



Charters Without Lotteries: Testing Takeovers in New Orleans and Boston

Date: December 2014
Author(s): Atila Abdulkadiroglu, Josh Angrist, Peter Hull, and Parag Pathak
Affiliation: MIT Department of Economics, MIT School Effectiveness and Inequality Initiative, and Duke University
Link: <http://seii.mit.edu/wp-content/uploads/2014/12/SEII-Discussion-Paper-2014.03-Abdulkadiro%20C4%29Flu-Angrist-Hull-Pathak1.pdf>

Key Findings

This paper reports estimates of the effect of charter school attendance on middle-school students in charter takeovers in New Orleans and Boston. Takeovers are traditional public schools that close and then re-open as charter schools, grandfathering in the previously enrolled students. We compare students grandfathered into takeover charter schools with students who appear similar at baseline and who were attending similar schools not yet closed. Estimates for a large sample of takeover schools in the New Orleans Recovery (RSD) School District show substantial gains from takeover enrollment. In Boston, where we can compare grandfathering and lottery estimates for one middle school, grandfathered students see achievement gains at least as large as those for students assigned charter seats in lotteries.

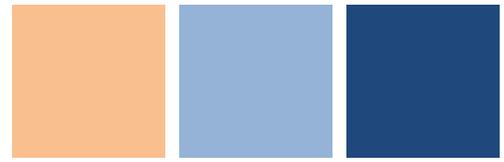
Data

The New Orleans RSD grandfathering analysis file is constructed from student enrollment data, demographic information, and outcome data provided by RSD for school years 2007–08 through 2013–14. Enrollment and demographic data include information on all students enrolled in the New Orleans RSD. 4th and 8th grade test score outcomes are from the Louisiana Educational Assessment Program (LEAP); achievement in other outcome grades is measured using the integrated LEAP (iLEAP) exam.

Our analysis of the UP Charter School of Boston uses student enrollment data, demographic information, and outcome data provided by the Massachusetts Department of Elementary and Secondary Education for school years 2007–08 through 2013–14. Boston enrollment and demographic data come from the Student Information Management System (SIMS), a centralized database that covers all public school students in Massachusetts. Test score outcomes are from the Massachusetts Comprehensive Assessment System (MCAS). The lottery analysis uses lists of first-time applicants and lottery winners provided by UP.

Research Methods

Students enrolled in the schools designated for closure are eligible for “grandfathering” into the new schools; that is, they are guaranteed seats. We use this fact to construct instrumental variables estimates of the effects of attendance at takeover charter schools. The grandfathering instrument compares students at schools designated for takeover with students who appear similar at baseline and who were attending similar schools not yet closed, while adjusting for possible direct effects of enrollment in the closed schools.



Detailed Results

- Attendance at Recovery School District takeover charters is estimated to increase LEAP scores by 6 to 10 percentage points for math and 5 to 7 percentage points for ELA, per year enrolled. To put this into context, the Louisiana black-white achievement gap in percent of students scoring Basic and Above on LEAP was around 28 percentage points for math and 23 percentage points for ELA in 2009, [according to the Cowen Institute](#).
- Analyses that disaggregate by outcome grade and by years of potential takeover exposure show that RSD takeover effects are larger in the first two years of takeover exposure than later. This is partly due to the growing share of the RSD comparison sample enrolled in charter schools. Students in the RSD comparison sample enrolled in charter schools dilute estimated takeover effects if other charter schools generate similar gains. Adjusting for the fact that many in the control group also attend charters increases math estimates from 0.21 to 0.36 standard deviations.
- In Boston, students grandfathered into UP by virtue of their previous attendance at the Gavin middle school experience achievement gains of about 0.3 to 0.4 standard deviations per year as a result. This impacts are similar to those measured in Boston charter schools in previous studies and are quite large relative to the research literature on other interventions.
- Math estimates at UP are similar across grades, but the ELA estimate for 7th graders—an effect of almost two-thirds of a standard deviation—is more than double that for 8th graders. Such large gains in reading skills are rarely seen in research on school reform.
- The benefits of UP enrollment for those enrolled there by virtue of grandfathering are at least as large as for UP students who won their seats in a lottery. The contrast in ELA estimates also favors grandfathering when we compare students who had equal exposure to UP: after one year, gains for the lottery cohort are 0.22 standard deviations in ELA, while gains after one year for those grandfathered into UP come to 0.5 standard deviations in ELA in 7th and 8th grade. For math, the effects are similar.

Implications for Policy and Practice

Some observers have claimed that evidence of gains for urban charter lottery applicants is misleading because those who apply to enter charter schools through lotteries are highly motivated and uniquely primed to benefit from the education these schools offer. The results for RSD and the comparison of estimates from grandfathering and lottery-based research designs for Boston's UP Academy weigh against the view that urban charter lottery applicants enjoy an unusually large and therefore unrepresentative benefit from charter attendance. Our estimates also suggest that systems that make urban No Excuses charter schools accessible to those who aren't likely to enter lotteries may yield especially large achievement gains.