

AVANCE Parent Child Education Program

School Readiness Evaluation Findings: Dallas, Texas

The AVANCE Parent-Child Education Program (PCEP) adopts a two-generation approach that aims to increase parenting knowledge and promote school readiness among low-income Latino families. AVANCE PCEP provides parenting education sessions, community resources, home visitation, and early childhood education to families with children from birth through three years of age. Using a rigorous matched sample design, we find that children who participated in AVANCE and entered kindergarten between 2013 and 2017 attended Dallas ISD pre-kindergarten at a rate 12 percentage points higher than demographically matched children who did not participate in AVANCE. When controlling for pre-k participation, AVANCE children entered kindergarten school-ready at a rate 4.6 percentage points higher than their peers who did not participate in AVANCE. Similarly, AVANCE children missed 1.5 fewer days of kindergarten, on average, than non-AVANCE children. Overall, findings from Dallas participants indicate that AVANCE PCEP promotes school readiness and higher attendance rates among kindergarteners.

AVANCE Parent Child Education Program

The AVANCE Parent-Child Education Program (PCEP) adopts a two-generation approach that aims to increase parenting knowledge and promote school readiness among low-income Latino families. The free program includes parenting education sessions, community resources, home visitation, and early childhood education for families with children from birth through three years of age.¹ AVANCE has served Texas families for nearly 50 years across several communities, including Austin, Dallas, El Paso, Houston, San Antonio, Waco, and in the Rio Grande Valley. AVANCE North Texas, the AVANCE chapter that serves families in Dallas ISD, targets services to first and second generation Latino families.²

Evaluation Overview

AVANCE contracted with Dr. Cynthia Osborne and the Child and Family Research Partnership (CFRP) at the Lyndon B. Johnson School of Public Affairs at The University of Texas at Austin to conduct an impact evaluation of the AVANCE PCEP program throughout Texas. The goal of the evaluation is to rigorously examine how participation in AVANCE PCEP is associated with school readiness and whether educational benefits from participation in the program are sustained through third grade. This brief presents kindergarten outcomes for AVANCE children who entered kindergarten in Dallas ISD between 2013 and 2017. We are conducting similar analyses across several Texas school districts where AVANCE participants commonly enroll in school, including Austin ISD, Harlandale ISD, Houston ISD, and Ysleta ISD, and will also examine third grade STAAR test outcomes among students in each district.

To assess educational outcomes associated with participation in PCEP, we created a matched sample of AVANCE participant children (AVANCE children) and comparison children with similar demographic characteristics whose families did not participate in AVANCE (non-AVANCE children). We first identified AVANCE children who entered kindergarten in Dallas ISD between 2013 and 2017, and for each participant we selected a comparison child from the same school and kindergarten entry year whose family did not participate in AVANCE, but otherwise had similar characteristics. Table 1 presents the demographic characteristics for the sample of AVANCE participants and the comparison group, as well as the overall demographic make-up of the schools in which AVANCE children entered kindergarten.

Next, we compared key kindergarten educational outcomes between AVANCE participants and the comparison group to learn whether participation in PCEP is associated with educational benefits to young students, including increased pre-kindergarten (pre-k) participation, increased school-readiness at kindergarten entry, and increased school attendance. The Technical Note on Page 7 provides more details on our methodology.

Table 1: Characteristics of the Dallas ISD Sample

	AVANCE Children n = 1,488	Non-AVANCE Children n = 1,488	All Students [^] N = 37,869
Year of Kindergarten Entry			
2013	5.4%	5.4%	N/A
2014	25.3%	25.3%	N/A
2015	25.3%	25.3%	N/A
2016	20.8%	20.8%	N/A
2017	23.2%	23.2%	N/A
Race/Ethnicity			
Hispanic	99.9%	99.9%	75.8%
White	0.1%	0.1%	4.8%
Black	0.0%	0.0%	17.9%
Other Race	0.0%	0.0%	1.0%
Gender of Child			
Male	51.1%	51.5%	50.3%
Female	48.9%	48.9%	49.7%
Other Characteristics			
Eligible for Free or Reduced Lunch	88.3%	88.3%	81.0%
English Language Learner	95.8%	95.8%	61.5%
Special Education	0.9%	0.9%	2.9%

Notes: "All Students" represents the demographic makeup of all students who started kindergarten between 2013 and 2017 across the schools in Dallas ISD where AVANCE students attended kindergarten.

