



# FIRST LONGITUDINAL ANALYSIS CONFIRMS VALUE OF DENVER'S PRESCHOOL INVESTMENT: READING GAINS PERSIST THROUGH THIRD GRADE

Four years later Denver Preschool Program students outperform peers on TCAP reading test

## Introduction

The 2012-13 school year marked two major milestones for the Denver Preschool Program (DPP). It was the fifth anniversary of the initiative's first full year of operation. And it was the first year a sizable group of DPP children reached third grade. This latter milestone has offered the opportunity to analyze the reading progress of DPP enrollees over time – the focus of this brief.

Since the 2009-2010 school year, annual evaluations of DPP graduates have concluded that “the vast majority of children are ready for school”<sup>(i)</sup> academically. These evaluations have rested on a set of standardized assessments given to a representative sample of DPP participants. The analysis summarized here<sup>(iii)</sup> begins to address the extent to which this school readiness persists beyond kindergarten.

## The Denver Preschool Program

Since voters approved sales-tax funding for the Denver Preschool Program in 2006, it has grown to serve nearly 6,000 children each year, or 70 percent of Denver's 4-year-olds. DPP architects built the initiative on three core pillars of success: access, choice and quality.

Tuition support, available to all Denver families with a 4-year-old, has expanded access by offsetting the high cost of preschool, which often exceeds the cost of in-state college tuition. Families can choose from more than 250 preschool options. These include community-based centers and family child care homes as well as Denver Public Schools classrooms. To improve the quality of these preschools, DPP invests in independent quality ratings, coaching and quality improvement grants.

## Students in the Analysis – Defined

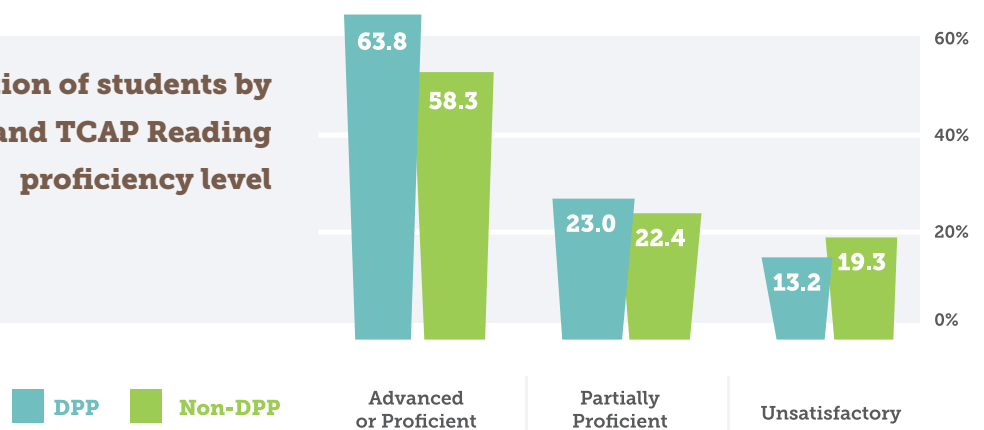
- Just over 3,000 third-grade students in Denver Public Schools (DPS) who previously participated in DPP took Colorado's TCAP reading assessment in the spring of 2013. Overall, these students accounted for 47 percent of DPS third-graders tested.
- A slightly larger proportion of third-graders who participated in DPP (74 percent) were eligible for Free or Reduced-Price Lunch (FRPL) than those who did not (69 percent).
- Fewer DPP students were classified as white (20 percent compared with 25 percent for non-DPP third-graders), while 62 percent of DPP students identified as Hispanic compared to 56 percent of non-DPP children.
- A larger proportion of DPP students (47 percent) identified as English Language Learners (ELLs) than non-DPP students (41 percent).



## DPP Graduates Outperformed Their Non-DPP Peers on the 2013 Third-Grade TCAP Reading Assessment

A total of 64 percent of third-graders that participated in DPP four years ago posted advanced or proficient reading scores compared to 58 percent of non-DPP students. Just as significant, participation in DPP reduced the proportion of unsatisfactory reading scores by 6 percentage points; 13 percent of DPP enrollees logged unsatisfactory scores compared to 19 percent for non-DPP third-graders. These gains occurred despite the demographic profile of DPP graduates that puts them at slightly greater risk of school failure.

