

KIPP Foundation

Success as the Norm: Scaling-Up KIPP's Effective Leadership Development Model

WHAT WERE THE IMPACTS OF KIPP'S LEADERSHIP DEVELOPMENT MODEL ON STUDENT ACHIEVEMENT?

Project Overview

THE PROBLEM: What Challenge Did the Program Try to Address?

Students from low-income backgrounds typically have lower educational attainment outcomes than students from middle- and upper-income backgrounds. Nationwide, less than 10% of students from low-income backgrounds earn a four-year degree. KIPP, wishing to expand to reach more students, did not have enough highly qualified leaders to grow. Thus, the scale-up was designed to train new leaders.¹

THE PROJECT: What Strategies Did the Program Employ?

To help address these disparities, the KIPP network of public charter schools is continuing to expand to serve greater numbers of low-income students across the United States (U.S.). With an i3 scale-up grant awarded for 2010–2015, KIPP expanded its reach to 162 elementary, middle, and high schools. The KIPP Approach is rooted in seven key principles (the KIPP Approach). The key evaluation objective was to measure the impact of KIPP on student outcomes as the network scales up the number of schools, students, and grades served. To test KIPP's impact, lottery-based randomized control trial (RCT) designs and matched-comparison quasi-experimental designs were used in a set of eight elementary, 43 middle, and 18 high schools in 20 cities. The analysis uses data from study-administered student achievement tests; state assessments in math, English/language arts (ELA), science, and social studies; and student and parent surveys

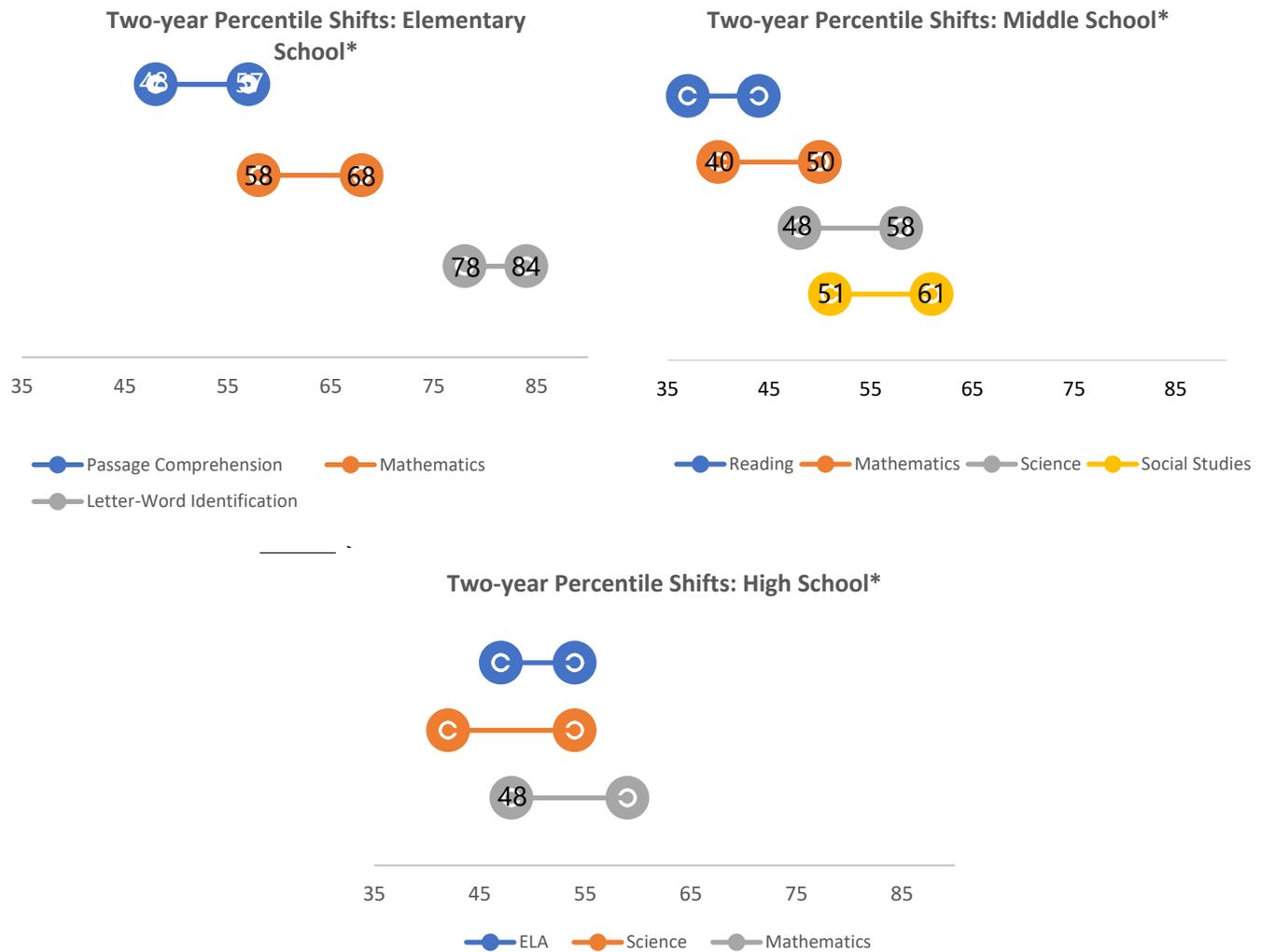
¹ KIPP Foundation received an i3 scale up grant supported by the U.S. Department of Education's Investing in Innovation program through Grant Number U396A100031.

