



Alabama's First Class Pre-K Program

Outcomes and Impacts: A Summary of Results

Prepared by the First Class Pre-K Research Evaluation Team
January 2020

Overall Summary of Impacts of First Class Pre-K

Children who attend First Class Pre-K are:

**More likely
to be:**

Ready for
Kindergarten

Proficient in
reading

Proficient in
math

**Less likely
to be:**

Retained in
grade

Chronically
absent

**Less likely
to:**

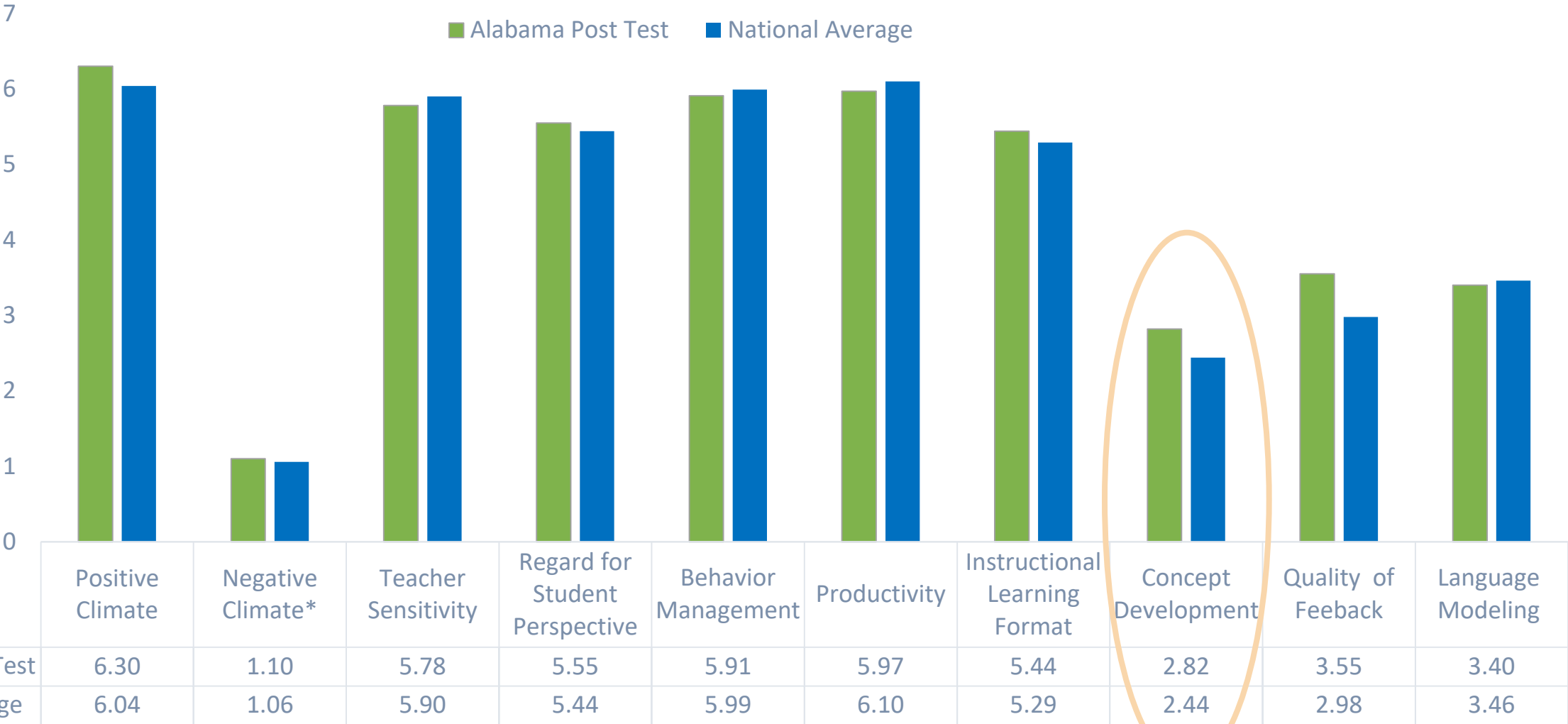
Need
special
education

Have
disciplinary
issues

Quality in First Class Pre-K Classrooms

Quality of Teacher-Child Interactions in First Class Pre-K Classrooms, 2019

CLASS (Classroom Assessment Scoring System)



*Want lower score

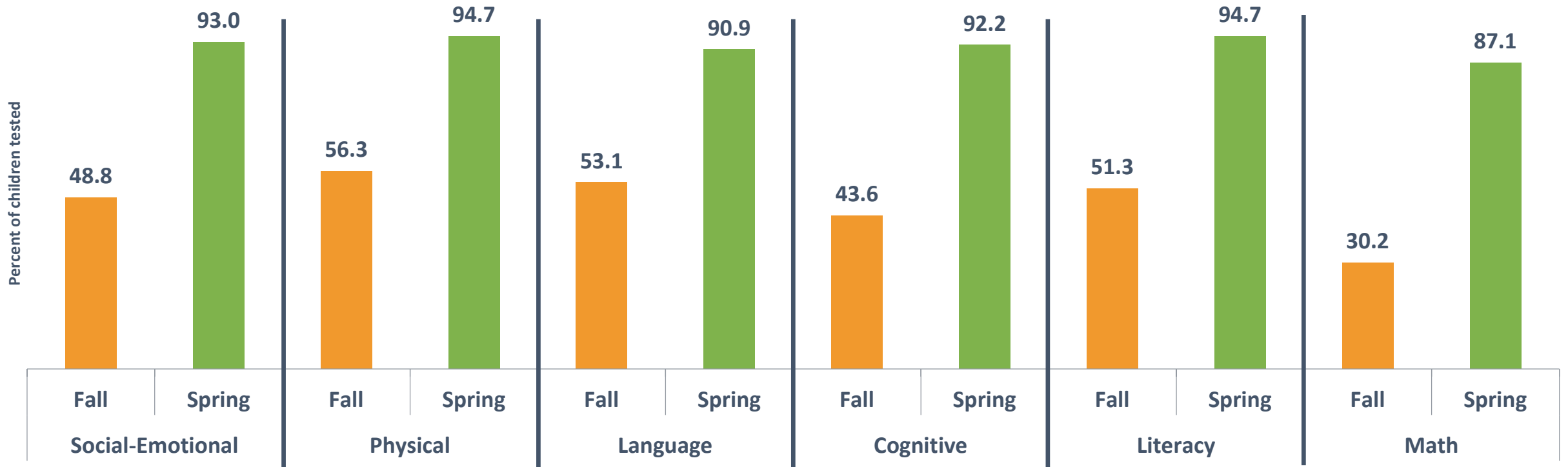
Developmental Gains in First Class Pre-K Classrooms

Teaching Strategies GOLD[®]

Exceeding Developmental Expectations

Roughly half or fewer children arrived in First Class Pre-K meeting development and learning predictors of school success. By the end of the year, nearly all were meeting or exceeding expectations.

Percent of Children Meeting or Exceeding Widely Held Expectations for Development and Learning
First Class Pre-K, Entry (Fall 2018) versus Exit (Spring 2019)
(Teaching Strategies GOLD)



Gains in Developmental Skills

The largest gain in percent meeting or exceeding by the end of the First Class Pre-K year was for math skills.

