

Closer to Home: More Equitable Pre-K Access and Enrollment in Chicago

As pre-kindergarten (pre-k) expands across the country, school districts are making choices about where to place pre-k classrooms and developing policies for how families can apply and who is enrolled. In doing so, districts are pulling policy levers that influence students' access to pre-k. Research shows that some families have less access to pre-k than others, which contributes to inequitable enrollment within districts. This study explores whether and how Chicago's school-based pre-k system was more equitable after the district implemented a set of policies focused on changing access to and enrollment in school-based pre-k. The outcomes from Chicago's efforts offer key insights for other school districts implementing similar efforts nationwide.

Studying Chicago's Pre-K Policy Changes for More Equitable Enrollment

Beginning in 2013, the City of Chicago launched major policy efforts to create more equitable enrollment in pre-k programs. The policies aimed to enroll more students from "high-priority" groups (students of color, students speaking a language other than English, and students living in neighborhoods with lower income and higher unemployment), who were most likely to benefit from pre-k. A subset of these policies affected school-based pre-k in Chicago Public Schools (CPS), such as a centralized application process; others were city-wide. We studied how these early education policies were related to changes in access to and enrollment in school-based pre-k within CPS.

Two of Chicago's primary policy strategies focused on expanding access to full-day, school-based pre-k:

- Increasing the number of full-day pre-k classrooms; and
- Reallocating full-day pre-k classrooms to neighborhoods with a larger proportion of age-eligible children and historically low rates of enrollment of high priority students in CPS pre-k.

This snapshot focuses on full-day pre-k because we found little evidence that access increased when studying all pre-k options within CPS.

Other complementary policy strategies that were being implemented city-wide over the same time period included:

- Centralizing CPS management of school-based pre-k applications and enrollment decisions;
- Providing information about school-based pre-k and other preschool programs online; and
- Employing on-the-ground efforts to encourage enrollment among high-priority families, such as providing targeted information about pre-k options and assistance in filling out the application.







Research Findings

1 ACCESS to CPS Full-Day Pre-K Increased for High-Priority Student Groups

Although the total number of pre-k seats in CPS did not increase during our study years (2010–11—2015–16), Chicago's policy changes greatly expanded full-day pre-k in CPS.

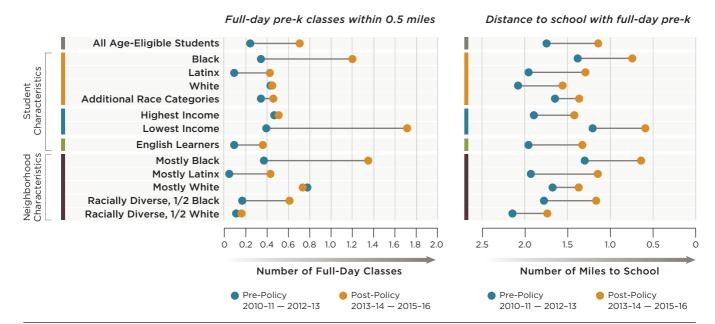
- The portion of pre-k seats that were in full-day class-rooms quadrupled, from 5% to 21%.
- The portion of elementary schools offering full-day pre-k quadrupled, from 10% to 41%.
- The concentration of full-day pre-k seats increased most on the West and South Sides of Chicago in mostly-Black neighborhoods and neighborhoods with lower income and higher male unemployment rates—which had the lowest rates of pre-k enrollment pre-policy.
 - The average number of full-day pre-k seats in mostly-Black neighborhoods increased from 4.6 seats to 19.5 seats per 100 children.

As intended, these shifts in both the number and location of full-day pre-k classrooms resulted in **increased** access to full-day pre-k for high-priority student groups. (See Figure 1)

- Although nearly all student groups saw an increase in the average number of full-day pre-k classrooms near their home post-policy (0.2 to 0.7), increases were largest for high-priority groups (e.g., an average of 0.4 to 1.7 for lowest-income students).
- Overall, students lived an average of 0.6 miles closer to a school with at least one full-day pre-k classroom; improvements in proximity were even greater for high-priority student groups.
 - For example, the average distance to the closest school with full-day pre-k was cut in half for Black students, from 1.4 miles pre-policy to 0.7 miles post-policy. Students living in mostly-Latinx neighborhoods lived 0.8 miles closer to a school with full-day pre-k post-policy (from 1.9 to 1.1 miles away, on average).