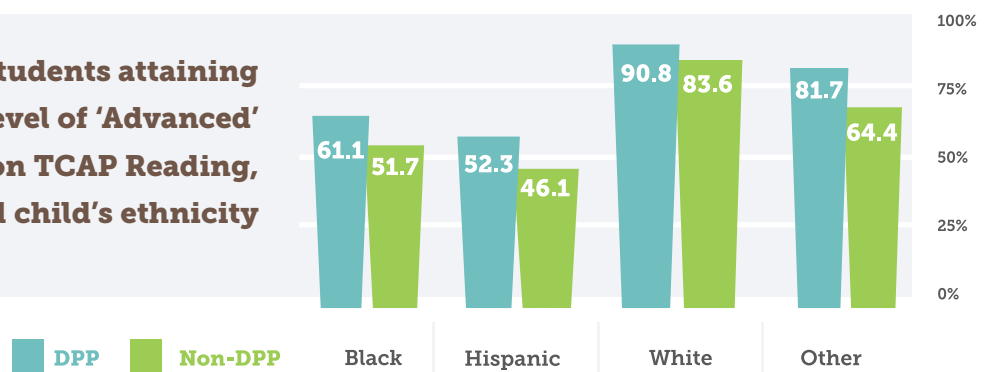
**2013 Distribution of students by DPP status and TCAP Reading proficiency level**



## Every Ethnic Category of DPP Students Outperformed Non-DPP Counterparts

- A total of 61 percent of black third-graders previously enrolled in DPP reached proficiency compared to 52 percent of non-DPP students.
- Slightly more than half (52 percent) of Hispanic children with DPP experience were proficient readers, compared to 46 percent of non-DPP students.
- Over 90 percent of white third-graders with DPP experience were proficient in reading compared to 84 percent of non-DPP students.

**Percent of students attaining a proficiency level of 'Advanced' or 'Proficient' on TCAP Reading, by DPP status and child's ethnicity**



# Findings



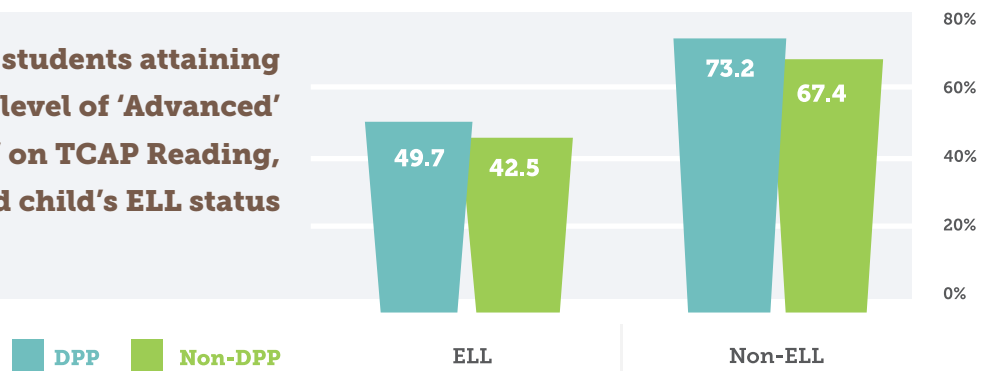
## Disadvantaged Students with DPP Experience Ahead of Non-DPP Peers

Although low-income students continue to lag behind their more advantaged peers, DPP students who qualified for Free or Reduced-Price Lunch (FRPL) were 9.3 percent more likely to read proficiently than their non-DPP counterparts.

## English Language Learners Did Better Overall

DPP students who identified as English Language Learners (ELLs) were 7.2 percent more likely to attain proficient or advanced levels on the TCAP than their non-DPP peers.