Teaching Strategies GOLD, Fall 2018 and Spring 2019

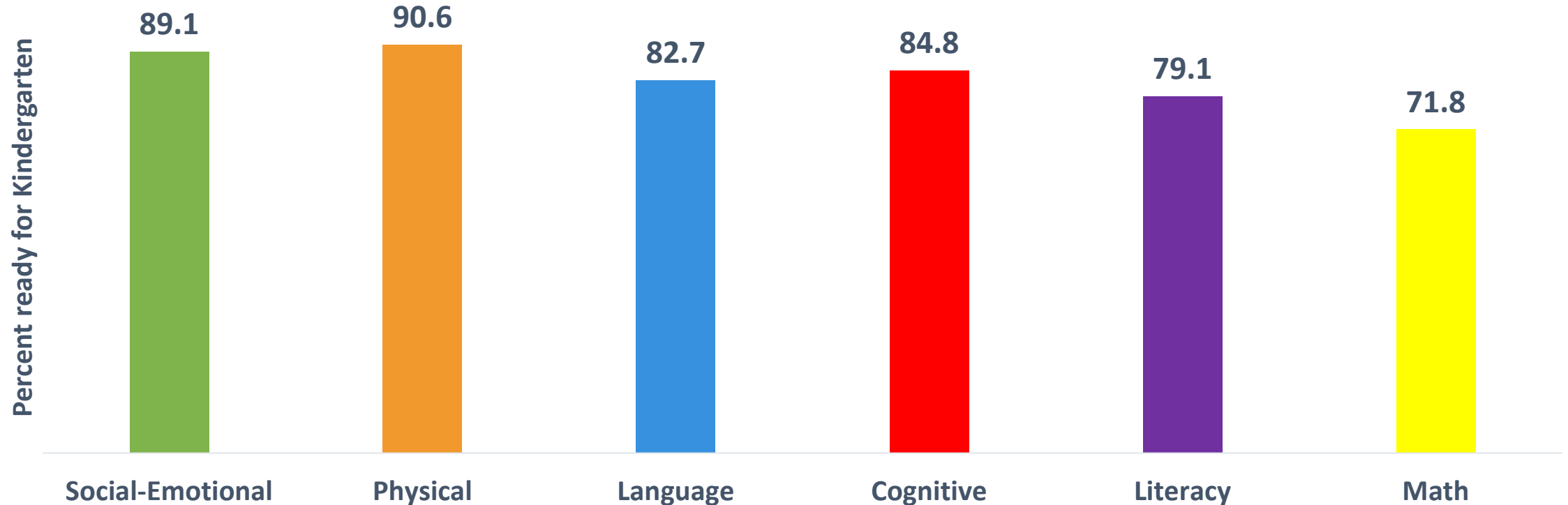
Skill	Fall Percent Meet/Exceed	Spring Percent Meet/Exceed	Percentage Point Gains, Fall to Spring
Social-emotional	48.4	93.0	44.2
Physical	56.3	94.7	38.4
Language	53.1	90.9	37.8
Cognitive	43.6	92.2	48.6
Literacy	51.3	94.7	44.4
★ Math	30.2	87.1	56.9 ★

Kindergarten Readiness

Kindergarten Readiness: At First Class Pre-K Graduation

By the end of the year, the majority of children in First Class Pre-K tested “ready” for Kindergarten in each domain.

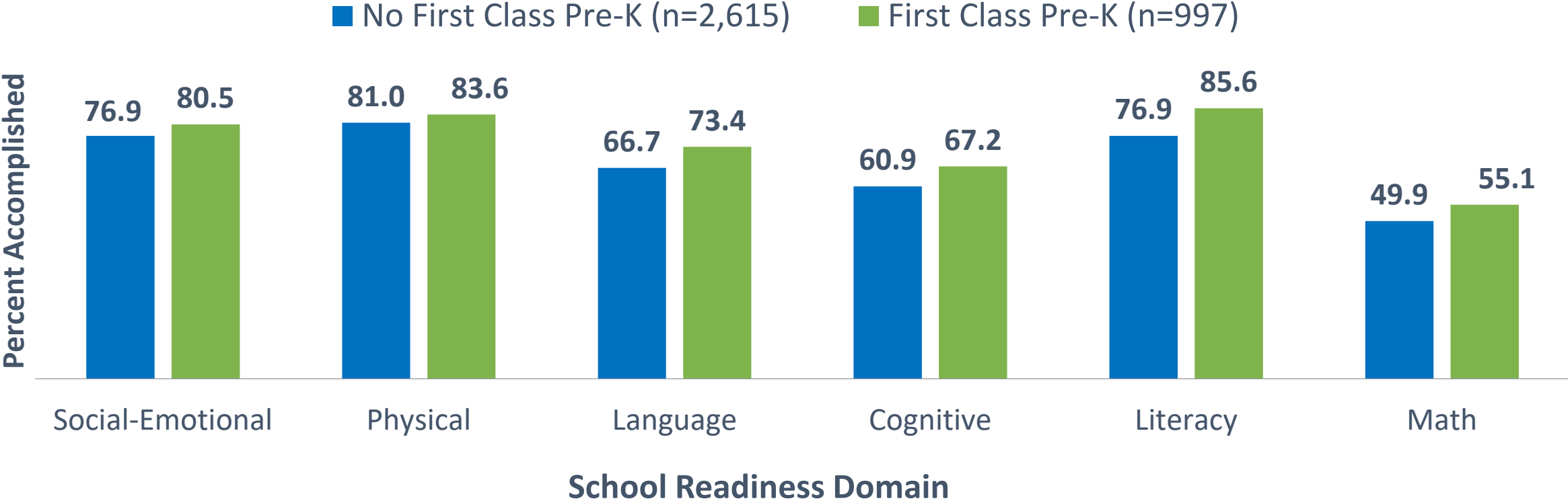
Kindergarten Readiness by Developmental Skill Area
First Class Pre-K, Spring 2019



Kindergarten Readiness: At Kindergarten Entry

Children who completed First Class Pre-K were more likely to test as “ready” at the beginning of Kindergarten than were children who did not receive First Class Pre-K.

