

EARLY CHILDHOOD DEVELOPMENT TASK FORCE

BROOKLYN BOROUGH PRESIDENT ERIC L. ADAMS
CO-CHAIR: STATE SENATOR DANIEL SQUADRON



Brooklyn Borough President Eric L. Adams

Early Childhood Development Task Force

Co-Chair NY State Senator Daniel Squadron

OVERVIEW

Brooklyn is home to approximately 2.6 million people, with a projected growth to 2.8 million by 2040. In 2010, it was estimated that there were 161,571 children ages birth to three years. It was also estimated that there were 424,704 school-aged children (five to seventeen) with a projected growth to 459,949 in 2040. There are approximately 40,000 births per year in Brooklyn. With all this expected growth, we must ensure we are providing quality care for pregnant women and children ages birth to three years so they may have all the opportunities to succeed. Studies show that early childhood education and development lead to increased school readiness, college acceptance, lower rates of incarceration, and career success. It may be hard to imagine that the practice of a quality reading routine with a toddler affects college, but in neighborhoods with low college graduation levels, such as Brownsville — where the college graduation rate is 18 percent compared to the New York City average of 41 percent — the importance and need for this head start in life is clearly evident. How we interact with our youngest Brooklynites will lead them on a path toward achievement for their future.

Mayor Bill de Blasio secured a tremendous step toward this future with the implementation of Pre-K for All. This program has been widely successful and enrollment continues to grow as it enters into its third year. However, as policy makers and advocates for communities, we must continue to strive to reach young people and their families as early as possible to create a system that prepares them to enter into, and navigate, the pre-k network.

In Brooklyn, we have a dedicated group of early childhood development stakeholders who are committed to engaging and empowering parents and caregivers with the tools needed for success. We have convened a task force to work together on this mission.

WHAT IS THE EARLY CHILDHOOD DEVELOPMENT TASK FORCE?

Brooklyn Borough President Eric L. Adams' Early Childhood Development Task Force, co-chaired by New York State Senator Daniel Squadron, brings together community stakeholders who share the same vision — ensuring that our children have access to quality developmental and educational services at the very beginning of their lives, ages birth to three, and providing families and caregivers with the tools and access necessary to provide support for their children during this critical time period.

The task force has been charged with:

 Developing strategic partnerships with stakeholders across Brooklyn and citywide to advocate for funding and support of evidence-based programs

¹New York City Planning. (December 2013). New York City Population Projections by Age/Sex & Borough, 2010 – 2040. Retrieved from www1.nyc.gov/assets/planning/download/pdf/data-maps/nyc-population/projections_report_2010_2040.pdf

² King L, Hinterland K, Dragan KL, Driver CR, Harris TG, Gwynn RC, Linos N, Barbot O, Bassett MT. Community Health Profiles 2015, Brooklyn Community District 16: Brownsville; 2015; 40(59):1-16. Retrieved from www1.nyc.gov/assets/doh/downloads/pdf/data/2015chp-bk16.pdf

- Convening stakeholders to share information and resources to support children and families
- Working with key legislative partners to develop and introduce legislation that will create
 a direct and sustainable funding source for evidence-based programs
- Playing a significant advocacy role in promoting the healthy development of children and families

SUMMARY OF RECOMMENDATIONS:

- Increase funding for evidence-based early childhood development programs
- Expand access to evidence-based early childhood development programs by empowering communities through increased information
- Form partnerships with community-based organizations and networks to increase awareness about the importance of early childhood interventions and services

WHAT IS EARLY CHILDHOOD DEVELOPMENT?

The National Association for the Education of Young Children (NAEYC) defines "early childhood" as occurring before the age of eight. "It is during this period that a child goes through the most rapid phase of growth and development. The brain develops faster than at any other point in their lives. The foundations for their social skills, self-esteem, perception of the world, and moral outlook are established during these years, as well as the development of cognitive skills." Early childhood development is the term used to refer to learning and development for children from ages birth to eight years. For the purpose of this report, we will focus on the range of birth to three years and the impact they have on a child later in their life, such as Universal Pre-Kindergarten (UPK) and beyond.

WHAT IS EVIDENCE-BASED?

