



EDUCATION

THE ARTS

CHILD POLICY

CIVIL JUSTICE

EDUCATION

ENERGY AND ENVIRONMENT

HEALTH AND HEALTH CARE

INTERNATIONAL AFFAIRS

NATIONAL SECURITY

POPULATION AND AGING

PUBLIC SAFETY

SCIENCE AND TECHNOLOGY

SUBSTANCE ABUSE

TERRORISM AND
HOMELAND SECURITY

TRANSPORTATION AND
INFRASTRUCTURE

WORKFORCE AND WORKPLACE

This PDF document was made available from www.rand.org as a public service of the RAND Corporation.

[Jump down to document](#) ▼

The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world.

Support RAND

[Purchase this document](#)

[Browse Books & Publications](#)

[Make a charitable contribution](#)

For More Information

Visit RAND at www.rand.org

Explore [RAND Education](#)

View [document details](#)

Limited Electronic Distribution Rights

This document and trademark(s) contained herein are protected by law as indicated in a notice appearing later in this work. This electronic representation of RAND intellectual property is provided for non-commercial use only. Unauthorized posting of RAND PDFs to a non-RAND Web site is prohibited. RAND PDFs are protected under copyright law. Permission is required from RAND to reproduce, or reuse in another form, any of our research documents for commercial use. For information on reprint and linking permissions, please see [RAND Permissions](#).

This product is part of the RAND Corporation monograph series. RAND monographs present major research findings that address the challenges facing the public and private sectors. All RAND monographs undergo rigorous peer review to ensure high standards for research quality and objectivity.

Charter Schools in Eight States

Effects on Achievement, Attainment,
Integration, and Competition

Ron Zimmer, Brian Gill, Kevin Booker, Stephane Lavertu,
Tim R. Sass, John Witte

Sponsored by several nonprofit foundations, including the Bill and Melinda
Gates Foundation, Joyce Foundation, and William Penn Foundation



RAND

EDUCATION

The research in this report was produced within RAND Education, a unit of the RAND Corporation. Funding was provided by several nonprofit foundations, including the Bill and Melinda Gates Foundation, the Joyce Foundation, and the William Penn Foundation.

Library of Congress Cataloging-in-Publication Data

Charter schools in eight states : effects on achievement, attainment, integration, and competition / Ron Zimmer [et al.].

p. cm.

Includes bibliographical references.

ISBN 978-0-8330-4693-2 (pbk. : alk. paper)

1. Charter schools—United States—States—Case studies. I. Zimmer, Ron W.

LB2806.36.C359 2009

371—dc22

2009008946

The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors.

RAND® is a registered trademark.

© Copyright 2009 RAND Corporation

Permission is given to duplicate this document for personal use only, as long as it is unaltered and complete. Copies may not be duplicated for commercial purposes. Unauthorized posting of RAND documents to a non-RAND Web site is prohibited. RAND documents are protected under copyright law. For information on reprint and linking permissions, please visit the RAND permissions page (<http://www.rand.org/publications/permissions.html>).

Published 2009 by the RAND Corporation

1776 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138

1200 South Hayes Street, Arlington, VA 22202-5050

4570 Fifth Avenue, Suite 600, Pittsburgh, PA 15213-2665

RAND URL: <http://www.rand.org>

To order RAND documents or to obtain additional information, contact

Distribution Services: Telephone: (310) 451-7002;

Fax: (310) 451-6915; Email: order@rand.org

Summary

Charter schools are publicly funded schools that operate outside the direct control of local school districts, under a publicly issued charter that gives them greater autonomy than other public schools have over curriculum, instruction, and operations. Their students (or the students' parents) choose to attend the charter schools rather than being assigned to a school based on residential location. The first U.S. charter school opened in 1992, and the scale of the charter movement has since grown to 4,000 schools and more than a million students in 40 states and the District of Columbia. With this growth has also come a contentious debate. Supporters argue that charter schools can improve student achievement and attainment, serve as laboratories for innovation, provide choice to families that have few options, and promote healthy competition with traditional public schools (TPSs). Critics worry that charter schools perform no better (and, too often, worse) than TPSs, that they may exacerbate stratification by race and ability, and that they harm the students left in TPSs by skimming away financial resources and motivated families.