FIGURE 1

Post-Policy, High-Priority Student Groups Lived Near More CPS Full-Day Pre-K Classrooms and Lived Closer to a CPS School with a Full-Day Pre-K Classroom



Note: In the left panel, there were statistically significant improvements for all student groups except White students and students living in mostly-White neighborhoods, after a Bonferroni correction for multiple comparisons. In the right panel, there were statistically significant improvements for all student groups. See "Figure & Table Category Details" for more information.

2 ENROLLMENT in CPS Full-Day Pre-K Increased for High-Priority Student Groups

In all of the years we studied, only a small subset of all CPS pre-k students were enrolled in full-day pre-k. Yet **full-day pre-k enrollment rates grew nearly four-fold** from the first year of our study to the last (from 3.2% in 2010–11 to 11.6% in 2015–16), driven by enrollment of high-priority students.

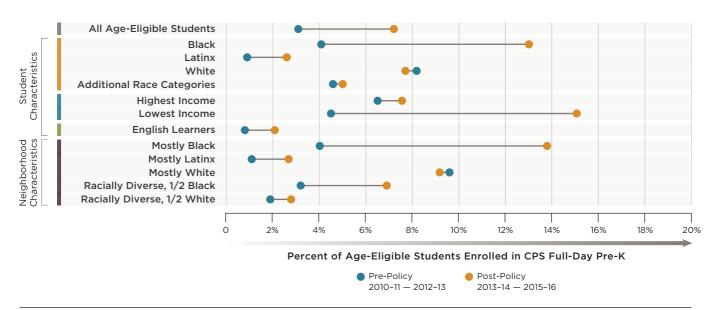
Like improvements in access, enrollment patterns in full-day pre-k changed in ways that were consistent with the policy goals. (See Figure 2)

- Pre-policy, the students most likely to enroll in fullday pre-k were White students, students living in highest-income neighborhoods, and students living in mostly-White neighborhoods.
- Post-policy, the students most likely to enroll in full-day pre-k were Black students, students living in lowest-income neighborhoods, and students living in mostly-Black neighborhoods.
 - These student groups were up to three times more likely to enroll in full-day pre-k post-policy (comparing three-year averages pre- and post-policy).
- Latinx students and students living in mostly-Latinx neighborhoods were also notably more likely to enroll in full-day pre-k. However, the post-policy Latinx student enrollment rate of 2.6% remained much lower than the city average of 7.2% (three-year averages, pre- and post-policy).

Figure & Table Category Details

Percentages displayed in figures are based on **all age-eligible students**. This included all CPS students in kindergarten the following year, plus CPS pre-k students who were not enrolled in kindergarten the following year. **Income** for each student was calculated as a combination of the percent of families with income below the federal poverty line and the percent of males unemployed at the census block level. Students with a standard deviation of >1 were considered to be lowest-income and those with a standard deviation of >1 were considered to be highest-income. To identify and describe CPS pre-k students' **neighborhoods**, we combined 12 tract-level census variables from the 2012 American Community Survey 5-year estimates that measure race/ethnicity, language, place of birth, and financial and socioeconomic characteristics. We have simplified the names of the neighborhood groups in this research snapshot to the defining racial characteristics, as race was the strongest census variable for differentiating across neighborhood groups. See Easton et al. under "Publication Information" for full details on the methodology, rationale, and outcomes of our neighborhood analyses. Data for Asian, Asian/ Pacific Islander, Multiracial, Native American/Alaskan Native, and Pacific Islander/Hawaiian students are represented in the **Additional Race Categories** group. All race/ethnicity categories used for student characteristics here come from CPS data files.

FIGURE 2
Post-Policy, High-Priority Student Groups Became Much More Likely to Enroll in CPS Full-Day Pre-K



3 ACCESS Was a Key Policy Lever for Achieving Greater Equity in ENROLLMENT

This study demonstrates that access played a key role in achieving more equitable enrollment of high-priority student groups. Although numerous policy-related factors were changing simultaneously, predictive analyses revealed a persistent link between access to and enrollment in full-day pre-k, both overall and within student groups, before and after Chicago's pre-k policy shifts.