Evidence-based is a "program or practice that has been tested in heterogeneous or intended populations with multiple randomized, or statistically-controlled evaluations, or both; or one large multiple site randomized, or statistically-controlled evaluation, or both, in which the weight of the evidence from a systemic review demonstrates sustained improvements in at least one outcome." In short, evidence-based programming has gone through rigorous studies in order to determine if outcomes are based on interventions or if they are simply coincidental.

WHY ARE EVIDENCE-BASED EARLY CHILDHOOD DEVELOPMENT PROGRAMS SO IMPORTANT FOR YOUNG CHILDREN?

Brain Development

The first three years of life are a crucial period in brain development. From the prenatal stage to the first day of kindergarten, a person's brain develops at a faster rate than at any other stage of life, with 90 percent of physical brain development occurring in the first three years.⁵

³ Teach: Make a Difference. "Early Childhood Education." Retrieved from teach.com/where/levels-of-schooling/early-child-hood-education

⁴Washington State Institute for Public Policy. "Updated Inventory of Evidence- and Research-Based Practices: Washington's K -12 Learning Assistance Program."

⁵ Pritzker, J.B. and Bradach, Jeffrey, and Kaufmann, Katherine. (2015) Achieving Kindergarten Readiness for All Our Children. Pritzker Children's Initiative and the Bridgespan Group.

The development of a child's brain provides the foundation for all future learning, behavior, and health. Poor development of the brain early in life can have adverse effects into adulthood.

Social and Emotional Development

Similar to brain development, positive social and emotional interactions create a healthy foundation for lifelong learning and development. A child's prolonged exposure to a stressful environment, such as caregiver mental illness, chronic neglect, physical or emotional abuse, violence, and trauma can disrupt brain development and increase the risk for cognitive impairment into adulthood. Children who are exposed to these stress factors (also known as Adverse Childhood Experiences, or ACEs) are at a higher risk of developing conditions in adulthood such as cardiovascular disease, depression, and obesity, which are tied to negative economic and social consequences. Social and emotional well-being in early childhood can translate into success later in childhood and adolescence, the ages that children come into contact with most government-funded interventions. Therefore, interventions at the early childhood stage are the most beneficial during this development stage as compared to later in life.

School Readiness and Achievement

School readiness refers to a child's ability to successfully transition to school and have the tools to learn. When a child enters kindergarten ready for school, "there is an 82 percent chance that child will master basic skills by age 11, compared with a 45 percent chance for children who are not school ready. Later in life, at-risk children who do not get high-quality early child-hood experiences are 25 percent more likely to drop out of school, 40 percent more likely to become teen parents, and 60 percent less likely to attend college." 11

New York State has made a large investment in pre-k, and universal pre-k is now available to all New York City children. Young children's success in life, in part, is dependent on quality early childhood learning programs for infants and toddlers — including maternal, infant, and early childhood home visiting.

INTERVENTIONS AND OUTCOMES

Early childhood development programs such as center-based quality child care, Head Start, and early intervention have shown positive outcomes for children and their families. In addition maternal, infant, and early childhood home visiting also provide expectant and new parents with the tools they need to care for and educate them. In New York State, a continuum of services and support exists but is not yet adequately funded and is, therefore, limited in scope. There are currently four research-based home visiting programs operating in the State. Each shows strong, measurable outcomes.

⁶ Center on the Developing Child - Harvard University. "Brain Architecture." Retrieved from developingchild.harvard.edu/science/key-concepts/brain-architecture/

⁷ Center on the Developing Child - Harvard University. "Brain Architecture." Retrieved from developing Child.harvard.edu/science/kev-concepts/brain-architecture/

⁸ Head Start: An Office of the Administration for Children and Families Early Childhood Learning and Knowledge Center. (2015) "Social and Emotional Development." Retrieved from eclkc.ohs.acf.hhs.gov/hslc/hs/sr/approach/elof/se_dev.html

Ocenter on the Developing Child - Harvard University. "Toxic Stress." Retrieved from developingchild.harvard.edu/science/key-concepts/toxic-stress/

¹⁰ Alliance for Early Success. (November 2015). Research at a Glance: The Research Base for a Birth through Eight State Policy Framework.

¹¹ Pritzker, J.B. and Bradach, Jeffrey, and Kaufmann, Katherine. (2015). Achieving Kindergarten Readiness for All Our Children. Pritzker Children's Initiative and the Bridgespan Group.

