

Leveraging Lotteries To Gauge Charter Effectiveness

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The MIT School Effectiveness and Inequality Initiative

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 - Boston (Abdulkadiroglu, *et al.* 2011; Walters 2013; Setren 2016; Angrist, *et al.* 2016)
 - Lynn (Angrist, *et al.* 2010, 2012)
 - Massachusetts urban and non-urban districts (Angrist, Pathak, Walters 2013)

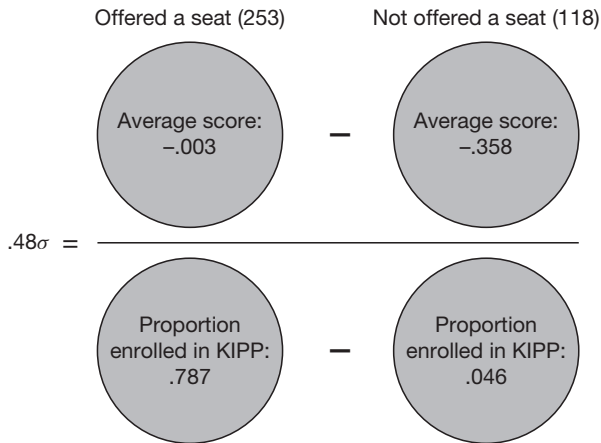
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- A consistent but nuanced picture emerges
 - Urban (mostly *No Excuses*) charters generate impressive achievement and post-secondary gains for their (mostly low income minority) students, including for special education and English language learners
 - Statewide, effects are mixed: on average, the non-urban charters we studied reduce achievement

KIPP Closes Achievement Gaps

FIGURE 3.2

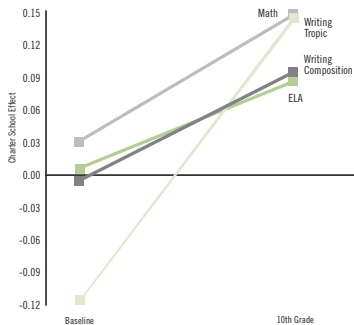
IV in school: the effect of KIPP attendance on math scores



Note: The effect of Knowledge Is Power Program (KIPP) enrollment described by this figure is $.48\sigma = .355\sigma / .741$.

Lottery Offer Effects at Boston High Schools

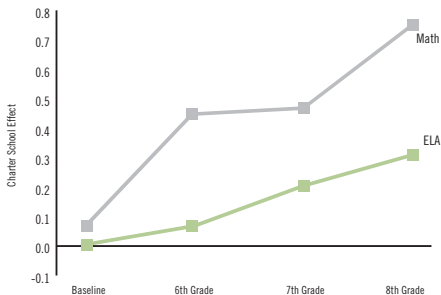
FIGURE 2:
Results for Charter High Schools by Grade:
Lottery Winners vs. Lottery Losers



Source: Abdulkadiroglu et al. (2009) and Abdulkadiroglu et al. (2011)

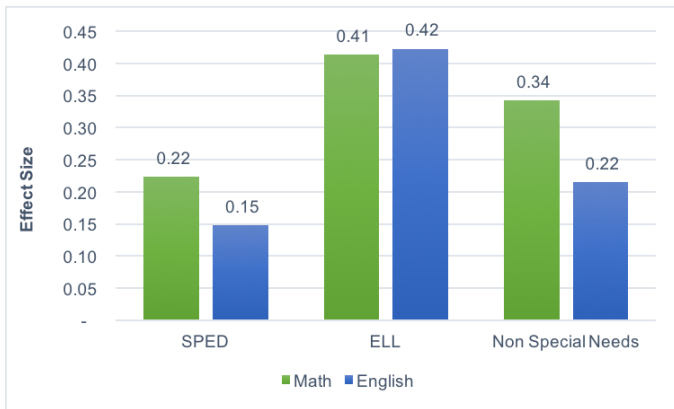
Lottery Offer Effects at Boston Middle Schools

FIGURE 4:
Results for Charter Middle Schools by Grade:
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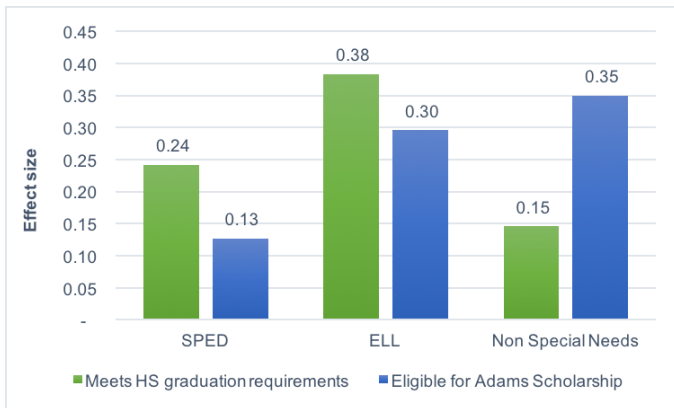
Source: Abdulkadiroglu et al. (2009) and Abdulkadiroglu et al. (2011)

Charter Enrollment FX for Boston Sped and ELL



Source: Setren (2016); Estimates for Boston charter high schools – elementary and middle estimates are similar

HS Grad and Adams FX for Boston Sped and ELL



Source: Setren (2016)

No Excuses Drives Urban Charter Success

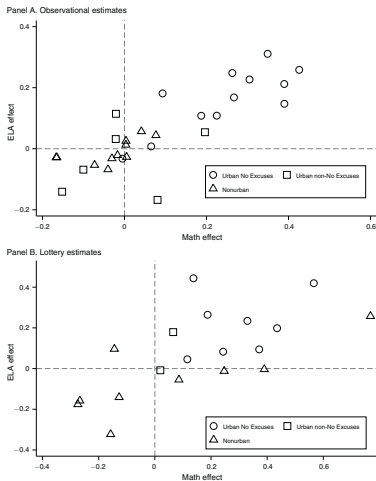


FIGURE 2. SCHOOL-SPECIFIC TREATMENT EFFECTS

Notes: This figure plots school-specific math effects against school-specific ELA effects. The sample used to construct lottery estimates contains fewer schools than the observational sample. The figure plots both middle and high school estimates.

