

# The Lasting Benefits of Quality Pre-Kindergarten Education

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## ABSTRACT

This research project outlines findings on the social and economic benefits of pre-K education both for children and society at large. It finds that while pre-K program attendance correlates with positive cognitive and social outcomes, program quality is the most important determiner of long-term positive outcomes. This research project then applies these findings to the state of the White-Hispanic school readiness gap. It finds that while Hispanic children's school readiness is particularly responsive to early childhood education and that their enrollment in programs has increased significantly over the last decades, nevertheless, they lack access to high-quality programs. These findings are then interpreted in light of California's recent rollout of universal transitional kindergarten, which, while a step in the right direction, highlights the challenges of providing access to high-quality early childhood education. Ultimately, the potential for universal early childhood education programs to close school readiness gaps depends on improving the quality of said programs.

## **Introduction**

After several years of individual districts piloting universal pre-K programs, the state of California made a historic investment in early childhood education in 2021, signing into law a \$2.7 billion universal transitional kindergarten program. An EdSource.org article observes that experts say “this expansion of the current TK [transitional kindergarten] program will create more equity in early education...[and that] Increasing access to preschool may be one of the keys to closing the achievement gap... since about 90% of brain growth happens before kindergarten” (D'souza, 2021). No doubt such an investment is an important step in the right direction for harnessing the power of early childhood education, but questions remain as to how effective universal transitional kindergarten may be in closing school readiness gaps. Jane Waldfogel, an economist and author of the 2006 book, *What Children Need*, theorizes “that one of the reasons why white and black children have different levels of school readiness despite similar pre-school attendance rates is that they do not attend the same kinds of programs” (Sadowski, 2006, p. 2). According to her, school readiness gaps are remedied more so by the kind and quality of pre-K programs attended than by universal access. Thus, it seems doubtful that access to universal transitional kindergarten can be a sort of silver bullet for school readiness gaps without a corresponding increase in access to quality programs.

There is a definite consensus that early childhood education programs have a net general positive effect on the children themselves and on society at large, but the most important and most lasting benefits are generally derived from high-quality programs. Abigail Slovic *et alia* point out that the known benefit of pre-K “stems from the half-century of research detailing the crucial importance of a child's initial 5 years of life, including basic health status and early cognitive and social-emotional growth” (2023, p. 3). Thus, this research project first outlines findings on the social and economic benefits of pre-K education both for children and society at large, concluding that data does indeed show that the first five years of a child's life are more determinative of long-term outcomes than any other age. It also considers and appreciates the expansion of universal pre-K as an important step in closing the school readiness gap. However, it seems that enrollment is not as important to long-term positive outcomes as the quality of the programs themselves, and significant challenges remain in increasing program quality. In assessing these issues, this

research project focuses on the White-Hispanic school readiness gap, as well as on the state of California, which is in the process of rolling out universal transitional kindergarten. It concludes that increasing enrollment trends for minority students is not enough to bridge educational inequities and that to close Hispanic-White school-readiness gaps, policymakers should invest in early childhood education models and equalize varying resource levels via high-quality classroom programs.

## The Benefits of Early Childhood Education

The effects of early childhood education are as diverse as the programs themselves, but certain variables among programs correlate with significant positive outcomes. In their thorough quantitative study of the effects of pre-K from data ranging from 1960 to 2000, Camilli *et alia* observe that “A host of original and synthetic studies have found positive effects for a range of outcomes, and this pattern is clearest for outcomes relating to cognitive development” (2010, p. 606). In their examination of 123 different comparative studies of early childhood interventions, most of which entailed programs of direct preschool instruction, they found significant positive cognitive effects for children who attended preschool before entering kindergarten as well as positive results for social progress. Bassok and Loeb commenting on similar findings, report that this is likely because “children’s experiences in the early years have a disproportionately large impact relative to experiences during school-age years and later” (2007, p. 510). In addition to this, the research of Chetty *et alia* show that one of the most significant factors in positive outcomes is program quality, pointing out that the quality of kindergarten programs has been shown to affect later life earnings, college attendance rates, quality of college attended, and home ownership (2010, p. 1). This notion is reinforced by Pianta *et alia* who show that while typical child care aimed at fostering parent employment has small effects on a child’s cognitive growth and even some negative effects on their social growth, higher quality programs promote larger learning gains and social development (2009, p. 58). According to them, quality programs include teachers with bachelor’s degrees and specialized training, a comprehensive curriculum, a maximum class size of 20, a child-to-teacher ratio of 10:1 or better, and at least one family support service (Pianta et al., 2009, p. 67). Thus, although positive results vary with program quality, early childhood education does provide measurable benefits for children at one of the most determinative stages in their development.