SCHOOL READINESS

- Nurse-Family Partnership (NFP) has shown the following outcomes:
 - 50 percent reduction in language delays in children age 21 months
 - 67 percent reduction in behavioral/intellectual problems in children at age six
 - Improvements in child executive functioning in children at age four
 - Improvements in language development in children at ages four and six
 - Improvements in cognitive development in children at age six¹²
 - Increases in math and reading achievement test scores in grades one through three, one through six, and for 12 year-olds.¹³
- <u>The Parent-Child Home Program, Inc. (PCHP)</u> showed better pro-social behavior than children who did not participate in the program (e.g. self-regulation skills)
 - English-speaking children who received PCHP demonstrated stronger language skills than children in the control group (e.g. receptive language).
 - Spanish-speaking children who participated in PCHP demonstrated stronger language skills than children in the control group (e.g. expressive and receptive).
 - Program parents reported pro-social competence more often than control group parents (e.g. fewer problem behaviors such as hitting and not getting along with others).
 - A multi-site, longitudinal, location-randomized evaluation of PCHP participants found that, as of third grade, there was a statistically significant reduction in the need for special education classes for Parent-Child Home Program graduates as compared to the control (14 percent versus 39 percent).¹⁵
 - A longitudinal, randomized control group study of the PCHP found that low-income children who completed two years of the program went on to graduate from high school at the rate of middle-class children nationally, a 20 percent higher rate than their socioeconomic peers, and 30 percent higher than the control group in the community.¹⁶
- Healthy Families New York (HFNY) has shown the following outcomes:
 - 50 percent reduction in likelihood to repeat first grade
 - 70 percent increase in likelihood of scoring above grade level in first grade on three behaviors that promote learning
 - 26 percent reduction in receipt of special education services by age seven
 - 23 percent reduction in below average scores for receptive vocabulary for children of young, first-time mothers who enrolled in program early
 - Increase in percentage of girls who scored above grade level academically.¹⁷

¹² Nurse-Family Partnership. Nurse-Family Partnership Improves School Readiness. Retrieved from nursefamilypartnership.org/proven-results/Improve-school-readiness

¹⁵ Lazar, I. & Darlington, R. (1982). Lasting effects of early education: A report from the Consortium of Longitudinal Studies. Monographs of the Society for Research in Child Development, 47 (Serial No. 195).

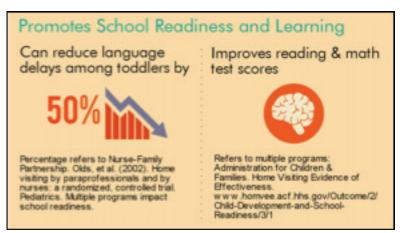
¹³ Nurse-Family Partnership. (2011). Evidentiary Foundation of Nurse-Family Partnership. Retrieved from nursefamilypartnership. org/assets/PDF/Policy/NFP_Evidentiary_Foundations.aspx

¹⁴ Astuto, J. (2014, May). Playful Learning, School Readiness, and Urban Children: Results From Two RCTS. Paper Presented at Annual Meeting of the Parent-Child Home Program, Uniondale, New York.

¹⁶ Levenstien, P., Levenstein, S., Shiminski, J. A., and Stolzberg, J. E. (1998). Long-term impact of a verbal interaction program for at-risk toddlers: An exploratory study of high school outcomes in a replication of the Mother-Child Home Program. Journal of Applied Develop-mental Psychology; 19, 267-285.

Healthy Families New York (HFNY) Home Visiting Program: Findings from the Randomized Controlled Trial (RCT) (2010) Retrieved from http://www.ocfs.state.ny.us/main/reports/Healthy%20Families%20New%20York%20Short%2011-24-2010%20FINAL.pdf

- Parents-as-Teachers (PAT) has shown the following outcomes:
 - Increase in scores among children entering kindergarten on measures of ability, achievement, language, social development, and other cognitive abilities
 - Increase in scores on standardized measures of language, math, and reading in elementary grades
 - Reduction in number of children requiring remedial and special education placements in third grade¹⁸



Source: Schulyer Center for Analysis and Advocacy

SOCIAL AND EMOTIONAL DEVELOPMENT:

- NFP has shown the following outcomes:
 - 48 percent reduction in State-verified reports of child abuse and neglect by age 15
 - 39 percent fewer health care encounters for injuries or ingestions in the first two years
 - 56 percent reduction in emergency room visits for accidents and poisoning by age two. 19
- HFNY has shown the following outcomes:
 - 88 percent reduction in the average number of acts of very serious physical abuse at age one
 - 75 percent reduction in the average number of acts of serious physical abuse at age two
 - 80 percent reduction in the average number of acts of serious physical abuse at age seven
 - 49 percent reduction in rate of confirmed CPS reports between ages five and seven, for children born to young, first time moms²⁰
- PAT has shown the following outcomes:
 - 50 percent reduction in cases of suspected abuse and/or neglect
 - Reduction in likelihood of children being treated for injury

¹⁸ Parents as Teachers. (2012) Evidence-Based Home Visiting Model. Retrieved from https://static1.squarespace.com/static/56be46a6b6aa60dbb45e41a5/t/5846f0ce59cc6850e4a65b99/1481044176280/PAT_EBHVModel_2015_sm.pdf

¹⁹ Nurse-Family Partnership. (2011). Evidentiary Foundation of Nurse-Family Partnership. Retrieved from nursefamilypartnership. org/assets/PDF/Policy/NFP_Evidentiary_Foundations.aspx

²⁰ Healthy Families New York Prevents Child Maltreatment (2013) Retrieved http://www.healthyfamiliesnewyork.org/Research/Publications/HFNYPreventsChildMaltreatment 09-2013.pdf

HEALTH:

- NFP has shown the following outcomes:
 - 35 percent fewer cases of pregnancy-induced hypertension
 - 31 percent reduction in very closely spaced (less than six months) subsequent pregnancies
 - 67 percent reduction in 12-year-old children's use of alcohol, cigarettes, or marijuana
 - 28 percent reduction in 12-year-olds' mental health problems.²¹
- HFNY has shown the following outcomes: 48 percent reduction in mothers having low birth weight babies.²²
- PAT has shown the following outcomes: Children are five times more likely to be immunized.²³

REDUCTIONS IN CRIMINAL JUSTICE INVOLVEMENT:

- NFP has shown the following outcomes:
 - 59 percent reduction in arrests of children at age 15
 - 80 percent fewer convictions among female children at age 19
 - 73 percent increase in age at first arrest among female children at age 19
 - 89 percent fewer current convictions among female children at age 1924
- The Chicago Child-Parent Centers, based in Chicago, showed the following outcomes:
 - Children not served by the Chicago CPC program were 70 percent more likely to be arrested for a violent crime by age 18;²⁵ This confirms similar results from the High/Scope Perry preschool program. A 22-year study of this program showed that leaving at-risk children out of this program multiplied by five times the risk that they would become chronic lawbreakers as adults.²⁶

²¹ Nurse-Family Partnership. (2011). Evidentiary Foundation of Nurse-Family Partnership. Retrieved from nursefamilypartnership. org/assets/PDF/Policy/NFP_Evidentiary_Foundations.aspx

²² New York State Office of Children and Family Services. "Healthy Families New York." ocfs.ny.gov/main/reports/Healthy%20 Families%20New%20York%20Short%2011-24-2010%20FINAL.pdf

²³ Parents as Teachers. (2012) Evidence-Based Home Visiting Model. Retrieved from https://static1.squarespace.com/static/56be46a6b6aa60dbb45e41a5/t/5846f0ce59cc6850e4a65b99/1481044176280/PAT_EBHVModel_2015_sm.pdf

²⁴ Nurse-Family Partnership. (2011). Evidentiary Foundation of Nurse-Family Partnership. Retrieved from nursefamilypartnership. org/assets/PDF/Policy/NFP_Evidentiary_Foundations.aspx

²⁵ Fight Crime: Invest in Kids. (2013)I'm the Guy You Pay Later: Sheriffs, Chief and Prosecutors Urge America to Cut Crime by Investing Now in High-Quality Early Education and Care.

