New York’s Progress

Children benefit from widening access to preschool in New York City, free to families with a 4-year-old, no matter how rich or poor. The city has tripled the count of public pre-k slots since 2014, now serving about 70 percent of all 4-year-olds, spurred by Mayor Bill de Blasio’s Pre-K for All campaign. The pandemic slowed progress in serving additional 3-year-old children.

The quality of classrooms and teaching practices remains adequate, spread across some 1,800 neighborhood programs, whether situated in city schools or community-based organizations (CBOs). The observed quality of city pre-k’s falls below those observed in Boston and the San Francisco Bay Area, on average, yet rises above public preschools in Florida.

Quality Flattens

Our Berkeley team detailed in summer, 2020 how average pre-k quality, after climbing during the program’s initial years, has largely stalled on two gauges of quality, each stemming from site observations conducted by Department of Education (DOE) monitors. We distributed these results in the wake of nationwide protests seeking racial fairness, and as the city’s preschools struggled to remain open as the coronavirus spread.

Key Findings

- Young children have likely benefited since 2014 from New York City’s progress in widening access to preschool. Household budgets also gain by extending free pre-k to tens of thousands of families.
- Whether pre-k helps to remedy children’s lost year of learning and early growth, resulting from the pandemic, depends on whether preschool quality elevates kids who have suffered most.
- During the initial years of Pre-K for All, quality lagged behind in sites that served mostly Black or Latino children, and those situated in the city’s poorest census tracts (2014-2016), as two independent research teams (Berkeley and Princeton) have found.
- This brief details how average pre-k quality began to plateau in 2017 and has failed to rise appreciably since then, based on two gauges of quality derived from on-site observations of classrooms by city monitors.
- We observe two notable exceptions to the city-wide stalling of quality, after matching 1,273 pre-k’s that have completed at least two quality assessments since 2014: sites hosting predominantly White children display significant gains in quality, 2014-2019, as do pre-k’s mainly serving Asian-heritage youngsters.
- It’s difficult to see how Pre-K for All will help narrow early disparities in child development if quality fails to climb for children of color and in programs located in poor neighborhoods.

Update from Berkeley studies in early education, 2021
Bruce Fuller and Talia Leibovitz
Figure 1 displays mean scores on the city’s two quality barometers – the Early Childhood Environment Rating scale (ECERS) and Classroom Assessment Scoring Assessment System (CLASS) – between 2014 and 2019. City pre-k’s have inched-up on the ECERS by just one-tenth of one point since 2015 on this 7-point scale.

CLASS scores on emotional support have moved upward slightly since 2017, while instructional support for children (one subscale that predicts early learning) has declined steadily since 2014. The DOE was unable to observe programs in 2020, many closed for several months during the pandemic.

These trends in quality stem, in part, from the increasing count and evolving mix of school and CBO-based pre-k’s coming online since 2014.

The DOE labors mightily to lift pre-k quality. In January 2021, the DOE announced that 105 CBO-based pre-k’s would be defunded, given that other nearby programs had “received higher quality scores.”

Quality Falls in Mostly Black or Latino Pre-K’s

We know that average pre-k quality ranges lower, on average, in pre-k sites that serve higher concentrations of Black or Latino children (Figure 2). The ECERS quality score averages one-quarter standard deviation (SD) lower among the 402 pre-k’s serving the highest shares of Black children, compared with the like number of pre-k’s enrolling the lowest percentages of Black youngsters, observed between 2014-2018. The same unequal pattern is observed between pre-k’s that serve low versus high concentrations of Latino children.

We are not suggesting that racial composition of pre-k sites determines their capacity to improve organizational quality. In the K-12 arena, race often proxies underlying disparities in teacher qualities, instructional materials, and school facilities. Which of these mechanisms operate to constrain preschool quality remains poorly understood.

Disparities in pre-k quality also appear when comparing programs situated in poor versus middle-class parts of the city (Figure 3). After splitting the city’s 1,057 census tracts by median household income, we see that ECERS scores are more than one-third SD lower in the poorest one-fourth of tracts, compared with the one-fourth of tracts with the highest median household income.