In recent years, research has begun to inform this debate, but many of the key outcomes have not been adequately examined or have been examined in only a few states. Moreover, questions about the validity of the findings of even the best-designed charter-school impact studies have remained, producing deep uncertainty about the interpretation of results. It has not been clear whether the conflicting conclusions of different studies reflect real differences in effects driven by variation

in charter laws and policies or, instead, reflect differences in research approaches—some of which may be methodologically flawed.

We set out to grow the evidence base and inform the debate on charter schools by examining four primary research questions across several geographic locations: (1) What are the characteristics of students transferring to charter schools? (2) What effect do charter schools have on test-score gains for students who transfer between TPSs and charter schools? (3) What is the effect of attending a charter high school on the probability of graduating and of entering college? (4) What effect does the introduction of charter schools have on test scores of students in nearby TPSs? We examine these questions using longitudinal, student-level achievement data from Chicago, San Diego, Philadelphia, Denver, Milwaukee, and the states of Ohio, Texas, and (for question 3 only) Florida. We discuss similarities and differences in charter-school effects across locations, considering whether any observed differences in effects might be related to differences in local charter laws and policies. In conducting these analyses, we also shed light on key research and methodological issues relevant to past and future studies that aim to estimate the achievement effects of charter schools.

What Are the Characteristics of Students Transferring to Charter Schools?

We find no systematic evidence to support the fear that charter schools are skimming off the highest-achieving students. The prior test scores of students transferring into charter schools were near or below local (districtwide or statewide) averages in every geographic location included in the study. In terms of prior achievement, in most sites, the transferring students did not differ substantially from other students in the TPSs they left: In a few sites, they were slightly higher achieving than their former peers; in other sites, they were slightly lower achieving, and, in Ohio and Texas, they were much lower achieving than their former peers. White students, who constituted a minority of charter entrants in all sites, deviated from the general pattern somewhat: In most sites,

white students entering charter schools were, on average, slightly higher achieving than the white students in their previous schools.

Transfers to charter schools did not create dramatic shifts in the sorting of students by race or ethnicity in any of the sites included in the study. In most sites, the racial composition of the charter schools entered by transferring students was similar to that of the TPSs from which the students came. There is some variation: Transfers to charter schools tend to marginally reduce racial integration in Philadelphia and in Texas while marginally increasing racial integration in Chicago. We find suggestive evidence that African American students are more likely to self-segregate: African American students transferring to charter schools moved to schools with higher concentrations of African American students in five of seven locales.

What Effect Do Charter Schools Have on Test-Score Gains for Students Who Transfer Between Traditional Public Schools and Charter Schools?

The average effect that charter schools are having on their students across grades K–12 is difficult to estimate, largely because prekindergarten baseline test scores are unavailable to assess the achievement gains of students in elementary charters (as well as K–8 and K–12 charters). For charter schools with entry grades at the middle- and high-school levels (plus a handful of schools that begin in grades 3 and 4), for which we have baseline scores, we have greater confidence in the impact estimates. In five out of seven locales, these nonprimary charter schools are producing achievement gains that are, on average, neither substantially better nor substantially worse than those of local TPSs. In Chicago (in reading) and in Texas (in both reading and math), charter middle schools appear to be falling short of traditional public middle schools. Results that include charter schools at every tested grade level (i.e., those that start in kindergarten as well as those that serve exclusively middle- and high-school grades) are, in most cases, similar to the results that are limited to nonprimary charter schools, providing

no evidence that charter-school performance varies systematically by grade level.