Teaching Strategies GOLD Kindergarten Entry Assessment; Fall 2017



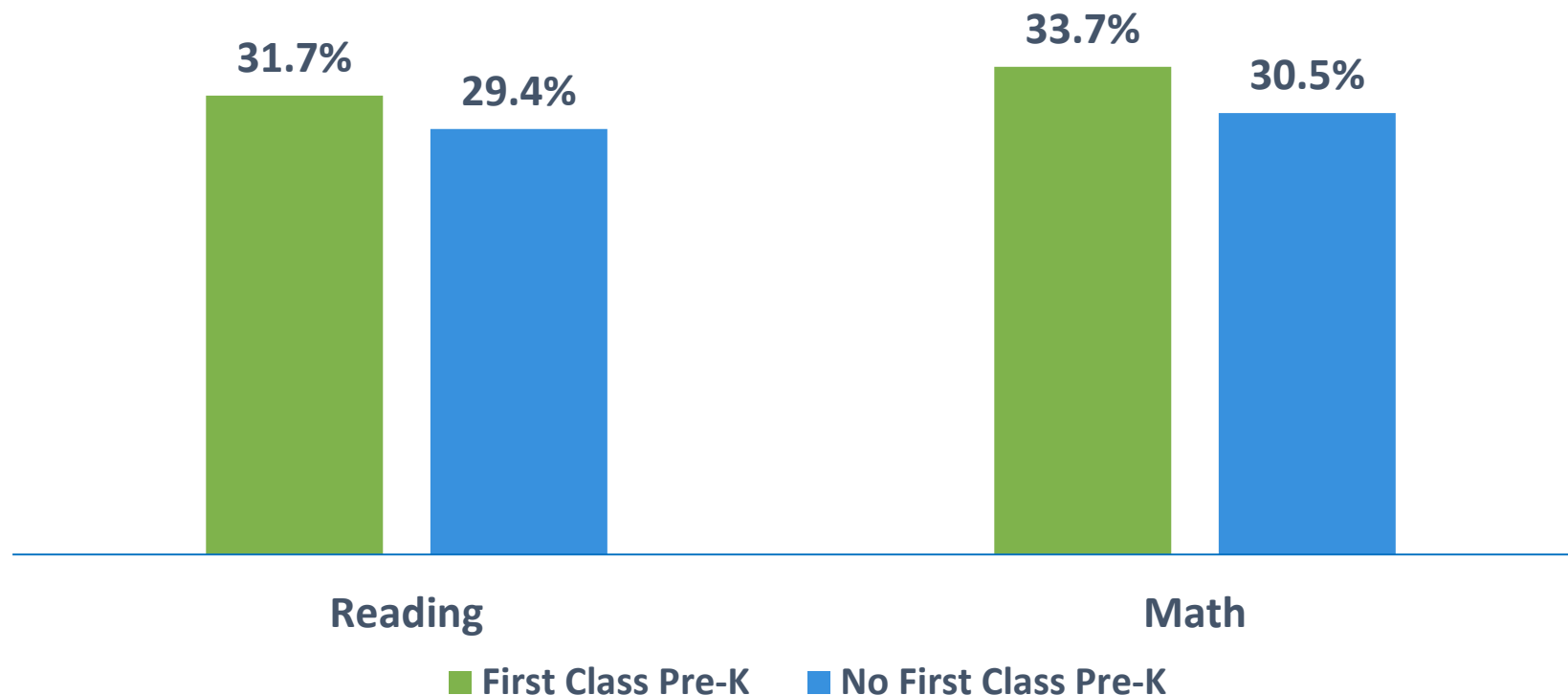
Reading and Math Proficiency

Scantron®

Impact: Reading and Math Proficiency for Low Income Students

Low income children who attended First Class Pre-K were more likely to be proficient in reading and math than were those who did not attend.

Scantron, Spring 2019, Overall Proficiency for 3rd – 8th Grades

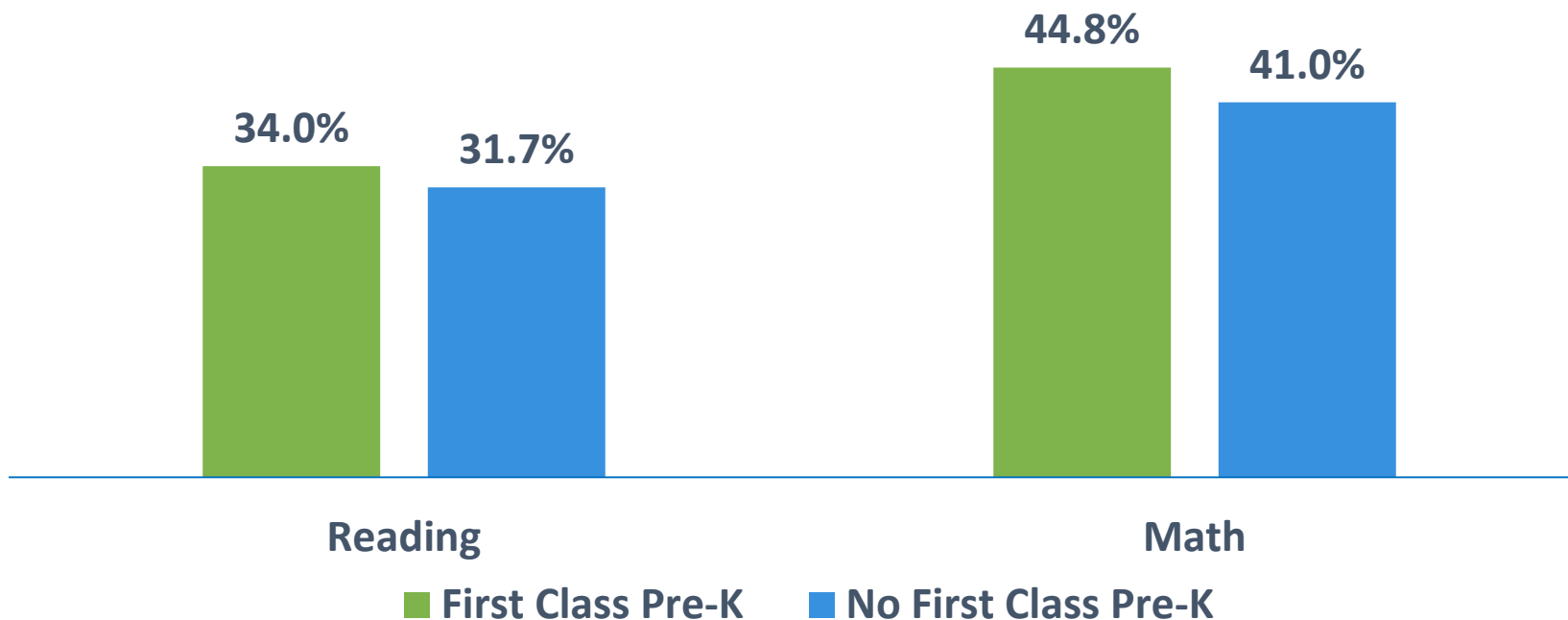


- Proficient = Level 3 or 4 on Scantron and in expected grade based on year of Kindergarten entry (never retained)
- Results statistically significant by Chi square analyses at $p < 0.0001$

Impact: 3rd Grade Reading and Math Proficiency for Low Income Students

Among Alabama's most vulnerable 3rd grade children, those who received First Class Pre-K were more likely to be proficient in reading and math compared with children who did not receive First Class Pre-K.

Scantron, Spring 2019, Proficiency at 3rd Grade



Reading and Math Proficiency – Sustained Benefits Over Time

ACT-ASPIRE[®]

Impact: Reading and Math Proficiency for All Students

Using advanced statistical methods to “control” for all other characteristics* that might influence school performance,

Children who received First Class Pre-K were:

- **More likely to be proficient in reading**
- **More likely to be proficient in math**

Compared to children who did not receive First Class Pre-K.

❖ We see no evidence of fade out of benefits over time.

Based on analyses of ACT Aspire results from Spring 2015, 2016, and 2017 for children in 3rd through 7th grades.

*Multivariable linear probability fixed effects models control for receipt of First Class Pre-K, year received/could have received First Class Pre-K, race/ethnicity, gender, poverty, and school attended.

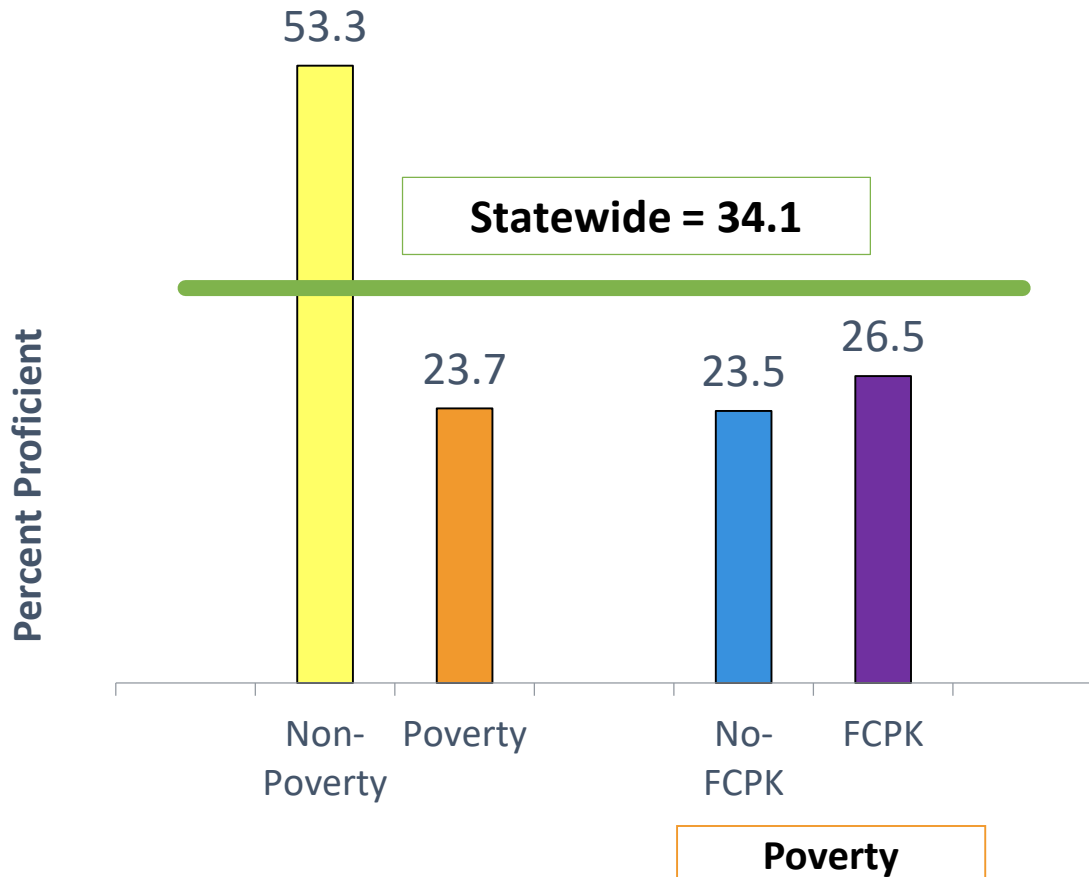
Reading and Math Proficiency Achievement Gap Closure for Low Income Students