Public investment in pre-K also offers significant economic advantages for society and is a crucial tool for closing long-term achievement gaps. Based on long-term data compiled by the Abecedarian Project and the Carolina Approach to Responsive Education, Nobel laureate economist, James Heckman reports that “High quality birth-to-five programs for disadvantaged children can deliver a 13% per year return on investment—a rate substantially higher than the 7-10% return previously established for preschool programs serving 3- to 4-year-olds” (2016, p. 1). Thus, according to Heckman, there are clear economic advantages to investing in early childhood education. These findings are magnified by the fact that returns for investment in remedial education for middle and high schoolers are much less. Thus, investing in early childhood education offers higher return on investment *and* saves money against having to spend on remedial programs later in life. In support of this, Schoch *et alia* report that early childhood education, “is associated with lasting adult and societal benefits such as completion of more years of education, higher high school graduation rates, lower involvement with the criminal justice system, better adult health, and higher earnings compared to individuals with similar backgrounds who did not participate in high-quality ECE [early childhood education]” (2023, p. 6). Hence, the benefits both contribute to positive outcomes like increased health and wealth, as well as the prevention of costly negative outcomes such as involvement in the criminal justice system. Students who received quality preschool education are also less likely to be placed in special education programs, which eases the strain on public school budgets (Ramey et al., 2000, p. 11). When given equal access, these long-term economic effects and benefits can help minorities close achievement gaps. Ultimately, pre-K, dollar for dollar is one of the most cost-effective ways of closing long-term achievement gaps and cultivating a more equitable society.

## The White-Hispanic School Readiness Gap

Gaps in school readiness for Hispanics and data regarding the success of early childhood education programs for them mean that such programs could result in outsized gains for that particular demographic. Researchers Bustamante & Hindman note that “Latino children enter kindergarten significantly behind their white peers in academic school readiness, and this gap persists over time” (Bustamante & Hindman, 2018, p. 4). In their research, they also found that Latino kindergartners were 22% less likely to recognize all the letters of the alphabet, 27% less likely to count to 20, and 11% less likely to be able to write their first name than their White and Black peers upon entering kindergarten (Bustamante & Hindman, 2018, p. 2). In light of this gap, Ahmad and Hamm report that,

“Several state and community preschool programs have demonstrated particularly strong impacts for Hispanic children. A 2008 study of Oklahoma’s universal preschool program conducted in Tulsa showed positive results for all racial and ethnic groups, but impacts were particularly strong for Hispanic children. On measures of early literacy skills and problem solving, Hispanic children made greater gains than any other subgroup” (Ahmad & Hamm, 2013, p. 3).

Hence, Hispanic children’s susceptibility to improvement through pre-K means it can be particularly helpful to them. Additionally, several other factors lend themselves to closing the Hispanic school readiness gap through ECE. Pre-K programs have larger than average benefits for dual language learners, many of whom are Hispanic, when compared to monolingual English students (Schoch et al., 2023, p. 4). Moreover, the value that Hispanic parents place on education and school readiness make them particularly receptive to assistance when it comes to enrolling their children in pre-K (Peterson et al., 2018, p. 5). Therefore, early childhood education seems particularly suited to helping Hispanic children and families close school readiness and achievement gaps.