Boston In-Districts Take Over

- The in-district model
 - ✓ A traditional public school—building, staff, and students—come under charter management; typically all staff are replaced
 - ✓ These charter takeovers *grandfather* (guarantee) seats for students at the legacy school

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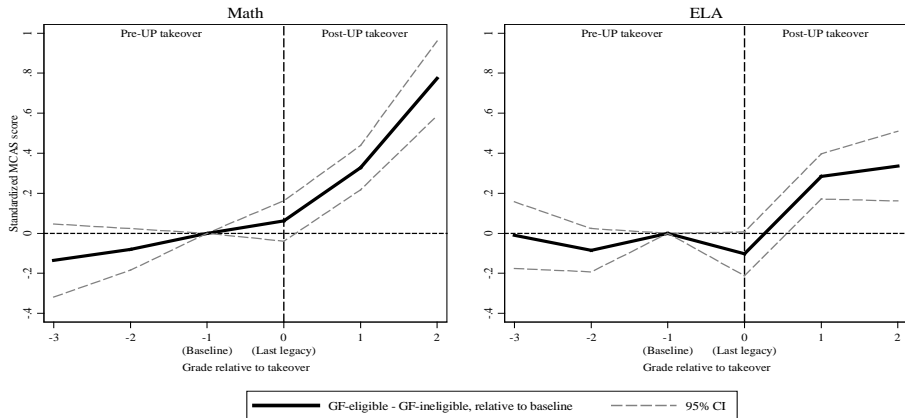
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- We studied UP Academy Boston, the first in-district middle school, which replaced Gavin in South Boston

Achievement Growth: Gavin Grandfathered vs. Control

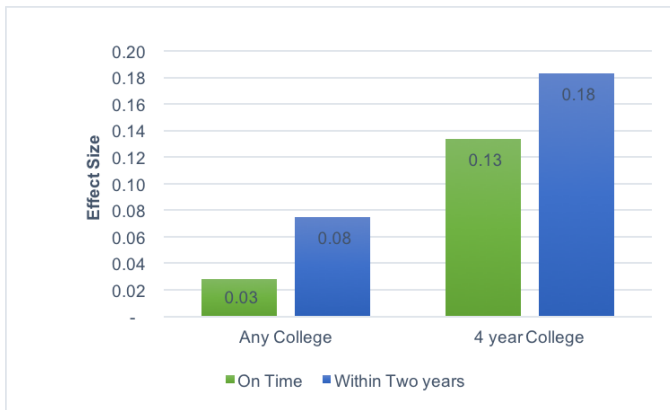
Figure 4b: UP grandfathering DD



Source: Abdulkadiroglu et al. (2016); Estimates for UP's later cohorts are similar

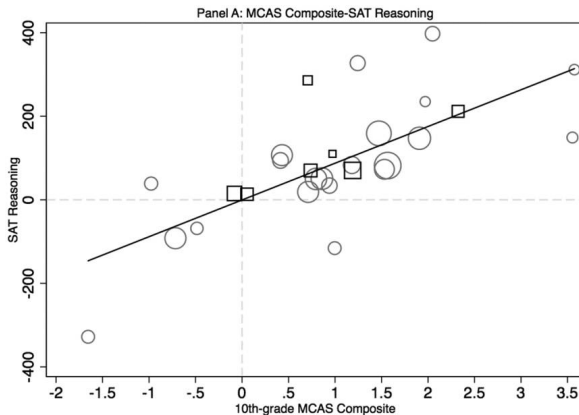
Beyond MCAS

College Enrollment Effects (2SLS Using Lotteries)



Source: Angrist et al. (2016); Estimates for Boston charter high schools

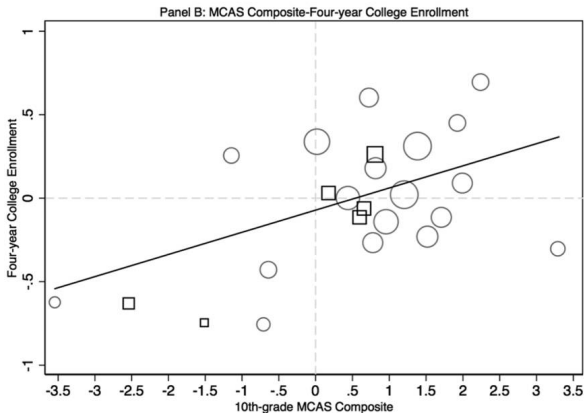
MCAS Effects Predict: SAT Gains



Source: Angrist et al. (2016)

Note: Circles indicate risk sets in which students applied to one school, while squares indicate risk sets in which students applied to two.

MCAS Effects Predict: Four-Year College Enrollment



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References

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