ACT-ASPIRE®

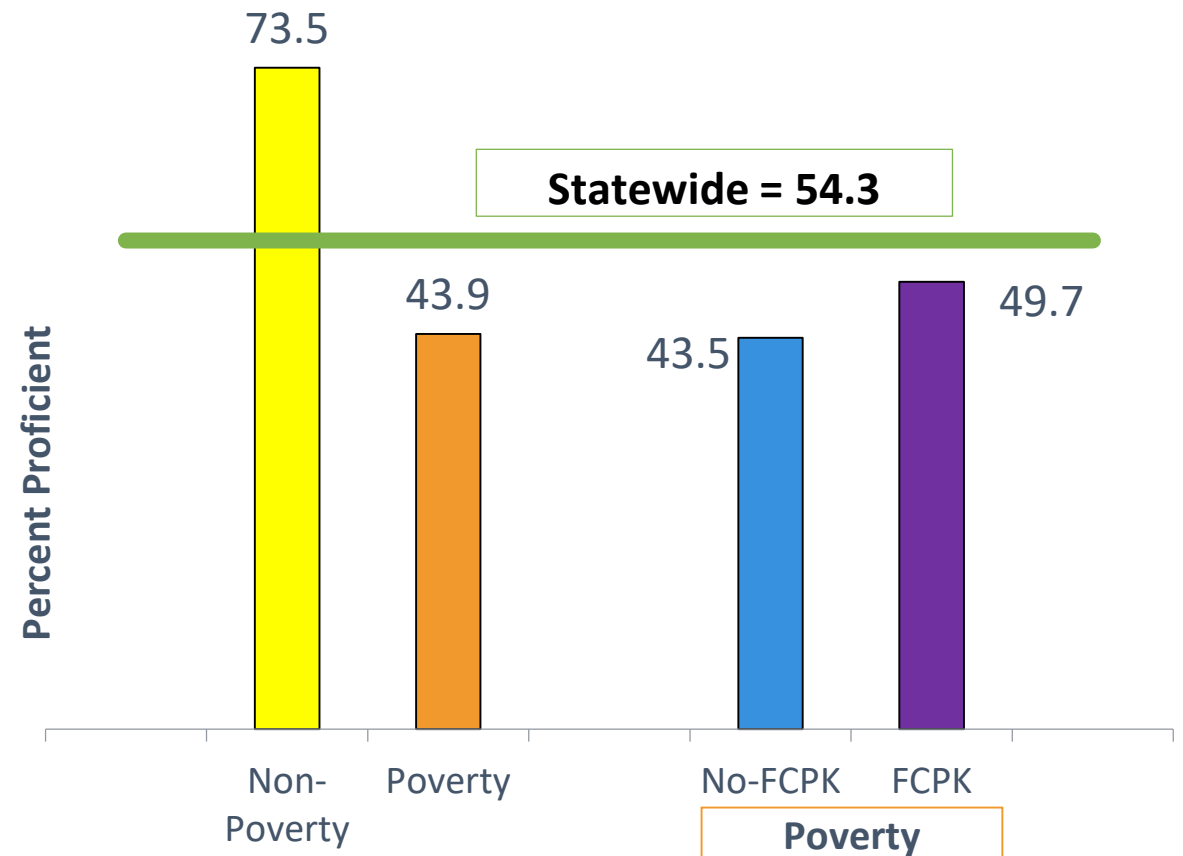
3rd Grade Achievement Gap Based on Income

In both Reading and Math, we observe a **29.6 percentage point gap** in proficiency between poverty and non-poverty students. First Class Pre-K closes that gap for children in poverty.