How large are these disparities in quality? Children, age 4, who attend one year of a state-funded pre-k nationwide – programs that mainly serve kids from lower-income families – gain about one to two-fifths SD in their early language skills and grasp of simple math concepts. We detect quality gaps equaling between one and two-fifths SD among programs.
differing by racial composition or economic setting. Disparities at these levels of magnitude constrain the developmental benefits that high-quality preschool can yield for children.

A second research team – based at Princeton University – has detailed similarly wide disparities in pre-k quality across the city, especially for racially segregated pre-k sites (based on one year of observational data, 2017-18). These scholars found that the average White 4-year-old attends a pre-k program that scores one-half SD higher on both the ECERS and CLASS gauges of quality, compared with the average Black child. They observed quality gaps between White and Latino children, although the magnitudes were one-third to one-half less severe in magnitude, compared with White-Black gaps in pre-k quality.6

Figure 4. Distribution of quality among pre-k sites in New York City, 2014-2018
Observed Early Childhood Environment Rating Scale (ECERS) scores by site and neighborhood wealth or poverty.
We can visualize the locations of lower-quality pre-k sites, as seen in Figure 4. We divided preschool programs among those scoring a 3 or below on the ECERS 7-point scale, those judged by city inspectors as a 4, and sites scoring 5 or above. We see that pre-k quality ranges lower in the Bronx, on average, the Lower Eastside, and parts of Brooklyn. Quality moves higher in much of Queens and other sections of Brooklyn.

**Quality Climbs for White and Asian-Heritage Children**

Moving forward, parents and educators hope to see gains in pre-k quality, teachers and classrooms that effectively buoy children’s early learning. To examine the question of whether quality may be rising in certain sites, we matched 1,273 preschool programs, 2014-2019, sites in which city monitors conducted quality assessments in multiple years, typically spread three years apart. We then can track changes in quality for a constant set of pre-k’s, rather than an evolving mix of differing school and CBO-based sites.

Pre-k’s with two observation rounds averaged small gains, bumps of just 0.13 and 0.14 of a scale point on ECERS and CLASS gauges of quality, respectively. Yet we also found that pre-k’s serving larger shares of White or Asian-heritage children enjoyed greater gains in quality, when assessed with the ECERS and CLASS tools, than programs serving larger percentages of Black youngsters.

We split pre-k’s into four groups based on the percentage of enrollment comprised of Black children. Figure 5 (top panel) shows changes in the ECERS barometer of quality for each group. Quality levels climbed about one-fifth of a point (7-point scale) for pre-k’s enrolling less than 25 percent, Black children, while inching downward for sites with enrollments over half, Black youngsters.

Isolating on pre-k’s that mainly serve Asian or White children further sharpens the disparity in which pre-k sites enjoy quality gains. Programs with enrollments 50 to 75 percent, Asian or White children, display the strongest gains – one-third of a scale point on the ECERS gauge – as seen in the bottom panel of Figure 5.

Gains for programs with over 75 percent, Asian children, are lower because they displayed the highest baseline score, 4.5, and have less room to grow. In contrast, sites with 50-75 percent, Asian enrollment, displayed a lower ECERS score at baseline, just 4.1, showing sufficient room to improve. Stronger gains for predominantly White or Asian sites appear for the CLASS gauge of quality as well, yet at lower levels of magnitude.

We delved into additional factors – inside pre-k sites or neighborhoods – that help predict growth in quality.
Preschool programs in poor or densely populated communities displayed less growth than in middling neighborhoods (2014-2019). Pre-k’s hosted by city schools enjoyed slightly greater bumps in quality than programs earlier run by the Administration for Children’s Services on both the ECERS and CLASS gauges.

Even after taking into account 14 other possible predictors of change in quality, pre-k’s serving larger shares of Black children displayed weaker to no gains, relative to other sites, on the ECERS and CLASS barometers. When predicting levels of change in quality for the CLASS, pre-k’s enrolling greater shares of Latino children similarly displayed weaker or no discernible improvement in observed quality.

