



How Much Can High-Quality Universal Pre-K Reduce Achievement Gaps?

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Introduction and summary

Many children of color and children from low-income families enter kindergarten without the academic skills they need to succeed. Compared to their white peers, African American and Hispanic children are anywhere from 9 to 10 months behind in math and 7 to 12 months behind in reading when they enter kindergarten.¹ These achievement gaps are concerning: Math and reading abilities at kindergarten entry are powerful predictors of later school success, and children who enter kindergarten already behind are unlikely to catch up.² Moreover, in the past 50 years, minimal progress has been made toward reducing these achievement gaps.³

Ensuring that all children are entering kindergarten with the foundational academic skills they need to succeed is a major priority for researchers, policymakers, and practitioners alike. Early childhood education programs show promise toward this goal. Research suggests that participation in a high-quality early childhood education program can enhance children's development, reduce achievement gaps at kindergarten entry, and even have long-term benefits for children's school trajectories.⁴ However, access to high-quality pre-K in the United States remains quite low and highly unequal due to two problems.⁵ First, although pre-K attendance has increased in the past two decades, rates of access to early education vary widely as a function of children's socioeconomic backgrounds: African American, Hispanic, and low-income children are less likely to access center-based early childhood education than their white and more affluent peers. Second, the quality of most early education programs—particularly those attended by low-income children of color—is not high enough to substantially improve academic readiness.

Recognizing the tremendous potential for high-quality preschool to improve children's outcomes, this report considers how a universal publicly funded pre-kindergarten program in the United States could decrease both disparities in access to early learning and achievement gaps at kindergarten entry. Data from two nationally representative datasets and prior results from evaluations of high-quality universal pre-kindergarten were analyzed to estimate the extent to which a national high-quality universal pre-K, or UPK, program would reduce achievement gaps at kindergarten entry based on children's race/ethnicity and income.

The following sections provide a review of the research on achievement gaps based on race/ethnicity and income; describe the effects of high-quality early education programs on children's achievement; and outline current inequalities in access to high-quality early education programs. The report concludes with empirical evidence that points to the potential of a national high-quality UPK program to reduce achievement gaps at kindergarten entry.

This evidence suggests that a high-quality UPK program would significantly reduce achievement gaps at kindergarten entry. Based on the average effect that two large-scale, highly effective programs in different parts of the country had on participating children's achievement scores, it is estimated that high-quality UPK would reduce the achievement gap at kindergarten entry in math 45 percent for African American children and 78 percent for Hispanic children, while essentially closing the entire gap in reading for both groups. Estimated effects on kindergarten entry achievement gaps between low-income and higher-income children were also large: The math gap would reduce by an estimated 27 percent and the reading gap would reduce by an estimated 41 percent. Establishing a high-quality UPK program is a critical first step toward creating equity in access to early education and ensuring that all children begin kindergarten with an equal opportunity to succeed.

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