

Evaluation Issue Brief

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Combined Attendance at KIPP Middle and High Schools Boosts College Enrollment and Graduation

The Knowledge Is Power Program (KIPP) is the nation's largest network of public charter schools. KIPP began as a network of charter middle schools designed to serve underserved communities, with the goal of closing achievement gaps and preparing students to succeed in college. KIPP has since expanded its model to include elementary and high schools in most regions and expanded its goals to include preparing students for success in carrying out their postsecondary plans, regardless of which pathway they choose. Prior research has demonstrated that KIPP has large positive impacts on student achievement. However, less is known about the network's impacts on longer-term outcomes, such as entry into and success in college.

This issue brief presents the results of a long-term tracking study that follows 2,066 students who applied to enter 21 KIPP middle schools that were popular enough to hold an admission lottery in 2008, 2009, or 2011. As of 2022, all those students were old enough to have attended college for at least three years, and the first two cohorts of students were old enough to have graduated from a four-year college. The study focuses on two analyses:

- The study's primary analysis examines the impact of KIPP middle schools on students' enrollment in and graduation from four-year college programs.
- In addition, the study examines the *combined* impact of attending both a KIPP middle school and a KIPP high school on these outcomes.

To collect information about these outcomes, we gathered data from the National Student Clearinghouse on college enrollment and graduation. The study used a randomized controlled trial design to ensure that students who were offered admission to a KIPP middle school (the treatment group) were similar on average to students who did not receive an offer of admission (the control group) on both observable characteristics, such as prior test scores, and unobservable characteristics, such as levels of motivation and parental support. Our primary

analysis measures the impact of admission to a KIPP middle school by comparing students who received an admission offer through the lottery with students who did not receive an offer. To measure the combined impact of attending a KIPP middle and high school relative to attending neither, we estimated an instrumental variables model based not only on the randomized admission lotteries described above, but also on differences in KIPP middle school students' opportunities to go on to attend a KIPP high school.

Findings in Brief

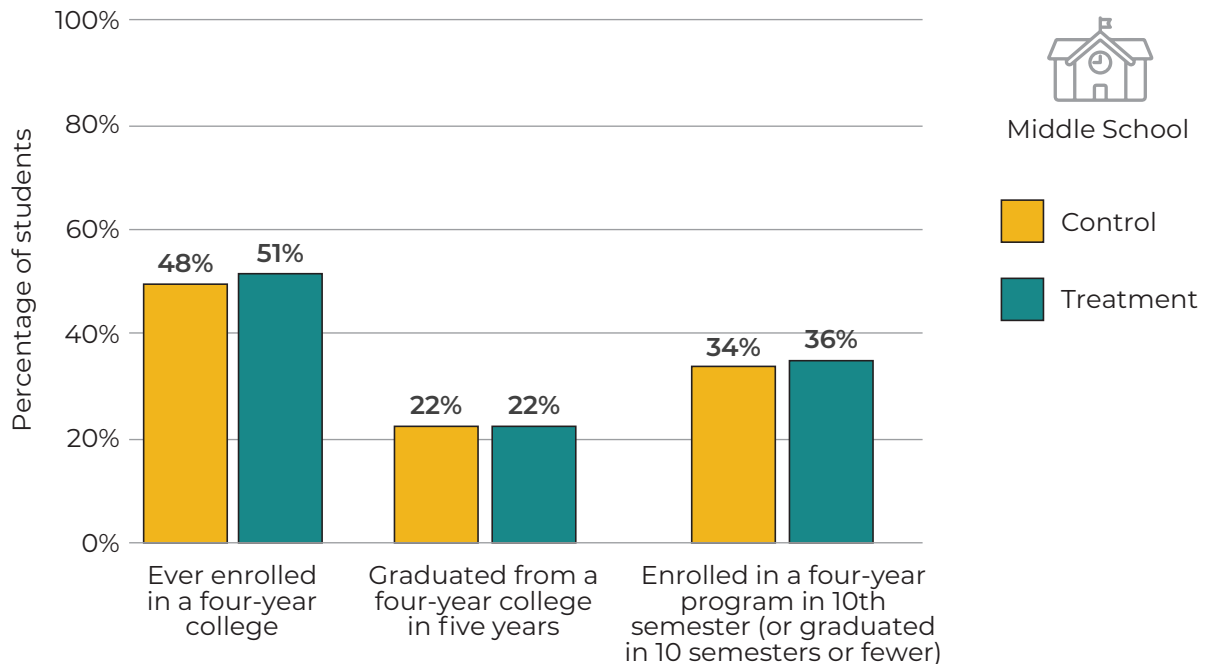
KIPP middle schools had a positive impact on enrollment in four-year college programs, but the effect was not statistically significant. On average, students who received an admission offer to a KIPP middle school were 3.8 percentage points more likely to enroll in a four-year college within three years after high school than students who applied to KIPP but were not offered admission (Figure 1).