- Pre-policy, students with more limited access to full-day pre-k in CPS were also less likely to enroll.
 This association was small for all student groups, but slightly stronger for the lowest-income students and for students living in mostly-Black and mostly-Latinx neighborhoods.
- Post-policy, access continued to predict enrollment, and the association became stronger for some student groups. The strength of the association between access and enrollment was stronger post-policy (compared to pre-policy) for Black students, lowest-income students, and for students living in mostly-Black neighborhoods.

Overall, the same high-priority student groups that experienced increases in access to full-day pre-k also experienced the largest increases in enrollment (see Table 1). Therefore, these high-priority student groups—those who stood to gain the most from going to pre-k but had been less likely to enroll prior to the policy changes—were the biggest beneficiaries of these policy changes. This meant that Chicago was able to achieve greater equity in both access to and enrollment in full-day, school-based pre-k.

TABLE 1
Post-Policy, High-Priority Student Groups Experienced the Largest Changes Both in Access to and Enrollment in CPS Full-Day Pre-K

	Student Groups	Access to Full-Day Pre-K		Enrollment in Full-Day Pre-K
		More Classrooms Near Home	Living Closer to School	Increase in Percent of Students Enrolled
Neighborhood Student Characteristics Characteristics	Black			
	Latinx			
	White			
	Additional Race Categories			
	Highest Income			
	Lowest Income			
	English Learners			
	Mostly Black			
	Mostly Latinx			
	Mostly White			
	Racially Diverse, 1/2 Black			
	Racially Diverse, 1/2 White			

Note: Access variables are color-coded into six categories based on the standard deviation change from pre-policy to post-policy for each student group:

≤0.5 SD; ■ 0.51-1.0 SD; ■ 1.01-1.5 SD; ■ 1.51-2.0 SD; ■ 2.01-2.5 SD; ■ > 2.5 SD.

Enrollment is color coded into six categories based on the percent change in enrollment from pre-policy to post-policy for each student group: ■ <0 (overall enrollment decreased); ■ 1-50%; ■ 51-100%; ■ 101-150%; ■ 151-200%; ■ >200%.

See "Figure & Table Category Details" for more information.

Implications

District policies determine who has access to full-day, school-based pre-k. As school districts nationwide grapple with limited full-day pre-k capacity, this study offers important insights. Most notably, increasing access to school-based, full-day pre-k may be an effective policy strategy for increasing enrollment among high-priority student groups and making pre-k opportunities more equitable. Providing more pre-k seats for historically under-served students can better prepare them for success in kindergarten and beyond.

- Policymakers can consider where school-based pre-k classrooms are located, and where new ones are added, to address inequities in student access and enrollment. While overall school-based pre-k enrollment remained relatively constant, CPS successfully and substantially increased full-day pre-k access and enrollment for high-priority students. District leaders can consider the location and number of full-day pre-k options for their own high-priority student groups (such as those who are most likely to benefit from a high-quality pre-k experience, or were historically least likely to enroll).
- Access is one key policy lever that districts can use to influence enrollment, but there are likely others. As this study demonstrates, increased access was linked to increased enrollment. But Chicago implemented other policy changes simultaneously, including: centralized CPS management of the pre-k application and enrollment process; prioritization of eligibility and placement of students with certain characteristics or experiences (e.g., lowest income); online information about pre-k and preschool options and quality; and local-level
- marketing and recruitment efforts with families, such as application assistants in particular communities or the use of text message reminders to complete the application and enrollment process. When multiple strategies are being implemented at once, unpacking each one's effect on enrollment is challenging. However, policymakers may want to explore whether and how similar strategies may be effective in their districts. Ongoing conversations with families and community organizations can provide additional, valuable feedback to policymakers as they understand the effects of various policies.
- District leaders can monitor and consider patterns in pre-k access and enrollment data. By looking for consistent or changing patterns over time using their own data, district leaders can gauge the effectiveness of current policies in achieving the goals for their district's pre-k system. District leaders can also identify and continue to refine goals for the pre-k system—including how pre-k may improve students' K-12 experiences and outcomes—and which policy levers may help reach those goals.

Increasing access to school-based, full-day pre-k may be an effective policy strategy for increasing enrollment among high-priority student groups and making pre-k opportunities more equitable.

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To read the research behind this snapshot, visit:

https://consortium.uchicago.edu/early_childhood

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