Findings

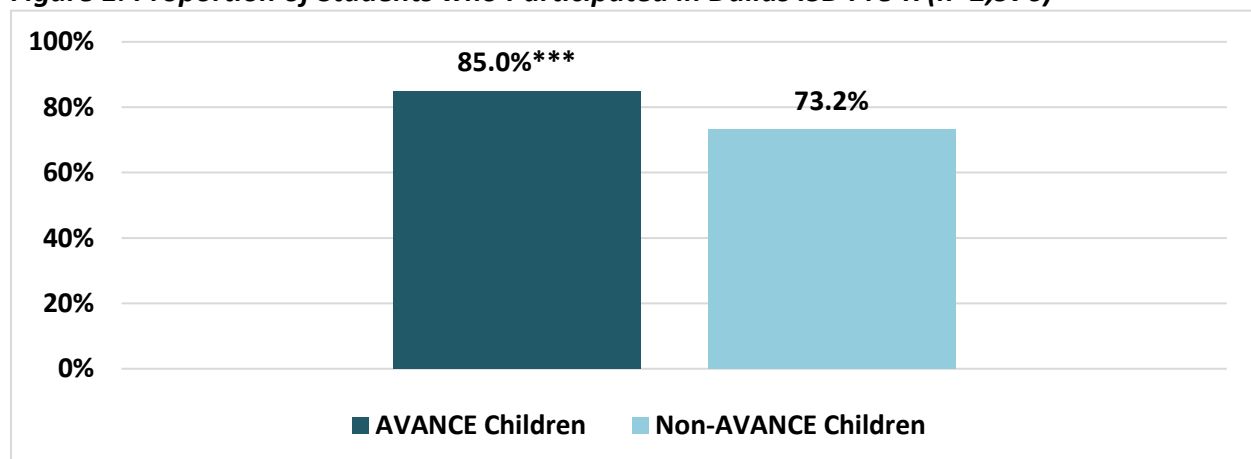
Children who participated in AVANCE PCEP and subsequently enrolled in kindergarten in Dallas ISD between 2013 and 2017 reached better early academic outcomes than their non-AVANCE peers across several key kindergarten metrics. Specifically, we find that AVANCE children were significantly more likely to participate in Dallas ISD pre-k, significantly more likely to be school-ready when they entered kindergarten, and missed significantly fewer days of kindergarten than non-AVANCE children. Overall, findings from Dallas participants indicate that participation in AVANCE PCEP is associated with better kindergarten outcomes. The following section describes early academic outcomes in more detail.

Pre-Kindergarten Attendance

Participation in pre-kindergarten is one of the biggest predictors of school readiness at kindergarten entry.³ Further, attending high-quality pre-k is associated with numerous positive longer term academic, economic, and social outcomes, including attaining higher education, higher employment rates, improved adult health, and reduced involvement in the criminal justice system.⁴ AVANCE children were more likely to participate in Dallas ISD pre-k than non-AVANCE children. Specifically, despite having similar socioeconomic and demographic characteristics that indicate equal eligibility for Dallas ISD pre-k, approximately 12 percentage points more AVANCE children attended pre-k compared to their non-AVANCE peers. As shown in Figure 1, 85 percent of AVANCE children participated in Dallas ISD pre-k, compared to 73 percent of non-AVANCE children, indicating that AVANCE PCEP promotes pre-k participation among Dallas ISD students.

One way that AVANCE North Texas recruits participants is through fliers delivered at Dallas ISD schools. Therefore, it is possible that the difference in pre-k participation between groups is a result of AVANCE recruitment strategies.

Figure 1: Proportion of Students who Participated in Dallas ISD Pre-K (n=2,976)



Source: AVANCE participant administrative data and Dallas ISD enrollment and testing data, 2013-2018.

