TWO POLICIES TO BOOST SCHOOL READINESS

Greg J. Duncan, University of California-Irvine
Ariel Kalil, University of Chicago
Katherine Magnuson, University of Wisconsin
Richard Murnane, Harvard University

Poor children begin school well behind their more affluent peers and regain little if any ground as school years progress. First-grade students with average family incomes of $15,500 are nearly a full year behind those with family incomes of $100,000 a year. By eighth grade, children from low-income families have fallen still further behind in both academic skills and social behaviors.

This brief recommends two investment strategies that could narrow those gaps. One is to scale up a promising pre-K program in Boston. The other is a shift in tax policy to increase the income of families with small children.

EDUCATION

Emerging evidence suggests early childhood preventive investments that target achievement and behavior gaps are more beneficial for promoting socioeconomic mobility than remedial investments in adolescence or early adulthood.

Studies in psychology and social epidemiology illustrate that both in-utero environments and early childhood experiences, including stressors related to low income, have long-run impacts on adult physical and mental health. In animal models, optimal “mothering” behavior in critical periods of early development is associated with cognitive strength. In addition, a cumulative effect in skill building exists that suggests “skill begets skill.”

EARLY CHILDHOOD INTERVENTIONS

Most interventions seek to improve the learning or social interactions that children experience. Programs attempting to enhance the skills of parents so that they can do a better job teaching, nurturing, or in other ways provide for their children have, by and large, shown disappointing results.

Studies of early childhood intervention...
models, such as Perry Preschool in the 1960s, Abecedarian in the early 1970s, and Head Start, have revealed potential problems with each model. Perry and Abecedarian, while showing some positive effects on cognitive ability in the short term, were both small, costly on a per-student basis, and would be hard to replicate on a large scale. The differences in home environments today vs. the 1960s and ‘70s also call into question the relevance of the results of those programs. Multiple studies of Head Start, which operates today on a large scale, were either inconclusive or raised questions about the program’s long-term effects.

BOSTON PRE-K

In 2005, Boston recruited Dr. Jason Sachs to head its newly formed Department of Early Childhood (DEC), which embarked on an overhaul of the city’s pre-K system. Sachs and his colleagues chose a new literacy curriculum, which included a social skills component and a new mathematics curriculum. Both curricula specify that children spend considerable time at activity centers where they play in groups at activities designed to teach critical skills. The DEC team also added a “Building Communities” component to teach children negotiation skills essential for constructive play and learning.

To effectively implement the new curricula, DEC embarked on a multi-year strategy to increase the quality and consistency of pre-K classroom instruction. Training, including intense coaching and professional development for each teacher and aide, was supplemented with increased staffing in the form of a full-time paraprofessional in each pre-K classroom. Among the challenges was convincing teachers and aides that 4-year-olds learn by doing, not listening to teachers talk. Classroom management skills were also critical to maintaining a cooperative learning setting.

The results of a 2013 study of Boston pre-K found that the math, literacy, and language skills of children who participated were considerably more advanced than those of similarly aged children who spent the year in other childcare settings. The program’s effects were sufficient to close more than half the academic skills gap at kindergarten entry between low-income children and their more affluent peers. The study also found improvements for Boston pre-K students in various executive functions skills, such as working memory, inhibitory control, and attention shifting.

The lack of evidence regarding longer-term outcomes suggests that the best strategy for scaling up the Boston pre-K system is a gradual one in which longer-term outcomes can be evaluated.

INCOME

Poverty is associated with a host of disadvantages—including low levels of parental education and living with a single parent—that might be harmful to children. Among those who are poor, families with preschool children are the poorest, with poverty rates three to five percentage points higher than families with older children.

Poverty affects children in at least two significant ways. First, it creates an environment of scarcity that creates strains on parents, impairing their cognitive functions and causing distress that can affect the relationships between parents. Parents experiencing conflict and psychological distress often resort to
parenting practices that are more punitive and less nurturing, which spills over to children and ultimately harms their development.

Poverty also reduces the ability of parents to invest in beneficial resources for their children. Child care expenses are the dominant expenditure for families with younger children, while no single expenditure dominates for families with older children.

Several studies suggest that income is a more important factor in the school achievement of pre-adolescents than in adolescents. In an evaluation of experimental welfare reforms in the 1990s, children between the ages of 4 and 7 when their mothers received wage supplements scored significantly higher on achievement tests than children in a control group. The achievement of older children did not appear to be significantly affected by the program.

REALLOCATING CHILD TAX CREDIT AND EITC

Given the high rates of poverty among very young children and the research pointing to their consistent achievement gains in response to poverty reduction, it makes sense to consider policies that would boost the incomes of families with young children.

Two obvious paths are increasing Earned Income Tax Credit payments to families with younger children and, in the case of refundable child tax credits, providing larger credits to families with young children. Whether using new resources or reallocating existing ones, payments to families with children under age 6 should be twice as large as payments to families with older children.