Among our first two cohorts, for whom we can observe college persistence patterns for five years, students who received an admission offer to a KIPP middle school graduated from a four-year degree program, or were on-track to graduate, at rates similar to those of students not offered admission. Approximately 22 percent of students in both the treatment and control groups graduated from a four-year degree program within five years of high school. Accounting for students who were still enrolled in college five years after high school—or

“on track” to graduate—students who received an admission offer to a KIPP middle school were 1.3 percentage points more likely to either have graduated from or still be enrolled in a four-year college after five years, relative to students who did not receive an admission offer.

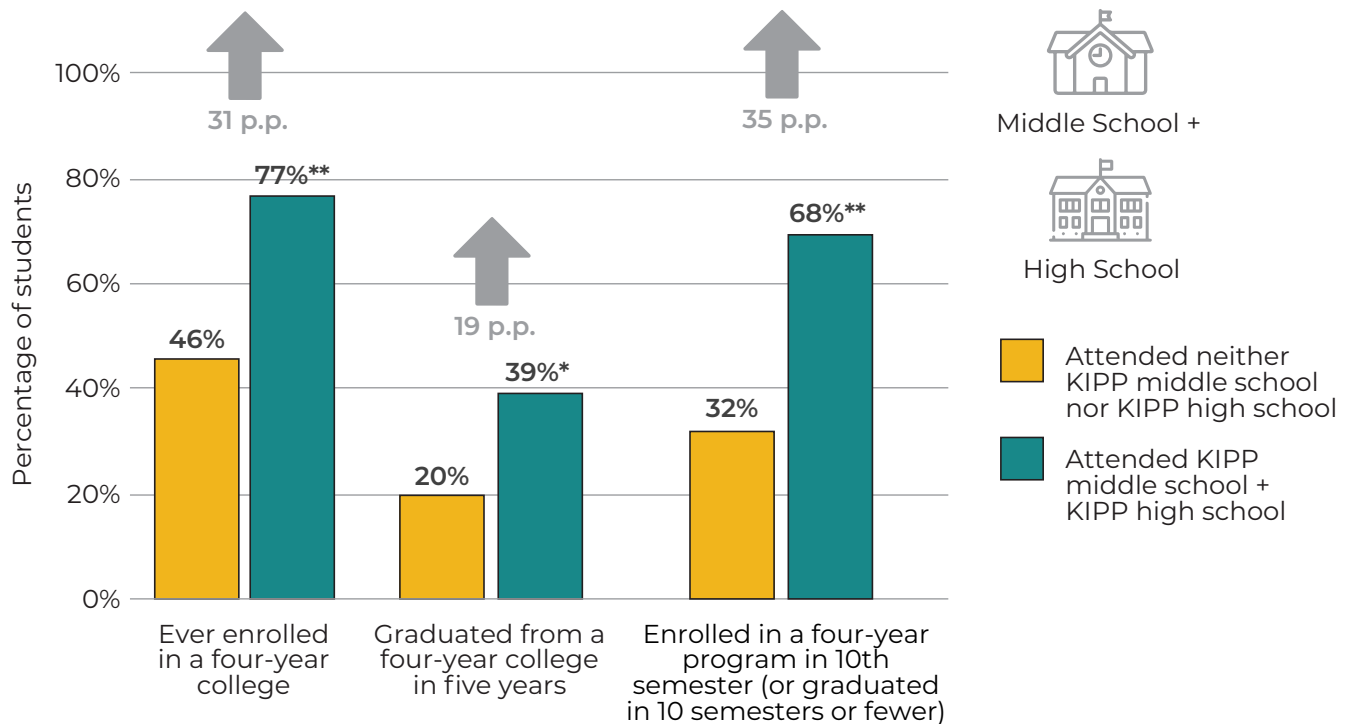
Students who received an admission offer to a KIPP middle school usually attended a KIPP middle school, and many went on to attend a KIPP high school. Approximately 70 percent of students who were offered admission to a KIPP middle school attended a KIPP middle school. Three-fourths of these students graduated from a KIPP middle school and a large share of KIPP middle school graduates matriculated into a KIPP high school (71 percent). Some students who did not attend a KIPP high school did not have the opportunity to attend because their region either did not have a high school at the time or did not have the capacity to seat all KIPP middle school graduates.

Figure 1. Impact of KIPP middle schools on four-year college enrollment and graduation



Note: Study includes 2,066 students who applied to enter KIPP through middle school admission lotteries, and compares the outcomes of students offered admission to KIPP (treatment group) to those not offered admission (control group) at the time of the lottery. The college graduation and “on-track” graduation outcomes include 1,177 students from the two earliest cohorts.

Figure 2. Impact of KIPP middle and high school attendance on four-year college enrollment and graduation



Note: Study includes 2,066 students who applied to enter KIPP through middle school admission lotteries, and compares the outcomes of students who attended a KIPP middle school and KIPP high school, to those who did not attend KIPP for middle or high school. The college graduation and “on-track” graduation outcomes include 1,177 students from the two earliest cohorts. Impacts (shown below the arrow) may differ from the difference in treatment and comparison group means due to rounding

*Impact estimate is significantly different from zero at the .05 level, two-tailed test.