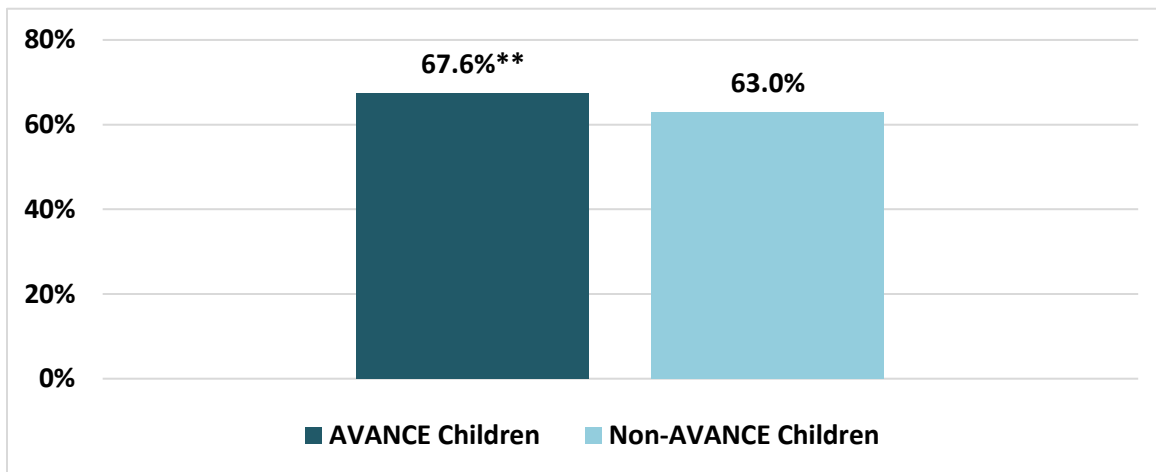
Note: *** indicates statistical significance at the $p < .001$ level. Results presented are the raw proportions of pre-k attendees by group.

Kindergarten Readiness

Entering kindergarten school-ready predicts better future academic outcomes. Scores on math and reading assessments at kindergarten entry are associated with later math and reading scores, emphasizing the importance of entering kindergarten ready for school.⁵ School-readiness is also associated with long-term economic outcomes; children from poor families who are school-ready at age five are more likely to reach middle class status by age 40 than their peers who were not school-ready.⁶ Importantly, children who grow up in poverty are less likely to be school-ready at kindergarten entry, emphasizing the importance of interventions that target students who are most vulnerable to entering kindergarten unprepared.⁷

AVANCE children were significantly more likely to be school-ready when they entered kindergarten compared to similar non-AVANCE children. As shown in Figure 2, approximately 68 percent of AVANCE children were school-ready at kindergarten entry, compared to 63 percent of non-AVANCE children. Importantly, these results account for the fact that AVANCE children are more likely to participate in pre-k. In other words, even when controlling for pre-k participation, AVANCE children were more likely to enter kindergarten school-ready.

Figure 2: Proportion of Students who were “School-Ready” at Kindergarten Entry (n=2,976)



Source: AVANCE participant administrative data and Dallas ISD enrollment and testing data, 2013-2018.

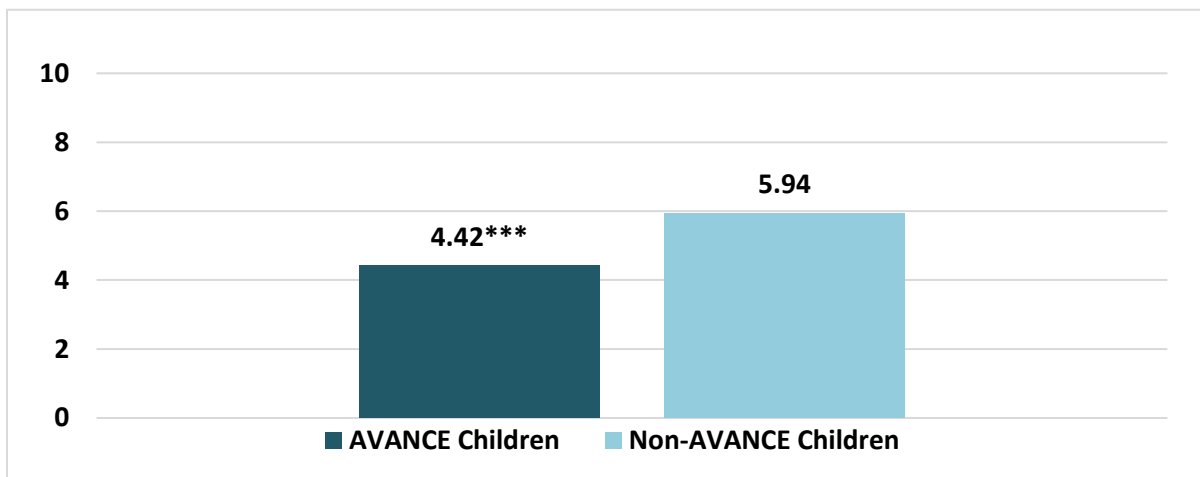
Note: ** indicates statistical significance at the $p < .01$ level. Results are presented as predicted probabilities by group controlling for Dallas ISD pre-k participation.