This is not to say that pre-k’s serving mostly Black or Latino children cannot muster the will and resources to improve their observed quality. Figure 6 shows the location of the city’s 443 preschool sites that raised their ECERS scores by at least one-half point between 2014 and 2019 (of the 1,273 programs with multiple quality assessments). The color of each site indicates the largest racial group served by that pre-k.

We see that sites with rising quality are distributed widely across the city. But relatively few pre-k’s in which Black children are the largest group enrolled showed this level of quality gain. Sites exceeding this notable boost in quality enroll lower shares of Black children 23%, relative to pre-k’s falling short of this growth threshold (26%).
Good News on Quality
Recall how we remove the effect of the churning mix of pre-k sites by selecting the 1,273 pre-k sites in which city monitors have conducted two quality observations. When isolating on these two-thirds of the city’s 1,800-plus pre-k’s, we do observe that quality have inched upward overall. These sites are not representative of the entire mix of pre-k’s serving children: they are more selective in terms of longevity and unobserved attributes within the city’s program.

Figure 7 reveals how the buoyancy of pre-k quality varies by organizational auspice. The DOE’s own dedicated pre-k centers show robust gains in quality, three-quarters of a scale point on the ECERS and one-third of a point on the CLASS between 2014 and 2019. The quality of CBO-run pre-k’s inched upward (their quality on average was higher than city-school sites at baseline). But ECERS quality scores fell among pre-k’s formerly overseen by the Administration for Children’s Services (ACS) and barely budged on the CLASS barometer. The small count of pre-k’s hosted by charter schools showed mixed changes in quality levels.

Children’s Learning Loss – Can Pre-K Help?
We know that children’s learning curves flattened or fell during the covid-induced shut down of public schools. This year of lost learning appears to have worsened already wide gaps in student achievement, with some children falling two years behind. Less evidence has yet to surface on the likely developmental losses suffered by preschool-age children.

Could New York City’s pre-k system – reaching so many 4-year-olds – play a role in recovering the pause in cognitive and social-emotional growth that arrived with the shut-down and erratic reopening of preschool?

Possibly, yes. But these new findings suggest that current distributions of quality across the city’s preschools will not likely narrow disparities in child development. Instead, lopsided gains in the quality of programs that serve Asian or White children, seen in recent years, may ironically reinforce inequities in early growth.

The DOE moved in January, 2021 to expand the supply of pre-k slots in parts of the city hit hardest by the pandemic, as parents struggle to get back to work and find affordable child care. Allied efforts to address the regressive distribution of preschool quality could help remedy racially arranged disparities.

Cutting support of programs that remain stuck at low levels of quality may help, which the city also announced in January. But this does not necessarily address the maldistribution of high versus low-quality programs, which threatens to reinforce inequality among children from the start.

A notable count of some pre-k’s serving mostly Black or Latino children have raised their program quality. Neither the racial composition of preschool sites, nor surrounding economic conditions, necessarily determine pre-k quality. The DOE dedicates over one hundred staff members to track and elevate pre-k quality across the city’s 1,800-plus sites. Still, future research should pinpoint why pre-k quality falls lower in predominantly
Black and Latino sites, then inform how to best remedy these shortfalls.

It may be that stronger pre-k teachers move to communities where they believe working conditions are better, or sites receive stronger resources and parental support in certain neighborhoods. Some pre-k’s in public housing reportedly suffer from cramped space and aging facilities.

We have much to learn about how such underlying resources and mechanisms inhibit or foster gains in pre-k quality. The DOE could better target their efforts to enrich quality within certain neighborhoods. By sharing data on teacher attributes and migration among pre-k sites, the DOE would enable independent analysts to identify underlying factors in play.

Until the distribution of quality better lifts children of color, along with youngsters in the poorest parts of the city, Pre-K for All may fail to un-do early disparities in early learning and development.

---


3 Fuller et al. (2020) and online review of empirical results.


For prior studies of early education in New York and further details: b_fuller@berkeley.edu

University of California, Berkeley, 2021.