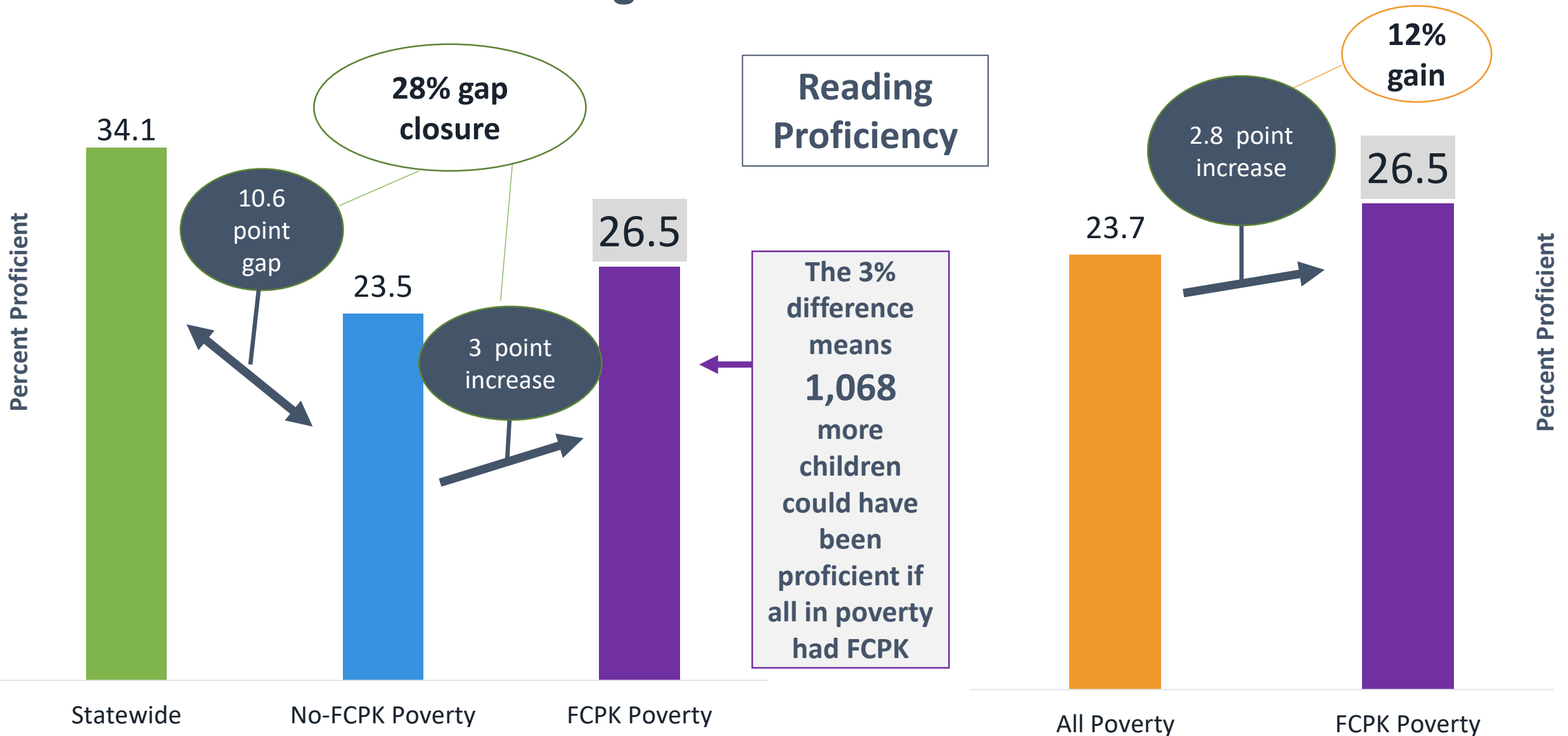
Reading Proficiency



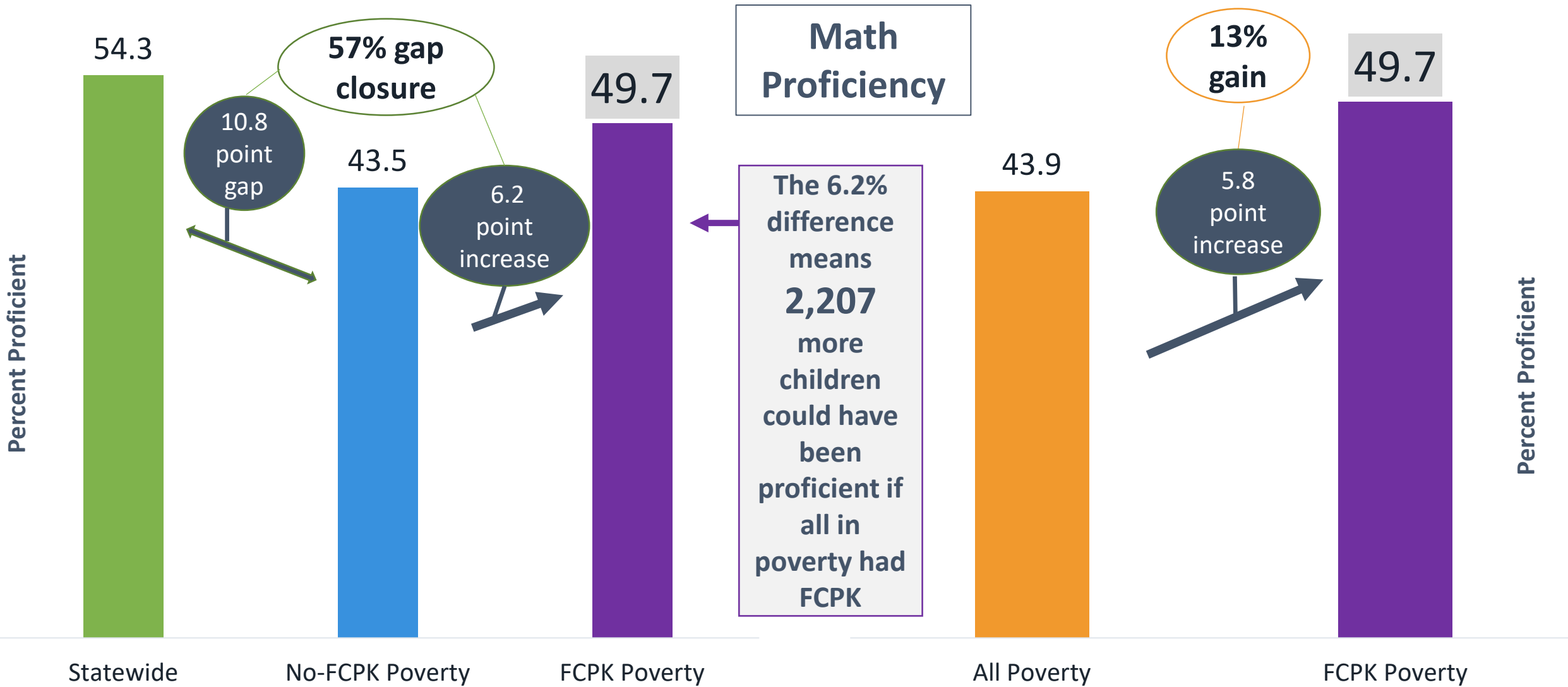
Math Proficiency



Impact: Narrowing the 3rd Grade Achievement Gap in Reading for Low Income Students



Impact: Narrowing the 3rd Grade Achievement Gap in Math for Low Income Students

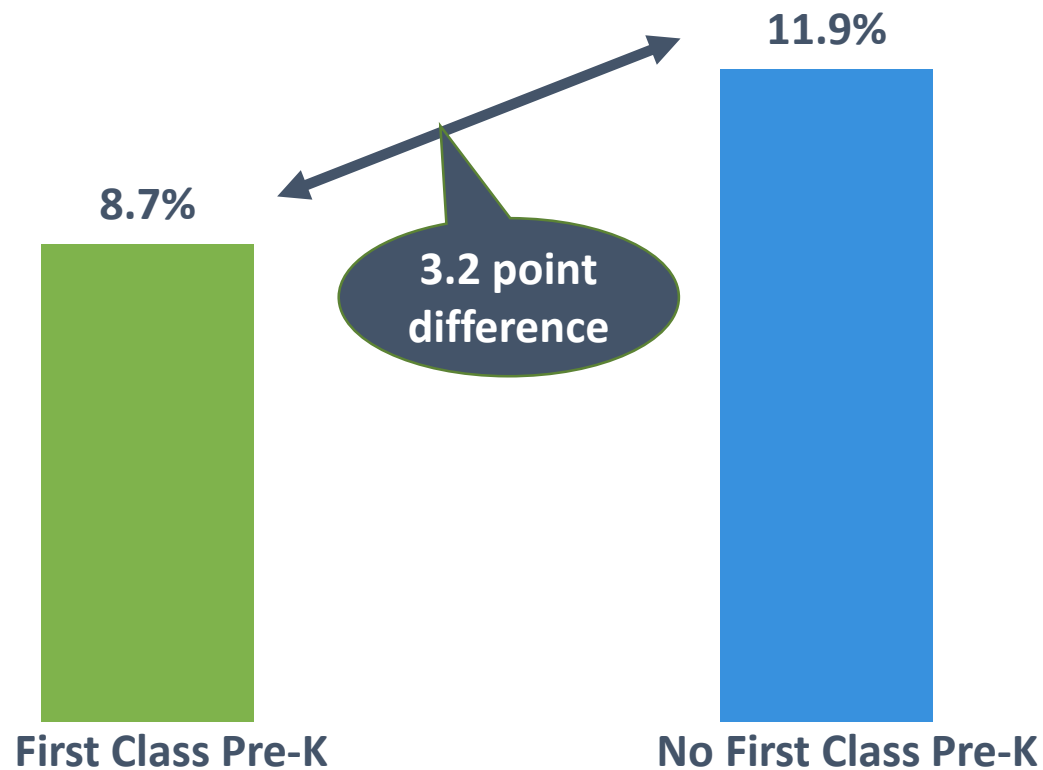


Retention in Grade

Impact: Grade Retention for All Students

Children who received First Class Pre-K are less likely to be retained in grade than children who did not attend.

Percent Children Retained At Least Once in K -7th Grade,
as of Fall 2019



The 3.2 percentage point difference represents a $\frac{1}{4}$ reduction in retention.

The difference means that **13,763** fewer children would have been retained if all in these grades had received FCPK.