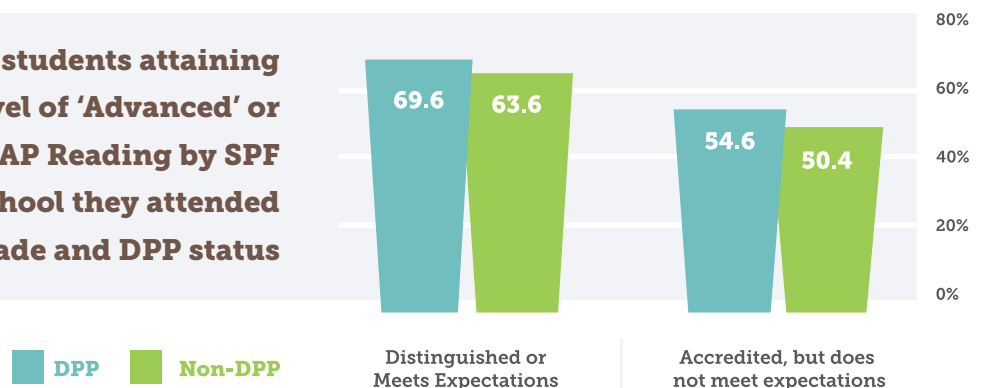
**Percent of students attaining a proficiency level of 'Advanced' or 'Proficient' on TCAP Reading, by DPP status and child's ELL status**



## DPP Benefit Seen at Lower-Performing Elementary Schools

While DPP children who went on to attend higher-performing elementary schools (as assessed by Denver Public Schools' School Performance Framework) did better overall, children who attended lower-performing schools still saw a benefit to DPP participation. Among all children enrolled in lower-performing elementary schools, DPP students outperformed their non-DPP counterparts by over 4 percentage points.

**Distribution of students attaining a proficiency level of 'Advanced' or 'Proficient' on TCAP Reading by SPF rating of the school they attended in 2nd grade and DPP status**

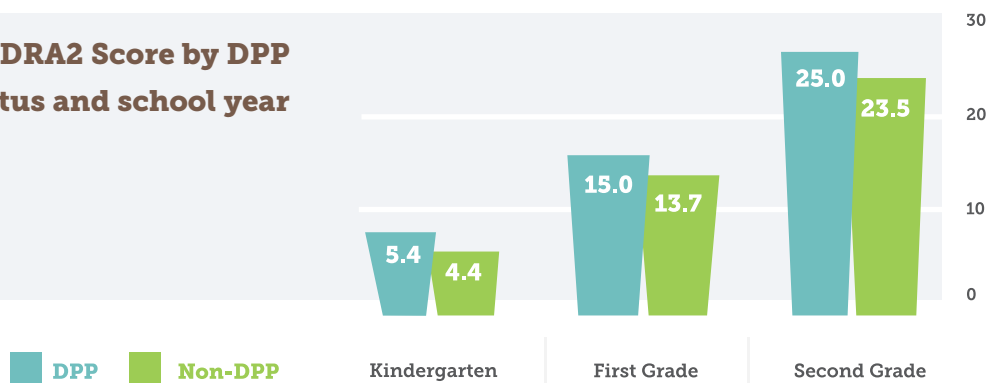


# Findings

## TCAP Results Mirror Those Seen in Earlier Years

Finally, it is worth noting that TCAP reading results represent a trend not an anomaly. As demonstrated by the outcomes of the kindergarten through second-grade Developmental Reading Assessment Version 2 (DRA2) shown below, children who participated in the Denver Preschool Program in 2008-2009 have consistently outperformed their non-DPP peers on tests of early elementary reading skill.

**Average DRA2 Score by DPP status and school year**



## Why does this matter? The importance of third-grade literacy

Third-grade reading is a critical indicator of a child's academic future. Children who have not learned to read by the end of third grade are more likely to fall behind peers who are "reading to learn" by fourth grade. They are "four times more likely to leave school without a diploma than proficient readers."<sup>[iii]</sup> The risk for poor African-American and Hispanic students is greater than white students but "the racial and ethnic graduation gaps disappear when students master reading by the end of third grade and are not living in poverty."

[i] Klute, M. (2010). Denver Preschool Program: Report on Child Outcomes, 2009-10 School Year. Clayton Early Learning Institute, Denver, Colorado.

[ii] A copy of the full report, conducted on behalf of the Denver Preschool Program by Augenblick, Palaich and Associates (APA), can be viewed at [dpp.org](http://dpp.org).

[iii] Hernandez, Donald J. (2011) Double Jeopardy: How Third-Grade Reading Skills and Poverty Influence High School Graduation. Annie E. Casey Foundation.



305 Park Avenue West, Suite B, Denver, CO 80205

WEB: [dpp.org](http://dpp.org) PHONE: 720.287.5055

FAX: 720.287.5063 EMAIL: [info@dpp.org](mailto:info@dpp.org)