The inclusion of kindergarten-entry charter schools in the analysis makes a substantial difference to our estimate of their achievement impacts in only one location. In Ohio, as in most of the other sites, the average performance of nonprimary charter schools is indistinguishable from that of nonprimary TPSs. But when the K-entry charter schools are included in the analysis, the estimated impact of Ohio's charter schools is significantly and substantially negative. The dramatically lower estimated performance of Ohio's K-entry charter schools appears to be attributable not to grade level per se but to virtual charter schools that use technology to deliver education to students in their homes. Virtual schools constitute a large part of the enrollment of K-entry charter schools in Ohio, and students have significantly and substantially lower achievement gains while attending virtual charter schools than they experience in TPSs. This result should be interpreted cautiously, because students who enroll in virtual charter schools may be quite unusual, and their prior achievement trajectories may not be good predictors of their future achievement trajectories.

In most locations, charter schools have difficulty raising student achievement in their first year of operation, typically producing achievement results that fall short of those of local TPSs. This is consistent with prior research and common sense and may not be a charter-specific phenomenon: Opening a new school is challenging, regardless of whether the school is a charter school. Across locations, we see a general pattern of improved performance as schools age.

Finally, charter schools in most locales have marginally greater variation in performance than TPSs, as measured by the achievement-impact estimate for each school, and, in some locations, this may simply reflect greater measurement error associated with the smaller average size of charter schools. Ohio is a notable exception: Its charter schools have a much wider range of variation in performance than its TPSs have.

What Is the Effect of Attending a Charter High School on the Probability of Graduating and of Entering College?

This study was the first to examine the effects of charter schools on long-term attainment outcomes. In the two locations with attainment data (Florida and Chicago), attending a charter high school is associated with statistically significant and substantial increases in the probability of graduating and of enrolling in college. Among students who attended a charter middle school (for whom we can estimate impacts with greater confidence than for charter–high school students who came from conventional public middle schools), those who went on to attend a charter high school were 7 to 15 percentage points more likely to graduate than students who transitioned to a traditional public high school (controlling for observed student characteristics and test scores). Similarly, those attending a charter high school were 8 to 10 percentage points more likely to enroll in college than were their TPS counterparts. In Chicago, the advantage is most clearly evident in the charter high schools that include middle-school grades, eliminating the change of schools between middle and high school. However, readers should keep in mind that we cannot be certain that charter–high school students who attend traditional middle schools also experience these positive effects. Nevertheless, our positive results are promising and are not fully explained by estimated impacts on test scores, suggesting that researchers and policymakers need to look beyond test scores to fully assess charter schools' performance.

What Effect Does the Introduction of Charter Schools Have on Test Scores of Students in Nearby Traditional Public Schools?

There is no evidence in any of the locations that charter schools are negatively affecting the achievement of students in nearby TPSs. But there is also little evidence of a positive competitive impact on nearby TPSs.

What Are the Policy Implications?

A quantitative evaluation of the relationship between charter-school effects and state policy would require data from many more than eight states. Nonetheless, we can inform policy by identifying outcomes that are consistent across sites and by examining outliers in the context of possible policy influences. We emphasize the modifier “possible” in discussing policy influences: Strong causal inferences are difficult in all nonexperimental evaluations, and, with a limited sample of sites and policy variables, policy conclusions must remain tentative.

Findings on the students transferring to charter schools and on the integration effects are largely consistent across sites, suggesting that policymakers need have little fear of cream-skimming or of substantial increases in racial isolation. Relative to local averages, prior achievement levels of charter entrants were particularly low in Texas, which could be attributable (at least in part) to the success of the provision in the state’s original charter law encouraging the establishment of charter schools for disadvantaged students.

The overall estimates of the average achievement impacts of charter schools can provide little guidance for policy, given that the validity of the estimates for elementary schools is in doubt. The estimates of the achievement impacts of nonprimary charter schools are more robust to methodological challenges, but they do not show great variation across sites, providing little purchase on the policy levers that might serve to improve the performance of charter schools. Nonetheless, some of the complementary achievement-impact analyses suggest useful guidance:

- Policymakers in every state with a charter law should look for ways to dampen the negative achievement impacts that are so frequently experienced by students enrolled in first-year charters. We cannot provide empirical evidence on specific strategies, but it is easy to imagine possibilities, including working with authorizers to ensure clear plans for the start-up period, providing additional start-up grants to approved operators, or reducing the reliance on brand-new start-up schools by easing the process for existing public or private schools to convert to charter status.