**Impact estimate is significantly different from zero at the .01 level, two-tailed test.

p.p. = percentage points.

Attending a KIPP middle school and a KIPP high school had a large, positive impact on college enrollment (Figure 2). The analysis found that attending both a KIPP middle and high school, as opposed to attending neither, led to students being 31 percentage points more likely to enroll in a four-year college within three years of high school.

Among our first two cohorts, KIPP middle and high schools also had large and statistically significant combined effects on college graduation rates and on the likelihood of remaining on-track to graduate. Attending both a KIPP middle and high school, as opposed to attending neither, increased a student’s likelihood of graduating from a four-year college within five years after high school by 19 percentage points. Accounting for students who

were still enrolled in college five years after high school, the difference is even larger: KIPP middle and high school attendees were 35 percentage points more likely to either have graduated from or still be enrolled in a four-year college after five years, relative to students who never attended KIPP.

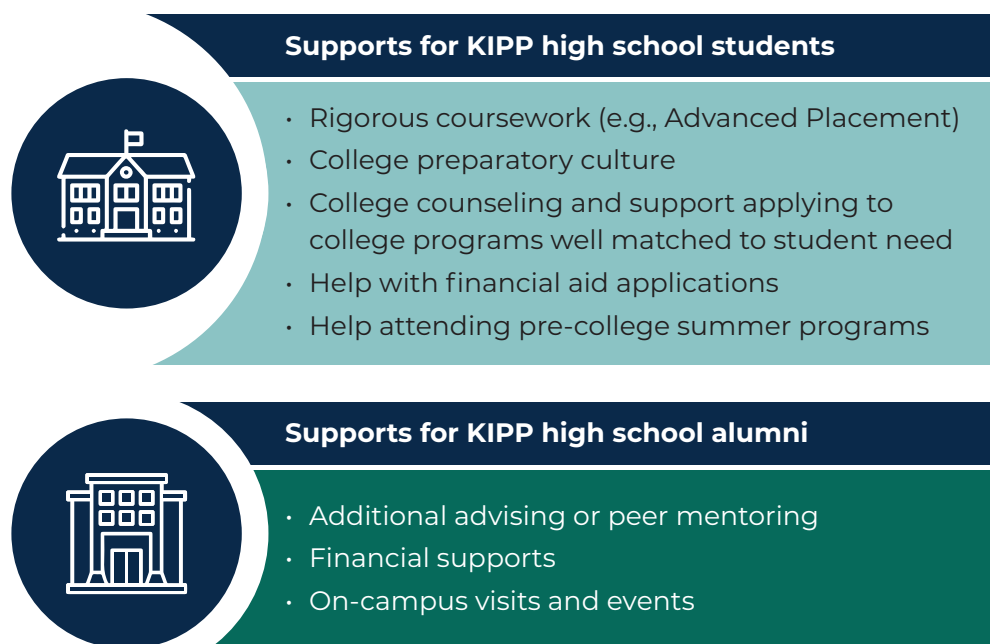
The magnitude of these impact estimates is large, and effects of this size have substantial policy relevance. Nationally, among students ages 25 to 29, 45 percent of White Americans have a bachelor’s degree compared to only 26 percent of Black Americans and 23 percent of Hispanic Americans—degree completion gaps of 19 and 22 percentage points, respectively (National Center for Education Statistics 2022). The impact of attending a KIPP middle and high school, extrapolated nationwide,

would be large enough to nearly close the degree-completion gap for Hispanic students or entirely close the degree-completion gap for Black students in the United States.

Previous research on KIPP high schools (Tuttle et al. 2015) and interviews with KIPP college support staff suggest that these findings may be driven by the

college preparatory culture at KIPP high schools, as well as college-related supports delivered to the schools' students and alumni (Figure 3). However, it remains to be seen whether KIPP's impacts on college enrollment and graduation will ultimately translate into improved employment and earnings outcomes for these KIPP alumni.

Figure 3. What drives KIPP high school success in promoting strong college outcomes?



Contact

For questions, please contact Alicia Demers at ademers@mathematica-mpr.com. This study was carried out with a grant from Arnold Ventures.

For further information, please see Demers, Alicia, Ira Nichols-Barrer, Elisa Steele, Maria Bartlett, and Philip Gleason. "Long-Term Impacts of KIPP Middle and High Schools on College Enrollment, Persistence, and Attainment." Cambridge, MA: Mathematica, September 2023.

References

National Center for Education Statistics. "Educational Attainment of Young Adults." Washington, DC: Institute of Education Sciences, May 2022. Available at https://nces.ed.gov/programs/coe/indicator_caa.asp. Accessed April 24, 2023.

Tuttle, Christina Clark, Philip Gleason, Virginia Knechtel, Ira Nichols-Barrer, Kevin Booker, Gregory Chojnacki, Thomas Coen, and Lisbeth Goble. "Understanding the Effect of KIPP as It Scales: Volume I, Impacts on Achievement and Other Outcomes." Washington, DC: Mathematica Policy Research, September 2015.