, NY: Russell Sage Foundation.

[11] Ronfeldt, M., Loeb, S., and Wyckoff, J. (2013). How Teacher Turnover Harms Student Achievement. *American Educational Research Journal, 50*(1): 4-36.

[12] Boyd, D., Lankford, H., Loeb, S., and Wyckoff, J. (2005). Explaining the Short Careers of High-Achieving Teachers in Schools with Low-Performing Students. *American Economic Review Proceedings,* 95(2): 166-171.

[13] Kraft, M., Marinell, W.H., and Yee, D. (2016). Schools as Organizations: Examining School Climate, Teacher Turnover, and Student Achievement in NYC. New York, NY: The Research Alliance for New York City Schools. Retrieved from http://steinhardt.nyu.edu/research_alliance/publications/schools_as_organizations.

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[15] Bitner, R.L. (2015). Exiled from education: Plyer V. Doe's impact on the constitutionality of long-term suspensions and expulsions. *Virginia Law Review, 101*(3):763-805.

[16] Smith, D.L., and Smith B.J. (2006). Perceptions of Violence: The Views of Teachers Who Left Urban Schools. *High School Journal, 89*(3): 34-42.

[17] Ronfeldt, M. (2012). Where Should Student Teachers Learn to Teach? Effects of Field Placement School Characteristics on Teacher Retention and Effectiveness. *Educational Evaluation and Policy Analysis, 34*(1): 3-26.

[18] Standing, V., Fearon,C., and Dee, T. (2011). Investigating the value of restorative practice: An action research study of one boy in a mixed secondary school. *International Journal of Educational Management, 26*(4): 354-369.

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[20] Berry B. (2011). *Teaching 2030: What We Must Do for Our Students and Our Public Schools… Now and in the Future.* New York, NY: Teachers College, Columbia University.

[21] C. Jackson and E. Bruegmann. (2009). Teaching Students and Teaching Each Other: The Importance of Peer Learning for Teachers. NBER Working Paper 15202. Washington, DC: National Bureau of Economic Research.

tools to create a climate in their classrooms that will improve or increase teacher effectiveness, and decrease the number of discipline referrals.[22] As one piece of remedying the issue of teacher turnover is to reduce student disciplinary incidents,[23] we need to better identify and invest in potential interventions that improve school climate.

Restorative Justice

School-based restorative justice is a whole-school approach focused on student inclusion in the school community, rather than exclusion, to address issues of student discipline,[24] student performance,[25] school safety,[26] student pushout,[27] and the school to prison pipeline[28]. Schools can perform restorative justice in many ways, including peer mediation programs, classroom community meetings, youth courts, or community circles (where members of the community engage in conversation).[29] There is a growing body of research supporting the effectiveness of restorative practices in schools; evidence shows that restorative approaches can result in improved teacher retention, improved teacher morale, reductions in the amount of instructional time lost to managing student behavior, improved academic outcomes, and reductions in racially disproportionate referrals.[30] In one study, researchers reported that teachers using restorative practices felt closer to and developed better relationships with their students, and noticed an improvement in student awareness of the impact they have on other people.[31]

Restorative Justice is a process set to involve those who have a stake in a community to collectively identify and address harms, needs, and obligations in order to heal and put things as right as possible.[32] In school settings, restorative practices work from a whole-school, strength-based model that allows for meaningful and supported opportunities for students and school community members to take responsibility and be accountable for their actions.[33] One example is the Council's investment in the Restorative Justice Initiative which, now in its second year, enables 25 participating schools to keep working toward becoming safer places, reducing exclusion and the demand for exclusion, and encouraging positive, supportive climates for

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students, educators, and their communities.[34] We appreciate the Council's sustained support for this initiative.

Conclusion

Our testimony today illustrates that school climate is central to issues of teacher retention. It is our hope that the Council continue dialogue with the DOE on the value of sustainable investment in restorative justice in schools and ending disparities in the use of punitive and exclusionary school discipline practices. We remain grateful to the Council for funding the unprecedented 2015-16 and 2016-17 Restorative Justice Initiative and for the continued commitment to matters of school climate. Thank you again for this opportunity to testify.

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I represent: Coalition for Educational Justice

Address: _____

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I represent: self

Address: CUNY

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Name: SHAEL SURANSKY

Address: 600 W. 111th St.

I represent: BANK ST. COLLEGE

Address: 610 W 112th St

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Name: Dewolyn Jones

Address: 2168 Crotona Ave #3

I represent: Bx NY 10453 PAC

Address: 1512 Townsend

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Name: Karen Alford, UFT

Address: VP of High Schools

I represent: _____

Address: 52 Broadway

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Name: Josephine Ofili

Address: 1512 Townsend Ave

I represent: Parent Action Committee (PAC) & CEC9

Address: 1512 Townsend Ave

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Name: Lesley GUGGENHEIM

Address: [redacted]

I represent: TNTP (The New Teacher Project)

Address: 186 Joralemon St. Brooklyn, NY 11201

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Name: MARYANNE KILEY

Address: 80 PINE ST, NY, NY

I represent: EDUCATORS FOR EXCELLENCE

Address: _____

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Name: Amy Way

Address: _____

I represent: NYC DOE

Address: 52 Chambers St. NY, NY 10007

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Name: Anna Commitante

Address: _____

I represent: NYC DOE

Address: 52 Chambers St NY, NY 10007

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Name: Leone Harmon (Class Size Matters)

Address: 124 Waverly Pl

I represent: Class Size Matters

Address: Same

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Name: Karen DeMoss

Address: 170 West End Avenue #6S 10023

I represent: Bank Street College

Address: 116 W. 112th ST 10025

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Name: Charissa Fernandez

Address: _____

I represent: Teach For America. New York

Address: _____

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Date: 1/24/16

(PLEASE PRINT)

Name: Prof. Kelley Parkes

Address: _____

I represent: Teachers College

Address: 525 W. 120th Street

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