- Policymakers should closely examine the performance of virtual charter schools (in the states where they exist), conducting careful analysis to determine whether their negative achievement trajectories represent underperformance and, if so, identifying ways to improve that performance.
- Policy changes to improve or eliminate the low end of the charter-school performance distribution might be informed by examining the case of Ohio. Among the seven sites in which we conducted achievement analyses, Ohio is the outlier, with an especially wide range of variation. Greater variation in charter performance in Ohio could be related to the fact that the state's charter law allows an unusually diverse group of organizations to serve as charter authorizers (Russo, 2005). It is also possible that the high variation in performance of Ohio's charters is partly related to resource constraints: A Thomas B. Fordham Institute report (2005) found that Ohio's funding scheme for charter schools leaves them at a "severe" disadvantage relative to TPSs.
- Policymakers in Ohio and other states that experience high variation in the performance of charter schools can view this as an opportunity: Eliminating or improving the lowest-performing charter schools has the potential to improve average results substantially. This may not be easy; the challenge is to minimize the number of charter failures without sacrificing successful charter schools. The empirical record does not identify any surefire solutions, but various possibilities could be tried. Improving the performance of charter authorizers, both at the stage of authorization and in subsequent reviews of school performance, would be one place to start.

The promising results of the analysis of long-term effects of charter schools on educational attainment suggest at least two possibilities for policymakers to consider, with potential relevance for TPSs as well as charter schools. First, the favorable results for Chicago's 6–12, 7–12, and K–12 charter schools suggest that school-district leaders and charter-school leaders alike might seriously consider eliminating the school transition between middle school and high school (although

the positive results seem to hold up for conventionally configured schools as well). The high-school transition is often a difficult one, and the simple strategy of keeping students in the same schools from seventh grade (or earlier) through 12th grade might reduce the dropout rate—perhaps even if the school is not a charter school. Second, the similarity of the charter attainment results to (some) previous results on Catholic schools suggests the possible value of seeking to replicate characteristics that charter and Catholic high schools have in common. We have no data on the extent to which charter high schools exhibit a similarly coherent mission-driven focus, but the ability to create such schools has often been cited by proponents of charters and other varieties of school choice (see, e.g., P. Hill, Foster, and Gendler, 1990; P. Hill, Pierce, and Guthrie, 1997; Whitman, 2008; and Mathews, 2009). The difference merits consideration by policymakers and further examination by researchers.

The absence of evidence of substantial effects of charter schools on the achievement of students in nearby TPSs might be encouraging to policymakers who were concerned about negative effects and disappointing to policymakers who hoped that competition would induce TPSs to improve. Our findings support the hypothesis (see, e.g., F. Hess, 1999) that charter-school competition is unlikely to create a rising tide of school performance, in the absence of dramatic changes in the structures, incentives, culture, and operation of conventional school districts.

How Should Future Research Evaluate the Performance of Charter Schools?

This study makes clear that there are many bad ways to analyze charter-school performance. The validity of cross-sectional methods that rely on statistical controls for observable student characteristics is cast into doubt by results suggesting that students entering charter schools often have pretransfer achievement levels lower than those of local public-school students who have similar demographic characteristics. Longitudinal methods, such as those used in this study, have many hazards

as well, especially when used to assess the performance of charter elementary schools; we therefore rely on them primarily to assess charter middle- and high-school effects.

Finally, one of the most important implications of our work for future research on charter schools is the need to move beyond test scores and broaden the scope of measures and questions examined. Our estimates of positive charter-school effects on high-school graduation and college entry are more encouraging than most of the test score–based studies to date (including our own test-score results). Future studies of charter schools should seek to examine a broad and deep range of student outcome measures and to provide evidence on the mechanisms producing positive long-term impacts.