Absenteeism

Missing days of school inhibits students' ability to learn and develop on track with their peers. In addition to promoting student learning and development, minimizing the number of days of school a student is absent ensures that the school receives adequate funding. Given that the state funds school districts based on the number of days of school students attend, minimizing student absences is vital for ensuring school districts obtain as much funding as possible per student.

In addition to entering kindergarten more prepared, AVANCE children missed fewer days of kindergarten than their non-AVANCE peers. Controlling for pre-k participation, AVANCE children missed, on average, 4.4 days of kindergarten and their non-AVANCE peers missed almost 6 days, on average, as shown in Figure 3.

Figure 3: Average Number of Days Absent from Kindergarten (n=2,976)

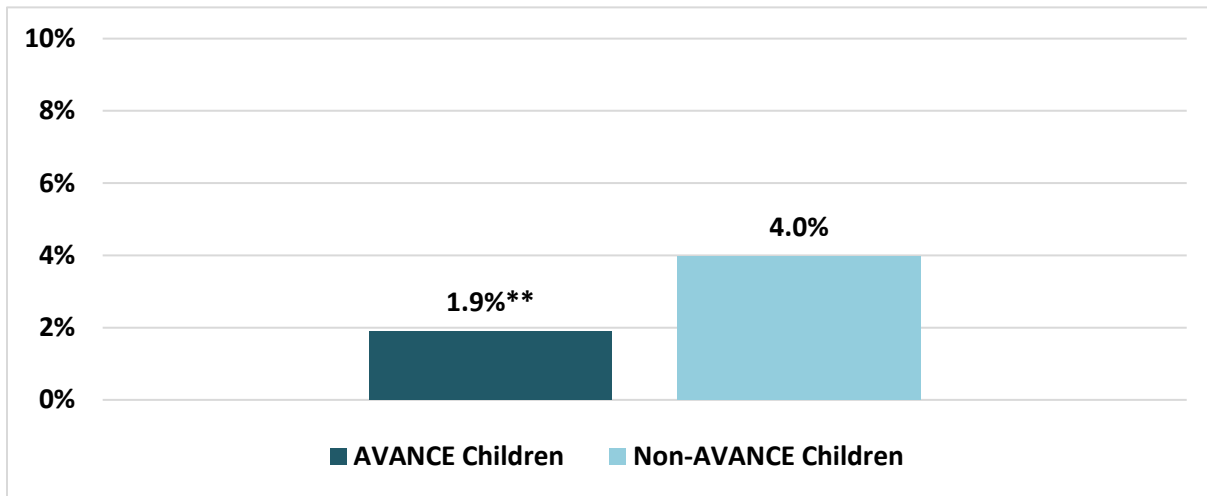


Source: AVANCE participant administrative data and Dallas ISD enrollment and testing data, 2013-2018.

Note: *** indicates statistical significance at the $p < .001$ level. Results are presented as predicted number of days absent by group, controlling for Dallas ISD pre-k participation.

Similarly, half as many AVANCE participants were chronically absent, or missed at least 10 percent of days of school, during their kindergarten year, compared to non-AVANCE children. As shown in Figure 4, when controlling for pre-k participation, four percent of non-AVANCE students were chronically absent, compared to just under two percent of AVANCE students.

Figure 4: Proportion of Students who were Chronically Absent (n=2,976)



Source: AVANCE participant administrative data and Dallas ISD enrollment and testing data, 2013-2018.

Note: ** indicates statistical significance at the $p < .01$ level. Results are presented as predicted probabilities by group controlling for Dallas ISD pre-k participation.