Reducing retention =
Fewer “extra years” →
cost savings

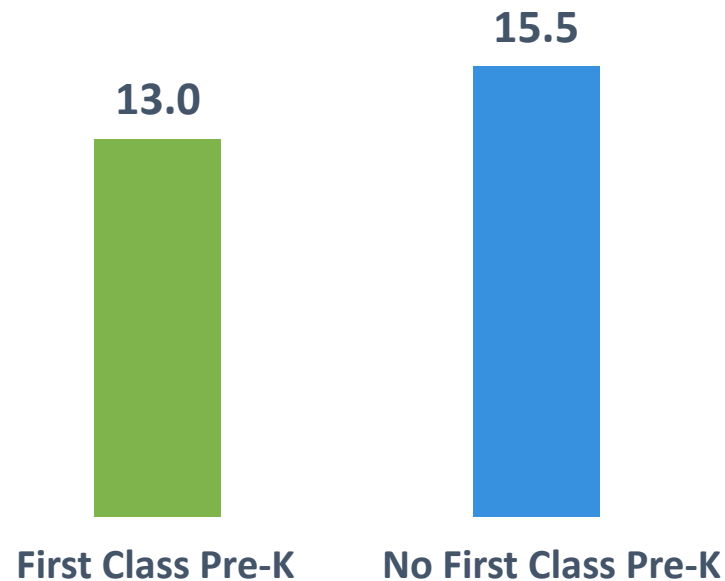
Estimated potential cost savings of
\$126,798,519.

Chronic Absenteeism

Impact: Chronic Absenteeism for All Students

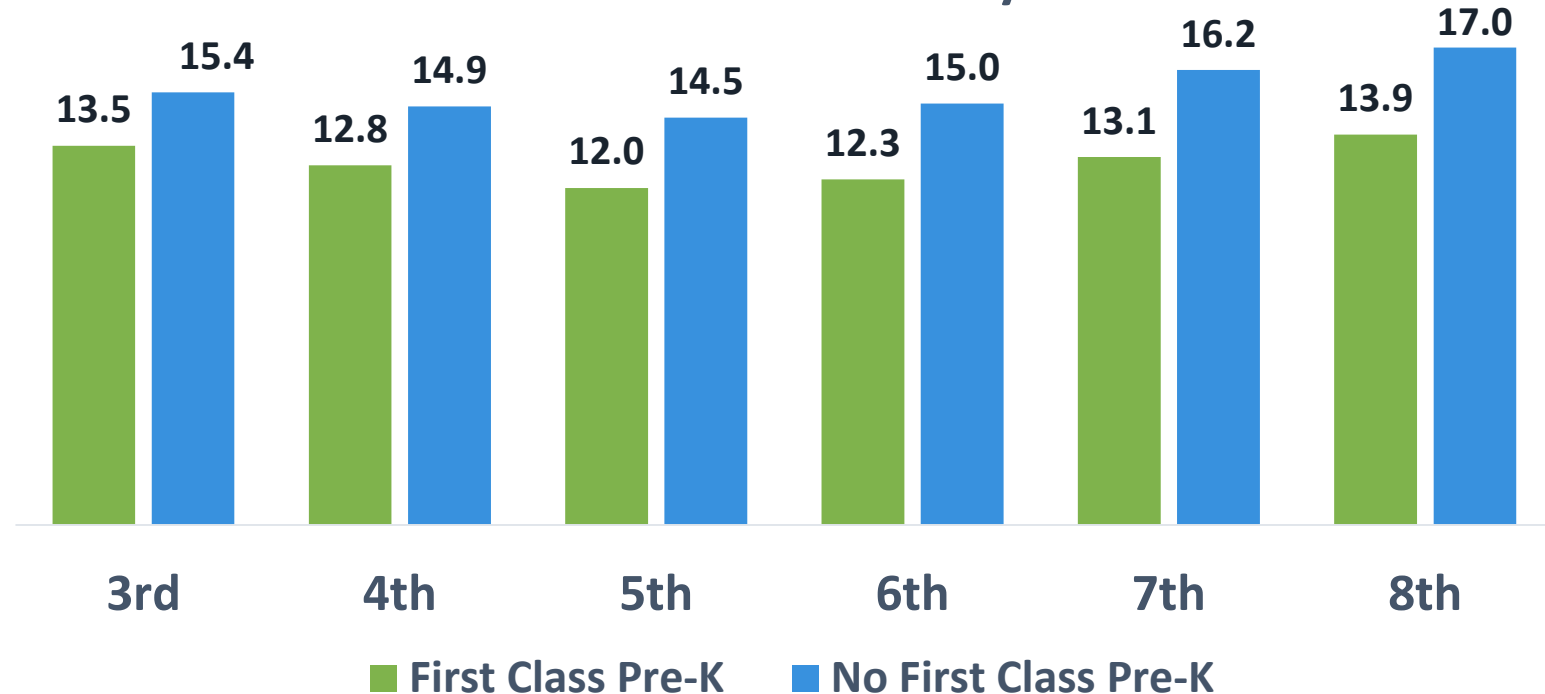
Children who attended First Class Pre-K are less likely to be chronically absent overall and consistently across grades.

Percentage Chronically Absent, Overall 3rd-8th Grades, 2018-2019 school year



Results statistically significant by Chi square analyses at $p < 0.0001$

Percentage Chronically Absent by Grade, 2018-2019 school year

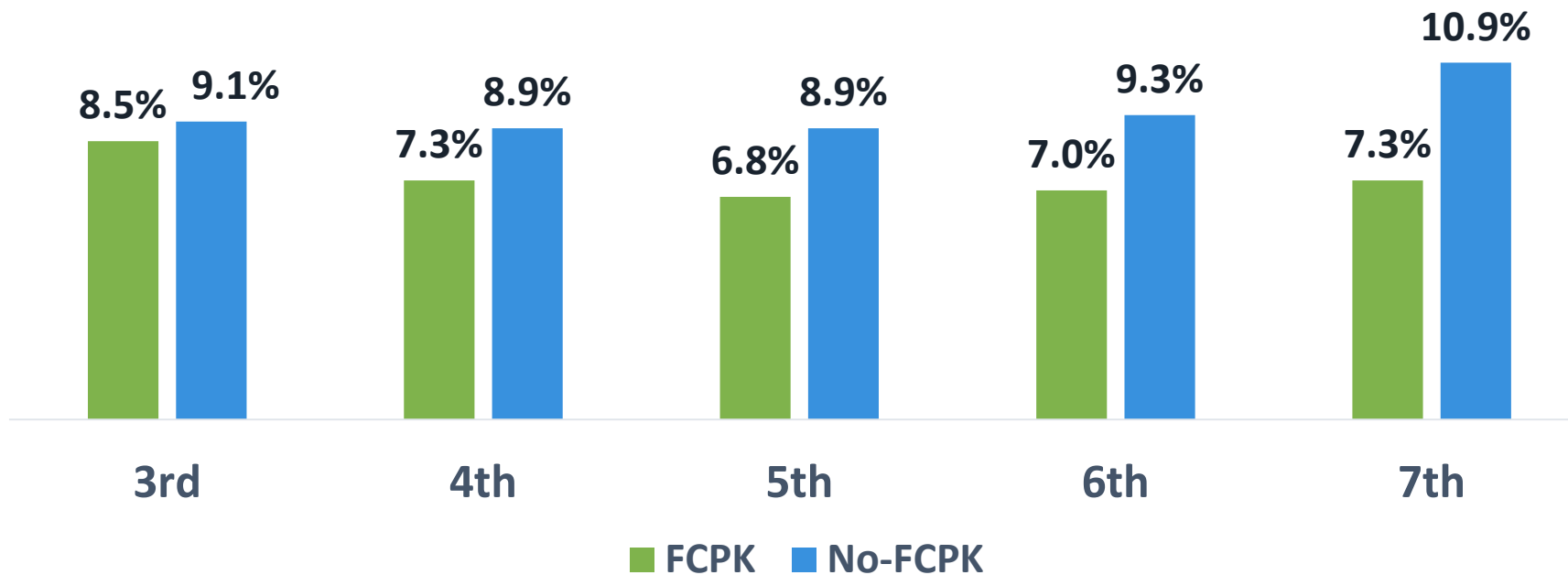


Chronically absent students missed 15 or more days per year

Impact: Attendance for Low Income Students

Alabama First Class Pre-K children consistently over time and across grades miss fewer days of school. Low income children who received First Class Pre-K are less likely to be chronically absent.