The KIPP APPROACH

- **Belief.** All students can learn and achieve.
- **Goal.** College graduation is the goal for all students.
- **Curriculum.** All students are provided rigorous academics and character development.
- **School leadership.** Visionary leaders are central to the development and operation of effective schools.
- **Teachers.** Excellent teachers are imperative to help students succeed.
- **Existing resources.** School leaders and teachers leverage existing knowledge in their work.
- **Continuous learning.** The network emphasizes continuous learning and improvement.

Summary of Results

WHAT ARE THE IMPACTS OF KIPP'S LEADERSHIP DEVELOPMENT MODEL ON STUDENT ACHIEVEMENT?



* ALL FINDINGS SHOWN ARE STATISTICALLY SIGNIFICANT.

KIPP STUDENTS HAD GREATER ACADEMIC ACHIEVEMENT than similar students who did not attend KIPP schools. Mean differences were statistically significant for elementary, middle, and high schools. The study used different approaches to measure impacts on elementary, middle, and high school students. KIPP's impacts are described below

- **ELEMENTARY SCHOOL STUDENTS.** Attending KIPP elementary schools positively impacted student achievement in reading, as measured by the Woodcock Johnson Achievement Test Letter-Word ID and Reading Comprehension scales. Math achievement was also impacted. Both positive impacts are statistically significant.
- **MIDDLE SCHOOL STUDENTS.** KIPP middle schools have positive and statistically significant impacts on students' state test scores in both math and reading, by the second year after students are admitted.
- **HIGH SCHOOL STUDENTS.** Having the opportunity to attend a KIPP high school, provides a statistically significant boost to new entrants' high school math scores. Relative to outcomes for the matched comparison group, KIPP students experience similar statistically significant science achievement. For students continuing from KIPP middle schools, the achievement impacts of KIPP high schools are not statistically significant on average, but these impacts vary by school.

Please see Appendices A and B for information about the evaluation's design and the quality of the evidence, respectively.

SECONDARY FINDINGS

- **IMPACT DECREASED IN MIDDLE SCHOOLS OVER TIME.** Across the KIPP network, the average impacts of middle schools were positive and statistically significant throughout the 10-year period for which we have data, though higher in earlier years than recent years. Impacts were largest in 2007 and earlier, especially in math, ranging from 0.38 to 0.50 standard deviations, compared with 0.16 to 0.30 between 2008 and 2014. In 2013 and 2014, when these two-year impacts fully reflect the performance of KIPP schools during the scale-up period, math impacts are 0.22 and 0.24, respectively.
- **STUDENT RETENTION.** Continuing students with the option to attend a KIPP high school are less likely to drop out of high school. The overall dropout rate is very low but is significantly lower for the treatment group—1% for those who had the chance to attend a KIPP high school and 3% for those who did not.

OTHER CONSIDERATIONS

The KIPP network grew its number of schools during the study and was still able to maintain positive impacts on student achievement at the elementary, middle, and high school levels. This suggests that the KIPP program can be expanded to reach more students across the country while still maintaining its effectiveness. In addition to impacting academic achievement, KIPP also played a role in student and parent satisfaction and knowledge. Therefore, increasing access to KIPP schools could lead to additional gains beyond academic outcomes:

- **PARENT SATISFACTION.** KIPP elementary and middle school parents reported more satisfaction with their child's school compared to the parents of students who did not attend a KIPP school.
- **STUDENT MOTIVATION AND ENGAGEMENT, BEHAVIOR, OR EDUCATIONAL ASPIRATIONS.** At all three grade levels, KIPP did not significantly affect measures of motivation and engagement related to student self-control, academic motivation, academic confidence, grit, school engagement, or effort in school, including student reports of the time spent on homework. Student behavior was measured only at the elementary and middle school levels; we find no evidence that KIPP schools affect behavior, including indices of positive behaviors, undesirable behaviors, peer pressure, illegal activities, parental concerns about their child, frequency of school disciplinary actions (according to the parent), and the extent to which the child is well-adjusted, the educational goals and aspirations among these elementary, middle, and high school students are high in both the treatment and comparison groups.
- **COLLEGE-GOING CULTURE.** Students who attend KIPP high schools are more likely to engage in college preparation activities. They are more likely to take college-level courses (i.e., advanced placement courses), have assistance applying to college, and discuss college financing with a staff member. Generally, they are more likely to apply to college than students who did not attend a KIPP high school.

