

## WWC Quick Review of the Report “Student Characteristics and Achievement in 22 KIPP Middle Schools”<sup>1,2</sup>

### What is this study about?

This study examined the effect of the Knowledge is Power Program (KIPP) on reading and mathematics achievement in 5th- through 8th-grade students.

The study analyzed scores on state assessments for more than 5,600 students who attended 22 KIPP middle schools in nine states and Washington, DC, in the 2000s.

Students were followed for one to four years, depending on data availability, and the study standardized all test scores so they could be compared across states.

KIPP middle school students were matched to students who had attended their same public elementary schools but subsequently attended non-KIPP middle schools.

The effectiveness of each school was assessed by comparing the average achievement of KIPP middle school students with that of their matches in the public schools.

### Features of the KIPP Middle Schools

KIPP is a network of charter schools that aim to improve the education of students from low-income families and to prepare these students for success in college.

The Knowledge is Power Program is based around high expectations for student achievement; commitment to a college preparatory education by students, parents, and faculty; devotion of time to both educational and extracurricular activities; increased leadership power of school principals; and a focus on results through regular student assessments.

This study included 22 of the 35 KIPP middle schools in 2005 that were in jurisdictions in which data necessary for the analyses were available.

Compared with public middle schools in their districts, KIPP schools in the study enrolled higher percentages of minorities, students who qualified for free or reduced-price lunch, and low-achieving students; they enrolled lower percentages of students in special education or with limited English proficiency.

(continued)

<sup>1</sup> Tuttle, C. C., Teh, B., Nichols-Barrer, I., Gill, B. P., & Gleason, P. (June 2010). *Student characteristics and achievement in 22 KIPP middle schools*. Washington, DC: Mathematica Policy Research, and Tuttle, C. C., Teh, B., Nichols-Barrer, I., Gill, B. P., & Gleason, P. (July 2010). *Supplemental analytical sample equivalence tables for student characteristics and achievement in 22 KIPP middle schools: A report from the National Evaluation of KIPP Middle Schools*. Washington, DC: Mathematica Policy Research.

<sup>2</sup> Absence of conflict of interest: This study was conducted by staff from Mathematica Policy Research, which operates the WWC. For this reason, no staff from Mathematica participated in the study's review.

Quick reviews examine evidence published in a study (supplemented, if necessary, by information from author queries) to assess whether that study's design meets WWC evidence standards. Quick reviews rely on the effect sizes and significance levels reported by study authors.

The WWC rating applies only to the summarized results, and not necessarily to all results presented in the study.

## What did the study find?

Students in the 22 KIPP middle schools studied had higher reading and math test scores, on average, than similar students in public middle schools.

The following differences were statistically significant: After one year of participation, students in eight KIPP schools demonstrated higher reading achievement scores, with effect sizes ranging from 0.14 to 0.43. Additionally, students in 15 KIPP schools demonstrated higher math scores, with effect sizes ranging from 0.10 to 0.76.

After three years, students in 14 KIPP schools demonstrated higher reading achievement scores, with 11 schools achieving an effect size of 0.28 or greater, corresponding to an estimated 0.9 years of additional growth in reading achievement, according to the authors.

Additionally, students in 18 KIPP schools demonstrated higher math scores, with 11 schools achieving an effect size of 0.48 or greater, corresponding to an estimated 1.2 years of additional growth in math achievement, according to the authors.

The WWC has reservations about these results because KIPP students may have differed from comparison students in ways not controlled for in the analysis.

## WWC Rating

### ***The research described in this report meets WWC evidence standards with reservations***

**Strengths:** The researchers used a statistical procedure to create a comparison group well matched to the KIPP group on baseline test scores.

**Cautions:** Although the study matched KIPP students to comparison students based on test scores and demographic characteristics, it is possible that differences existed between the two groups that were not accounted for in the analysis; these differences could have influenced achievement growth. In addition, the study examined each of the 22 KIPP schools separately, so cross-school conclusions should be interpreted with caution.