Percentage of Low Income Children who were Chronically Absent by Grade, 2015-2016 school year



These differences result in an estimated \$5,403,655 in cumulative “lost cost” avoided

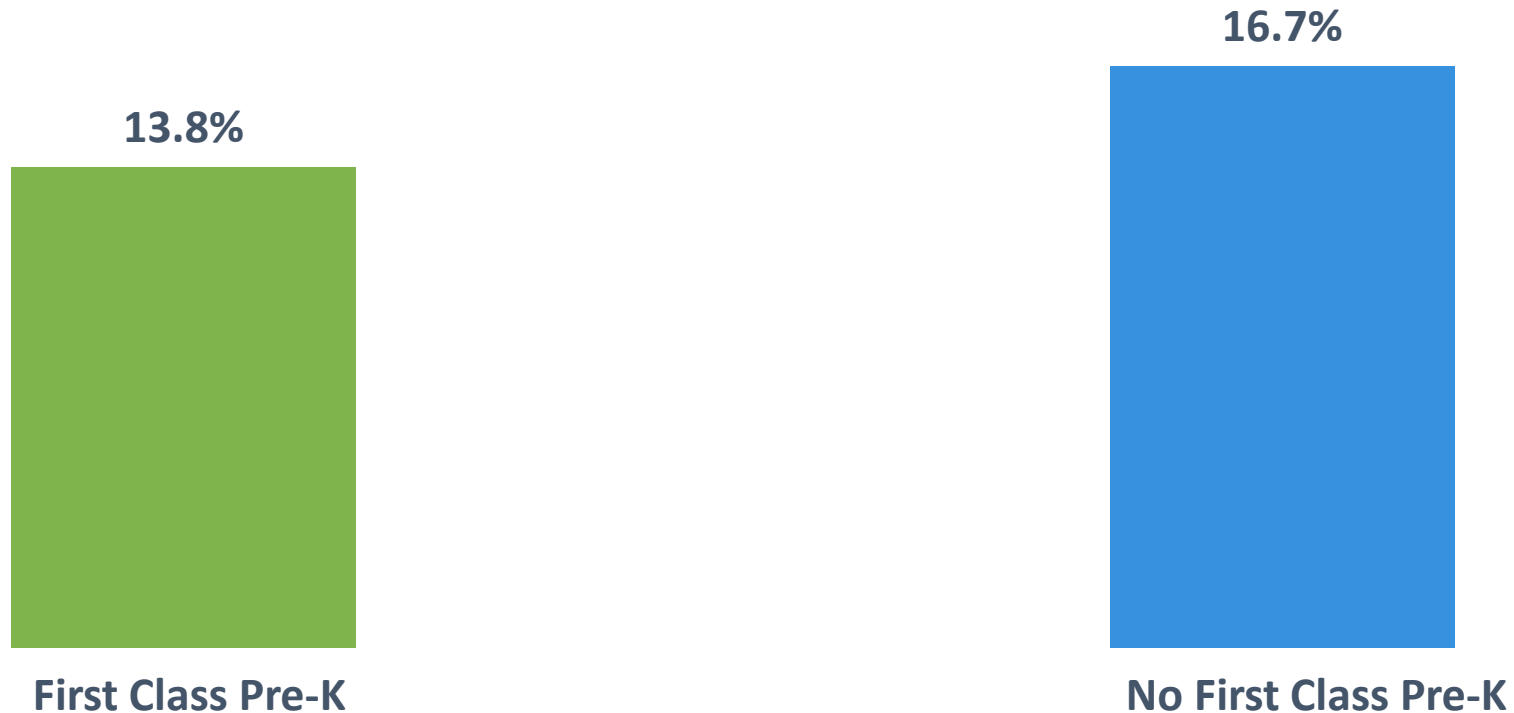
Chronically absent students missed 18 or more days per year

Special Education

Impact: Special Education for All Students

Children who received First Class Pre-K are less likely to need special education services than children who did not attend.

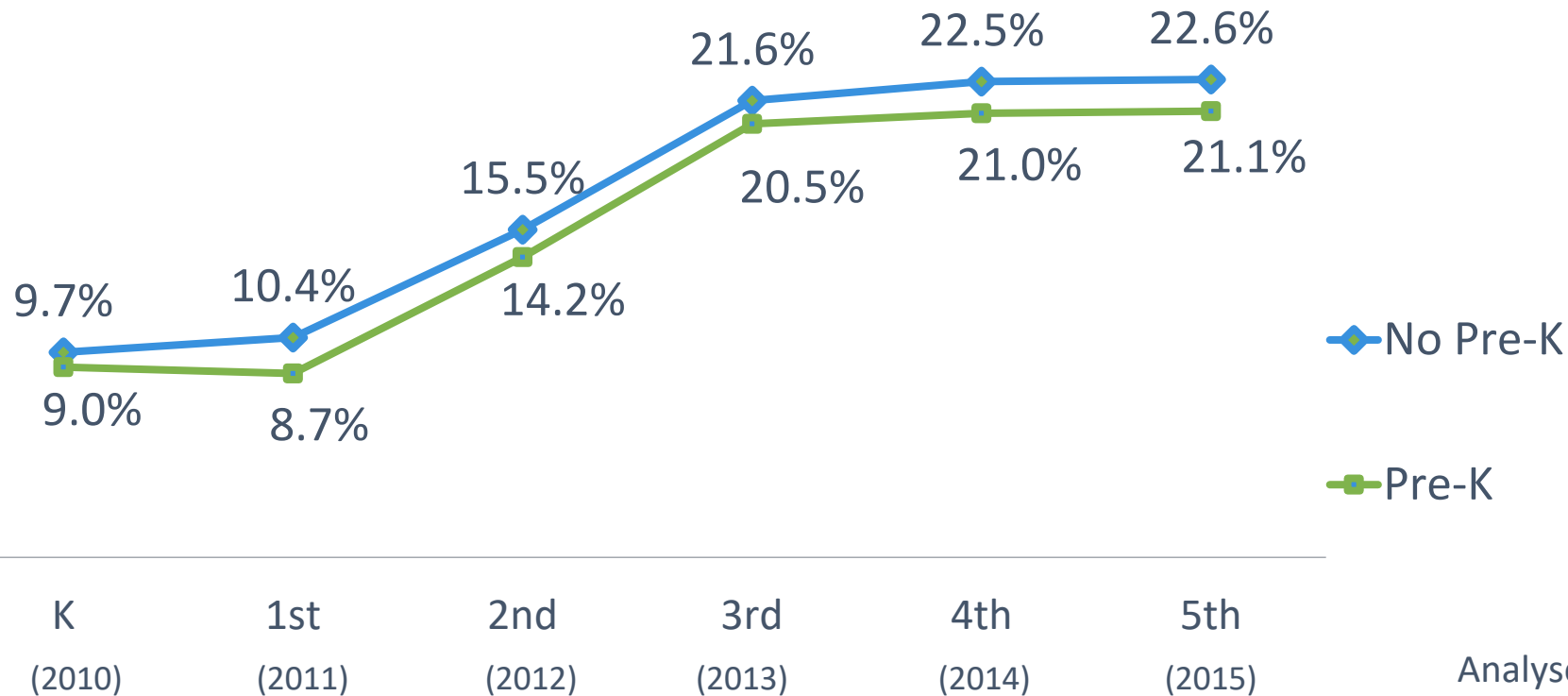
Percent of Children with Individualized Education Program within Past Two Years, Grades 3rd – 8th, as of Fall 2019



Impact: Special Education for All Students

In an analysis of children who began Kindergarten in 2010, at each grade children who received First Class Pre-K needed special education services at lower percentages compared with children who did not receive First Class Pre-K.