Conclusions and Next Steps

Overall, we find that AVANCE PCEP facilitates school readiness and higher attendance among students in Dallas ISD. Children who participated in AVANCE PCEP and subsequently enrolled in kindergarten in Dallas ISD were more likely to participate in Dallas ISD pre-k, more likely to be school-ready at kindergarten entry, attended more days of kindergarten on average, and were less likely to be chronically absent than a comparison group of demographically similar students.

CFRP’s evaluation will also assess kindergarten outcomes for students in other Texas school districts, including Austin ISD, Harlandale ISD, Houston ISD, and Ysleta ISD, to assess whether positive outcomes associated with AVANCE PCEP are similar across the state. Additionally, CFRP will assess whether improved academic outcomes are sustained through third grade and will more closely examine academic and parenting outcomes among AVANCE participant families to learn which families benefit from AVANCE PCEP the most.

Technical Note

The following section summarizes our analytic approach to calculating and comparing early academic outcome for AVANCE students and non-AVANCE students.

Sample

To identify AVANCE children in Dallas ISD and select a comparison group, we first worked with Dallas ISD Evaluation and Assessment staff researchers to identify AVANCE children who enrolled in kindergarten in Dallas ISD between 2013 and 2017. In the data we received from Dallas ISD staff, student name and date of birth were masked. We identified 2,525 out of 6,606 children who participated in the North Texas AVANCE program and likely attended school in the Dallas area (38.22%). We expect that most students who we could not identify in Dallas ISD records enrolled in kindergarten outside of Dallas ISD, including at private schools, charter schools, and in other school districts. For each AVANCE child, we used exact matching to select a comparison child whose family did not participate in AVANCE who had the same key demographic and family characteristics (school, kindergarten entry year, gender, race and ethnicity, socioeconomic status, English Language Learner, or ELL, status, and special education status). The final analytic sample is limited to students who had non-missing data across each academic outcome (N=2,976; AVANCE n=1,488; non-AVANCE n=1,488).

Outcomes

Pre-K Participation

We used Dallas ISD enrollment data to create a binary measure of whether each student participated in pre-k through Dallas ISD. We compared participation in Dallas ISD pre-k among AVANCE children and non-AVANCE children using a logistic regression. One limitation of this outcome measure is that we do not know whether children participated in private pre-k or pre-k through another school district. We present the observed rates of pre-k participation.

Kindergarten Readiness

Dallas ISD uses the Istation assessment to measure school-readiness at kindergarten entry. We used a binary measure of ready/not ready based on the Istation score and conducted a logistic regression controlling for pre-k participation to compare school readiness among AVANCE and non-AVANCE children. We present the predicted probability of school-readiness by group controlling for pre-k attendance.

Days Absent and Chronically Absent

For each child in the sample, we used Dallas ISD attendance data to calculate the number of days absent out of the total number of days a child was enrolled in Dallas ISD during kindergarten. To compare days absent across groups, we conducted a Poisson regression controlling for pre-k participation and setting the number of days enrolled in kindergarten as the exposure.

Chronic absenteeism is defined as missing more than ten percent of days of school during an academic year. We created a binary measure of chronically absent/not chronically absent that considered the number of days a student was enrolled and conducted a logistic regression controlling for pre-k participation to compare chronic absenteeism across AVANCE and non-AVANCE children. We present attendance outcomes as predicted probabilities by group controlling for pre-k attendance.

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The Child and Family Research Partnership (CFRP) is an independent, nonpartisan research group at the LBJ School of Public Affairs at The University of Texas at Austin, specializing in issues related to young children, teens, and their parents. We engage in rigorous research and evaluation work aimed at strengthening families and enhancing public policy.

¹“Programs,” AVANCE, Inc., last modified August 9, 2018, <https://www.avance.org/programs/programs/>

² “2016-2017 Annual Report,” AVANCE, Inc., https://avance-ntx.org/wp-content/uploads/2018/08/2016-2017-Annual-Report_pdf.pdf

³ Isaacs, J. (2012). Starting School at a Disadvantage: The School Readiness of Poor Children. Brookings Institution. https://www.brookings.edu/wp-content/uploads/2016/06/0319_school_disadvantage_isaacs.pdf

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