In fact, along these lines, Hispanic enrollment in pre-K programs has risen rapidly, especially in California where universal pre-K has expanded, but enrollment alone does not tell the full story. Reardon and Portilla report that at the national level in 2016, “the Hispanic-White gap in preschool enrollment also narrowed over the last two decades, again because Hispanic enrollment rates rose much more rapidly than White enrollment rates.” (Reardon & Portilla, 2016, p. 4). Looking more closely at California, as access has increased due to the piloting of universal transitional kindergarten, Hispanic students have enrolled at higher rates than both Black and White children (Banks et al., 2022, p. 2) (Slovick et al., 2023, p. 10). However, the increase in enrollment does not tell the full story. Senior analyst at The Education Trust, Carrie Gillispie writes that, “Of all Black and Latino 3- and 4-year-olds in the 26 states we analyzed, only 1% of Latino children and 4% of Black children were enrolled in high-quality state-funded preschool programs” (Gillispie, 2019, p. 9). As has been noted, one of the most determinative factors for the effectiveness of early childhood education is program quality and studies show that Hispanic students lack meaningful access to high quality programs. Even with California rolling out state-wide transitional kindergarten, the lack of access to quality is particularly pertinent in that state. Gillispie notes that, “larger states such as Texas and California have programs that meet fewer quality benchmarks. High-quality programs tend to be in relatively smaller states” (Gillispie, 2019, p. 9). Providing access to quality is made even more difficult by research that shows that Hispanic families are less likely than other races and ethnicities to search for early childhood education programs, and that when they do, they are less likely to consider more than one option. Additionally, low-income Hispanic families have a higher rate of non-traditional work schedules, which also complicates their ability to find or afford quality pre-K (Mendez & Crosby, 2018, p. 1). Thus, while Hispanic enrollment in pre-K has risen rapidly in California, nevertheless, access to the kinds of high-quality programs that are most effective remains elusive.

## Remaining Obstacles of Universal Pre-K

As shown, California's universal TK program has significantly improved enrollment for Hispanic children; yet, program quality is more responsible for closing school readiness gaps than enrollment, and in this regard, barriers still remain for Hispanics. At Stanford University, Deborah Stipek indicates that "California has many good providers; but for a state that once led the nation in early childhood education, ECE today is marked by diminished investments in quality, low wages, and highly fractured oversight" (Stipek, 2018, p. 2). Stipek helps us understand that expanding transitional kindergarten universally is no doubt a step in the right direction, but access to quality programs, which are most effective, was still an issue as recently as 2018. The lack of standards and data collection that could be used to improve the quality of early childhood education in California exacerbates the issue (Slovick et al., 2023, p. 11). Stipek concludes that,

"If early education programs are to meet parents' needs to participate in the workplace and to prepare California's children for academic success—and if any progress is to be made on reducing the unacceptably large achievement gap—the state needs a workforce that is prepared, supported, and fairly compensated for this complex work in a system of early childhood education that supports families and puts children on positive developmental trajectories" (Stipek, 2018, p. 12).

The previously mentioned issues are matters of policy, but perhaps the greatest barrier to increasing the quality of programs is the lack of a workforce to do so. The pay level for preschool teachers and workers attracts fewer qualified individuals and not enough emphasis is placed on preparing and compensating a sufficient workforce that could execute quality programming. This issue will only escalate for the worse as California's TK expansion requires more and more manpower. While access to pre-K in California is continually expanding, there are still significant barriers to ensuring that Hispanics have access to the kinds of high-quality programs that are most effective in closing readiness gaps.

## Methods

Quality early childhood education programs are perhaps the most powerful tool available for addressing White-Hispanic school readiness gaps, and while significant strides have been made in enrollment for Hispanics, access to quality programs remains problematic. This article has made use of reports, studies, and journal articles to ascertain the state of the question of how early childhood education might address school readiness gaps. It sought to address primarily three questions. Namely, how powerful a tool is early childhood education for addressing readiness gaps? What progress has been made in the last decades in addressing those gaps? What barriers still remain for remedying the White-Hispanic school readiness gap? Some of the limitations of this research result from the sporadic and variegated data streams regarding early childhood education programs and ethnic data in general. Comparisons often have to be made between data that is not current or perhaps decades apart, and sometimes conflicts. Further research could examine the ways in which data collection could be standardized so that a more accurate picture of the landscape of early childhood education in America can be drawn, and more effective solutions proposed.

## Conclusion

Without doubt, early childhood education is a powerful tool for closing school readiness and achievement gaps. However, much of its power will be left untapped without ensuring that programs are of high quality and accessible to all. In the words of Pianta *et alia*, "Current public policies for child care, Head Start, and state pre-K fail to ensure that most American children attend highly effective preschool education programs" (Pianta et al., 2009, p. 78). Dollar for

dollar, investing in Pre-K programs can provide immense returns, especially for minorities. Data shows that among minorities, Hispanics stand to benefit the most, but that even higher enrollments in pre-K programs do not necessarily close the school-readiness gap. Rather, access to high-quality programs remains the most important barrier. Universal pre-K programs are certainly a step in the right direction, but it is quality on top of quantity that will ensure access to the American dream for all.

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