Policies that increased access to full-day pre-k in Chicago Public Schools created a pathway to higher math test scores and grades for most second graders

Reading test scores in second grade also increased among Black students and students in the lowest income group

New research from NORC at the University of Chicago, Start Early, and the University of Chicago Consortium on School Research finds that Chicago policies intended to increase access and enrollment to full-day, school-based pre-k were also related to higher kindergarten entry skills and ultimately better academic outcomes in second grade, particularly for high-priority students. Average second grade math and reading test scores and academic grades increased the most for some high-priority student groups, including Black students, students in the lowest-income group, and students living in mostly Black neighborhoods.

In the new study, A Path to Equity: From Expanded Pre-k Access to Success in Elementary School, researchers investigate if and how the geographic placement of full-day pre-k classrooms within a school district matters for later student outcomes. “Access to pre-k is not equitable, but there are decisions school districts can make that determine who has access,” said Stacy Ehrlich, principal investigator and senior research scientist at NORC. “Intentional decisions to place full-day, school-based pre-k classrooms in neighborhoods that typically do not have them does make a difference for student outcomes,” added Ehrlich.

Beginning in 2013, the City of Chicago launched major policy efforts to create more equitable enrollment in pre-k programs. The policies, including increasing the number of full-day pre-k classrooms and reallocating classrooms throughout the city, aimed to enroll more students from “high-priority” groups to help them better prepare for success in kindergarten and beyond. An October 2020 study from this same team of researchers showed that access played a key role in achieving more equitable school-based pre-k enrollment.

Another recent study in Boston found students attending public preschool were more likely to graduate from high school and enroll in college compared to students who did not attend public preschool. While the Chicago study does not compare outcomes between students who attended pre-k and those who did not, these studies from Chicago and Boston highlight that increasing the availability of pre-k can set high-priority student groups on a positive trajectory.

Many school districts are currently exploring what strategies are available to them as they consider how to use potential funding from the Biden Administration’s American Families Plan. The proposed Plan, which still needs a vote from Congress, calls on the government to invest $200 billion in universal, high-quality preschool to all three- and four-year-olds. The Administration has noted that high-need communities will be prioritized and families will be able to choose the settings that work best for them. “As district leaders begin plans to expand pre-k and make decisions about where to locate the classrooms, our study suggests they have an opportunity to prioritize policies and funding that provide more full-day pre-k classrooms close to where historically underserved students live,” said Maia Connors, co-principal investigator and director of research and policy initiatives at Start Early.
Research Questions and Key Findings

Were Chicago’s pre-k policy changes related to academic outcomes in early elementary school?

- Yes. For most student groups, the pre-k policy changes were related to more favorable early elementary math test scores and academic grades.
- For Black students and students in the lowest-income group, the pre-k policy changes were also associated with higher reading test scores in second grade.

How were pre-k policy changes related to second grade outcomes?

- Across all student groups, improved second grade outcomes were related to pre-k policy changes through greater access to full-day pre-k, and subsequently improved kindergarten entry skills.
- This pathway, from full-day pre-k to better second grade outcomes, proved especially strong among Black students, students in the lowest-income group, and students living in mostly-Black neighborhoods.

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About NORC
NORC at the University of Chicago is an independent research organization headquartered in downtown Chicago with additional offices on the University of Chicago’s campus, the DC Metro area, Atlanta, Boston, and San Francisco. NORC also supports a nationwide field staff as well as international research operations. With clients throughout the world, NORC collaborates with government agencies, foundations, educational institutions, nonprofit organizations, and businesses to provide data and analysis that support informed decision-making in key areas, including health care, education, economics, crime, justice, and energy. NORC’s decades of leadership and experience in data collection, analysis, and dissemination—coupled with deep subject matter expertise—provide the foundation for effective solutions.

About Start Early
Start Early (formerly known as the Ounce of Prevention) is a nonprofit public-private partnership advancing quality early learning and care for families with children, before birth through their earliest years, to help close the opportunity gap. For nearly 40 years, Start Early has delivered best-in-class doula, home visiting and Early Head Start and Head Start programs. Bringing expertise in program delivery, research and evaluation, professional development and policy and advocacy, Start Early works in partnership with communities and other experts to drive systemic change so that millions more children, families and educators can thrive. Learn more at www.StartEarly.org.

About the University of Chicago Consortium on School Research
With the goal of supporting stronger and more equitable educational outcomes for students, the UChicago Consortium conducts research of high technical quality that informs and assesses policy and practice in the Chicago Public Schools (CPS). We seek to expand communication among researchers, policymakers, practitioners, families, and communities as we support the search for solutions to the challenges of school improvement. The UChicago Consortium encourages the use of research in policy action and practice but does not advocate for particular policies or programs. Rather, we help to build capacity for school improvement by identifying what matters most for student success, creating critical indicators to chart progress, and conducting theory-driven evaluation to identify how programs and policies are working.