²⁶ Economic Opportunity Institute. The Link Between Early Childhood Education and Crime and Violence Reduction. eoionline. org/wp/wp-content/uploads/early-learning/ELCLinkCrimeReduction-Jul02.pdf



Source: Schulyer Center for Analysis and Advocacy

RETURN ON INVESTMENT:

- Expanding early learning initiatives would provide benefits to society of roughly \$8.60 for every \$1 spent, about half of which comes from increased earnings for children when they grow up.²⁷
- The return on investment of home visiting in particular is as much as \$5.70 for every \$1 spent on high-risk families.²⁸

In December 2014, the White House released a report called "The Economics of Early Childhood Investments."²⁹ Below are some of the key findings that reflect positive outcomes for home visiting and other birth to three programs as well:

- High-quality early education for all would narrow the achievement gap. Overall, across all studies and time periods, early childhood education increases achievement and cognitive scores by nearly half the black-white difference in the kindergarten achievement gap.
 Since higher income children are currently more likely to have access to high-quality early education, expanding access to all would narrow the achievement gap.
- High-quality, affordable child care can help parents balance work and family responsibilities.
 Studies show that providing better access to and lowering the cost of high-quality care can significantly increase mothers' employment rates and incomes. This increase in family income has been shown to improve children's outcomes as well.

²⁷ Executive Office of the President of the United States. (December 2014) "The Economics of Early Childhood Investments." December 2014.

²⁸ Karoly, L., M. Kilburn, J. Cannon. (2005). Early Childhood Interventions. Proven Results. Future Promise. RAND Corporation.

²⁹ Executive Office of the President of the United States. (December 2014) "The Economics of Early Childhood Investments." December, 2014.

- Early childhood education can lower involvement with the criminal justice system. Research shows that improving cognitive and socioemotional development and investments in early childhood education may reduce involvement with the criminal justice system. Lower crime translates into benefits to society from increased safety and security as well as lower costs to the criminal justice system and incarceration.
- Early childhood interventions can reduce the need for remedial education. Research shows that benefits in children's development may also reduce the need for special education placements and remedial education, thereby lowering public school expenditures.

THE BROOKLYN BOROUGH PRESIDENT'S EARLY CHILDHOOD DEVELOPMENT TASK FORCE RECOMMENDATIONS

INCREASE SUPPORT FOR EVIDENCE-BASED EARLY CHILDHOOD DEVELOPMENT PROGRAMS

- Support funding increases recommended by the New York State Senate Democratic Policy Group's Report "Pre-Natal to Pre-K: Supporting New York's Young Families." ³⁰
- Develop strategic partnerships with New York City's Children's Cabinet to integrate and coordinate services in order to provide a continuum of care.

EXPAND ACCESS TO EVIDENCE-BASED EARLY CHILDHOOD DEVELOPMENT PROGRAMS BY EMPOWERING COMMUNITIES THROUGH INCREASED INFORMATION

- Borough President Adams' Early Childhood Development Task Force will create and disseminate a resource guide of early childhood services available in the borough.
- New York City and New York State should create online maps that provide data on early childhood programs, including seat availability, etc.

FORM PARTNERSHIPS WITH COMMUNITY-BASED ORGANIZATIONS AND NETWORKS TO INCREASE AWARENESS ABOUT THE IMPORTANCE OF EARLY CHILDHOOD PROGRAMS AND SERVICES.

- Borough President Adams' Early Childhood Development Task Force will convene a workshop specifically for Brooklyn clergy members to engage and educate leaders so they may disseminate information among their congregations.
- Encourage the Brooklyn Public Library to create lending institutions for books, educational materials, puzzles, and toys for early childhood development programs.

³⁰ New York State Senate Policy Group (February 2016). Pre-Natal to Pre-K: Supporting New York's Young Families. Retrieved from scribd.com/doc/298706186/White-Paper-Pre-Natal-to-Pre-K-Supporting-New-York-s-Young-Families

TASK FORCE MEMBERS

- Brooklyn Borough President Eric L. Adams, co-chair
- New York State Senator Daniel Squadron, co-chair
- Bedford Stuyvesant Restoration
- Council for a Strong America
- Division of Early Care & Education, New York City Administration for Children Services
- New York Center for Child Development
- New York City Department of Health and Mental Hygiene
- NYU Lutheran
- Nurse-Family Partnership
- Parent-Child Home Program
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- The Brooklyn Hospital Center
- SCO Family of Services
- University Settlement