Percentage of Children Receiving Special Education



These differences result in a cost savings of \$4,374,400 over this group's K-12 experience

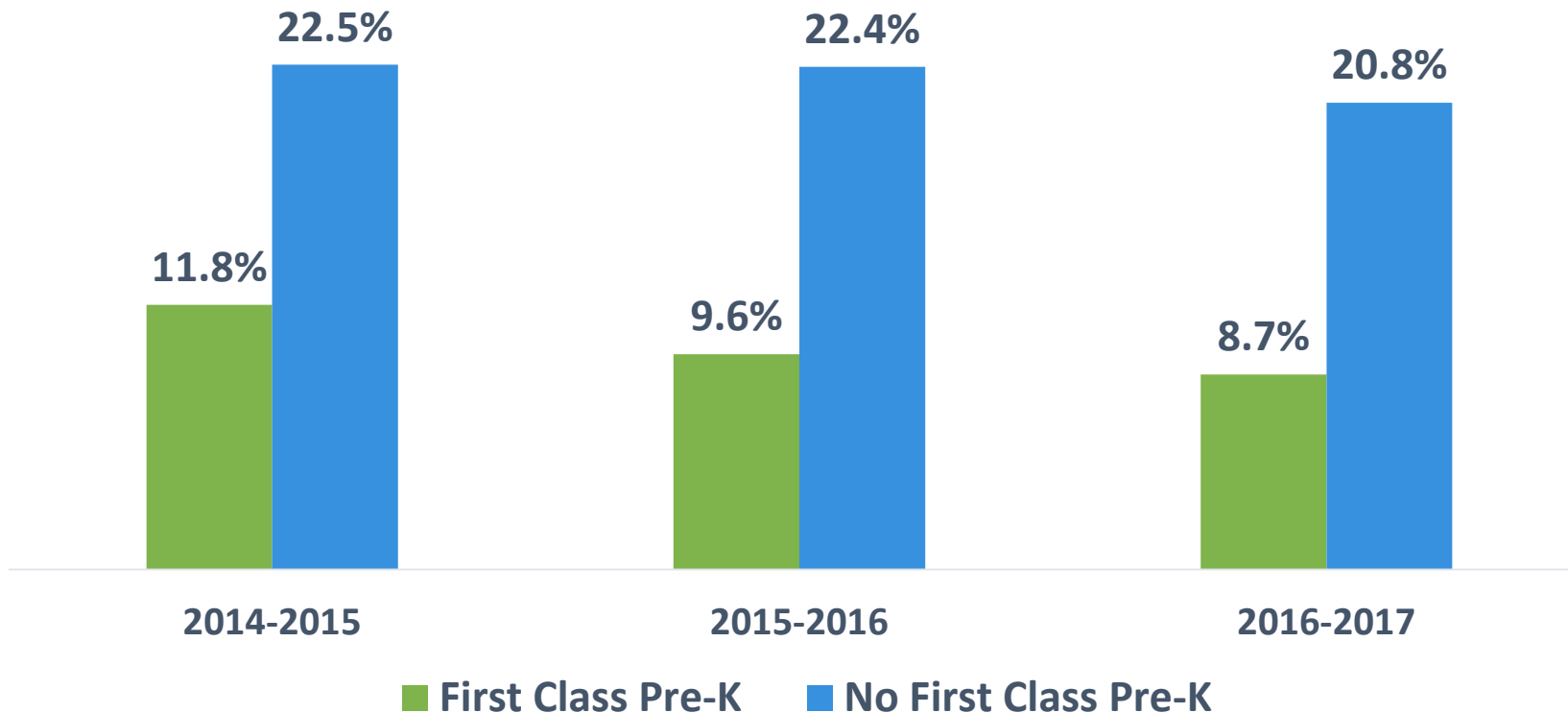
Analyses through 2015-2016 school year

Disciplinary Issues

Impact: Disciplinary Issues

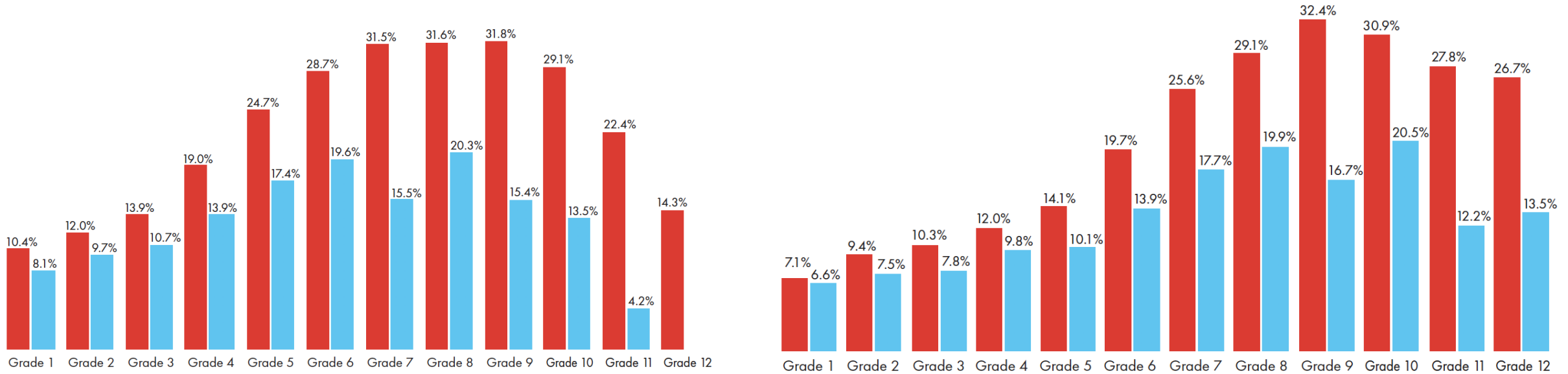
Children who attended First Class Pre-K have lower discipline rates compared to those who did not attend.

Percentage of Students with Disciplinary Infractions, Grades 1st – 12th, by School Year



Impact: Disciplinary Issues

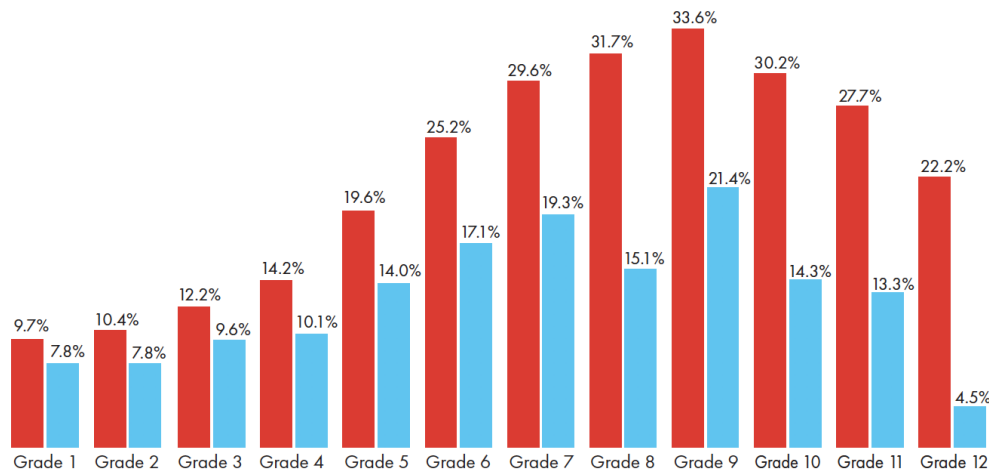
Children who attended First Class Pre-K are have lower discipline rates consistently across grades. The discipline rate differences are larger in middle and high school.



2014-2015

2015-2016

2016-2017



No First Class Pre-K



First Class Pre-K