For More Information

Evaluation Reports

- [Understanding the Effect of KIPP as it Scales: Volume I, Impacts on Achievement and Other Outcomes](#). (Mathematica Policy Research, 2015) ²

Additional Reports

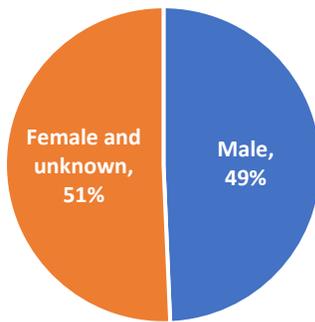
- [Understanding the Effect of KIPP as it Scales: Volume II, Leadership Practices at KIPP](#) (Mathematica Policy Research, 2015)

² The information and data for this result summary was collected from the most recent report, [Understanding the Effect of KIPP as it Scales: Volume I, Impacts on Achievement and Other Outcomes](#) from Mathematica Policy Research, September 2015, as of 01/23/2020.

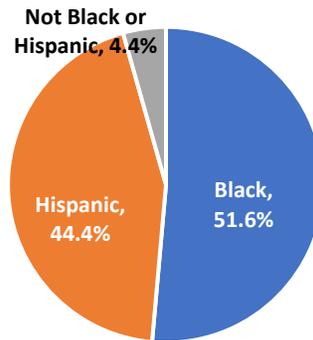
Appendix A: Students Served by the Project³

GRADE(S)													
PK	K	1	2	3	4	5	6	7	8	9	10	11	12

GENDER



RACE/ETHNICITY



COMMUNITY

Not reported

HIGH-NEED STUDENTSⁱ

Economically Disadvantaged	English Learners	Students with Disabilities
76%	16%	Not Reported/Not Applicable

³These data reflect the entire student population served by the intervention, not just the evaluation sample used in the impact study.

Appendix B: Impact Evaluation Methodology⁴

RESEARCH DESIGN

Design: Randomized Controlled Trial and Quasi-Experimental Design

- Approach:**
- A lottery-based design was used for the elementary students. This means that students who applied to the KIPP lottery and were selected are in the intervention group, while those who applied to the KIPP lottery and were not selected are in the control group.
 - Similar to the analysis for the elementary students, the middle school analysis also used a lottery-based design. In addition, it used a matched-student design to increase the sample. The matched-student design used propensity-score matching to define the comparison group of students who most closely matched the intervention group of students. Data below are for the matched-student sample.⁵
 - The high school analysis used a matched-student design and a matched-school design focused on two different samples. The statistics presented below are for the largest sample (the matched-student sample).⁶
 - The report presents evidence of baseline equivalence between the intervention and comparison groups of students.

Study Length: Five years

DATA COLLECTION AND ANALYSIS⁷

ELEMENTARY SCHOOL SAMPLE

Study Setting Eight KIPP elementary schools (intervention group)

Final Sample Sizes

- Intervention Group: 473 Students
- Comparison Group: 624 Students

Intervention Group Characteristics⁸

- Female: 44%
- Non-Hispanic White: 1%
- Black: 57%
- Hispanic: 39%
- Other Race/Ethnicity: 4%
- English main language spoken at home: 62%
- Family income below 50K: 86%

⁴ These data reflect only the evaluation sample in the impact study, not the entire population served.

⁵ Appendix E of the final evaluation report presents sample statistics for the lottery-based design, http://www.kipp.org/wp-content/uploads/2016/09/kipp_scale-up_vol1-1.pdf.

⁶ Appendix H of the final evaluation report presents sample statistics for the smaller sample, matched-student design, http://www.kipp.org/wp-content/uploads/2016/09/kipp_scale-up_vol1-1.pdf.

⁷ Appendices D – H of the final evaluation report present more data on the samples used in all analyses, http://www.kipp.org/wp-content/uploads/2016/09/kipp_scale-up_vol1-1.pdf.

Comparison Group Characteristics

- Female: 48%
- Non-Hispanic White: 1%
- Black: 54%
- Hispanic: 40%
- Other Race/Ethnicity: 4%
- English main language spoken at home: 60%
- Family income below 50K: 87%

Data Sources

- Parental survey
- Woodcock-Johnson III Tests of Calculation, Applied Mathematics, Letter-Word Identification, and Passage Comprehension

Key Measures

- Math achievement
- Reading achievement

MIDDLE SCHOOL MATCHED-STUDENT SAMPLE

- Thirty-seven KIPP middle schools (intervention group)

Study Setting

Final Sample Sizes

- *Intervention Group*: 20,312 Students
- *Comparison Group*: 20,312 Students

Intervention Group Characteristics⁹

- Free/Reduced Priced Lunch: 89%
- Limited English Proficiency: 10%
- Individualized Education Program: 7%
- Male: 49%
- Black: 51%
- Hispanic: 47%

Comparison Group Characteristics

- Free/Reduced Priced Lunch: 88%
- Limited English Proficiency: 10%
- Individualized Education Program: 7%
- Male: 50%
- Black: 52%
- Hispanic: 46%

Data Sources

- Student survey
- Parent survey
- State and district administrative records

Key Measures

- Reading achievement assessment
- Math achievement assessment
- Science achievement assessment
- History achievement assessment
- Grade repetition

⁹ Sample statistics are based on Year 1 reading outcomes.

HIGH SCHOOL MATCHED-STUDENT SAMPLE

Study Setting

- Fourteen KIPP high schools (intervention group)

Final Sample Sizes

- *Intervention Group*: 1,380 Students
- *Comparison Group*: 1,380 Students

Intervention Group Characteristics

- Free/Reduced Priced Lunch: 84%
- Limited English Proficiency: 7%
- Individualized Education Program: 9%
- Male: 46%
- Black: 52%
- Hispanic: 44%

Comparison Group Characteristics

- Free/Reduced Priced Lunch: 68%
- Limited English Proficiency: 6%
- Individualized Education Program: 11%
- Male: 51%
- Black: 42%
- Hispanic: 33%

Data Sources

- Student survey
- State and district administrative records

Key Measures

- Reading achievement assessment
- Math achievement assessment
- Science achievement assessment
- Social studies achievement assessment
- Four-year high school graduation

Appendix C: Quality of the Evidence

WHAT WORKS CLEARINGHOUSE REVIEW¹⁰

STUDY	RATING
<p>Understanding the Effect of KIPP as it Scales: Volume I, Impacts on Achievement and Other Outcomes [Middle School, RCT] https://ies.ed.gov/ncee/wwc/Study/85538</p>	<ul style="list-style-type: none"> Study meets WWC standards without reservations (middle school sample only) Reading and math: Statistically significant positive effects found
<p>Understanding the Effect of KIPP as it Scales: Volume I, Impacts on Achievement and Other Outcomes [Middle School, QED] https://ies.ed.gov/ncee/wwc/Study/85516</p>	<ul style="list-style-type: none"> Study meets WWC standards with reservations At least one statistically significant positive finding
<p>Understanding the Effect of KIPP as it Scales: Volume I, Impacts on achievement and other outcomes [High School]. https://ies.ed.gov/ncee/wwc/Study/85518</p>	<ul style="list-style-type: none"> Study meets WWC standards with reservations At least one statistically significant positive finding

EVIDENCE FOR ESSA REVIEW¹¹

STUDY	RATING
Not reviewed as of 01/23/2020	N/A

NATIONAL CENTER ON INTENSIVE INTERVENTIONS REVIEW¹²

STUDY	RATING
Not reviewed as of 01/23/2020	N/A

¹⁰ <https://ies.ed.gov/ncee/wwc/FWW>

¹¹ <https://www.evidenceforessa.org/>

¹² <https://intensiveintervention.org/>

Investing in Innovation (i3) Grantee Results Summary

Scale up, 2010-2015

The [Investing in Innovation Fund \(i3\)](#), established under section 14007 of the American Recovery and Reinvestment Act of 2009, is a Federal discretionary grant program at the U.S. Department of Education within the Office of Innovation and Improvement. i3 grants help schools and local education agencies work in partnership with the private sector and the philanthropic community to develop and expand innovative practices that improve student achievement or student growth, close achievement gaps, decrease dropout rates, increase high school graduation rates, and/or increase college enrollment and completion rates for high-need students.

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ⁱ "High-need student" refers to a student at risk of academic failure or otherwise in need of special assistance and support, such as students who are living in poverty, attend high-minority schools, are far below grade level, who have left school before receiving a regular high school diploma, at risk of not graduating with a diploma on time, who are homeless, in foster care, have been incarcerated, have disabilities, or who are English learners. For more information see: [Applications for New Awards: Investing in Innovation Fund-Development Grants](#), 81 FR 24070 (April 25, 2016).