

Sociology and School Choice: What We Know After Two Decades of Charter Schools

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Abstract

Charter schools have been on the educational reform landscape for over twenty years. In the last ten years, a number of rigorous studies have examined the effects of these schools on student achievement and educational attainment. Findings reveal mixed results where student achievement is concerned (i.e., some positive, some negative, some neutral) and positive results in terms of educational attainment (i.e., high school graduation and college attendance). The article places this research within a framework that draws on both market and institutional theories, and concludes that additional research on the social organization of charter schools and traditional public schools is needed to better understand the conditions under which school choice is or is not effective.

INTRODUCTION

Although a multitude of school reforms have been proposed and implemented over the past several decades, one that receives a great deal of attention is school choice, which refers to a variety of programs providing families the option to choose the school their children attend. School choice options may include neighborhood public schools, magnet schools, charter public schools, vouchers, tuition tax credits, homeschooling, and supplemental educational services (Berends et al. 2009, 2011). One school choice option that has grown significantly in the past two decades is charter schools—schools that are publicly funded but run under a charter by parents, educators, community groups, universities, or private organizations to encourage school autonomy and innovation. As the fastest-growing area of school choice, charter schools number more than 6,000 and serve more than 2.5 million children across the United States (National Alliance for Public Charter Schools 2014).

Although in existence for over 20 years, the charter school sector has experienced tremendous growth in the past decade. This surge in growth may be due partly to national leaders emphasizing charter school reform as an option that provides significant opportunities to families and children, particularly for students of color, in low-income families, and at low achievement levels. President Obama (2008) has come out in strong support of charters, willing to stand against some in his own party: “I’ve consistently said we need to support charter schools. I think it is important to experiment, by looking at how we can reward excellence in the classroom.” As part of President Obama’s Race to the Top program, which has provided \$4 billion to schools, charter school reform was emphasized as a way to increase states’ competitive advantage in securing these discretionary funds (Education Week 2013).

Of course, the charter school movement is not without its critics. For example, one of the strongest public critics has been Diane Ravitch (2010, p. 138), who argues that charter schools have not lived up to their promise of improving student outcomes and the school system as a whole: “In terms of quality, charter schools run the gamut. Some are excellent, some are dreadful, and most are somewhere in between. It is in the nature of markets that some succeed, some are middling, and others fail.” Subsequently, she argued that charter schools have been overrun by privatization, posing significant dangers to the public education system: “The developments of the past two decades have brought about massive changes in the governance of public education, especially in urban districts. Some children have gained; most have not. And the public schools, an essential element in our democracy for many generations, have suffered damage that may be irreparable” (Ravitch 2013, p. 179).

Although Ravitch may overstate her claims, the evidence base for scaling up charter school reform via federal policy and programs is weak. Although some rigorous studies of charter schools show positive effects, other studies reveal more mixed effects (for a review see Betts & Tang 2014, CREDO 2013, Teasley 2009).

Yet this research is wanting. I argue here that placing charter schools in a horse race between sectors (i.e., comparing charter schools with traditional public schools) is not as helpful as understanding the conditions under which school effects (e.g., traditional public schools, charter schools, or private schools) occur. Such sociologically informed studies are limited at this point, but a few that point toward fruitful research will inform sociological research and theory as well as educational policy. Richer comparisons between sectors can yield lessons learned about school and schooling effects, as well as inform sociological theories that provide a framework for understanding the possibilities and limitations of charter school reform.

Thus, after describing the growth in the number and types of charter schools and students, I place the research on charter schools within a theoretical framework that draws on market theory

and institutional theory. I then review what we know about the effects of charter schools on student outcomes, such as achievement and educational attainment; that is, I summarize what we know at this point about the horse race between sectors. Next, I examine the research that has begun to open the black box of charter schools by describing the characteristics of high-performing charter schools and then review what the research says about charter school innovation. I conclude by providing directions for future research that draws on the social organization of schooling to further research in this area and to inform theory and policy. In this perspective, researchers focus their attention inside schools—examining the relationships between teachers and students as well as the other social relationships among parents, peers, and administrators—to understand how the organization of schools influences the learning opportunities and schooling processes (Bidwell & Kasarda 1980, Gamoran et al. 1995). Summarizing the importance of this perspective when examining school choice, Schneider (2003, p. 212) writes,

Studies of school choice have also not yet overcome the inadequacies we find in studies of the social organization of public schools. One reason may be that the pressure to link school choice with gains in student achievement has placed issues of selection bias and test score differences at the forefront, thus overshadowing serious efforts to examine qualitative differences in the learning opportunities experienced in choice versus other types of school settings.

CHARTER PUBLIC SCHOOLS

Charter schools are public schools funded by the government, but their governance structure differs from that of traditional public schools in that they are established under a charter run by parents, educators, community groups, or private organizations to encourage school autonomy and innovation. In exchange for such autonomy and flexibility, charter schools are held to current state and federal accountability standards, such as the No Child Left Behind Act of 2001 (NCLB), which requires testing in certain grades and sets performance targets over time (overall and for various subgroups). When a charter school has more students applying than there are seats available (i.e., oversubscription), the school is required to hold a lottery to select at random students for those available seats.

Numbers and Composition

The first charter school appeared in 1992 in Minnesota after the state passed the first charter school law in 1991 (Junge 2012, Wohlstetter et al. 2013). Between the early 1990s and 2012, the number of charter schools grew to over 6,000 serving over 2.5 million students in 42 states; leading states are California (1,065 charter schools), Arizona (534), Florida (576), Ohio (374), Texas (280), and Michigan (276) (National Alliance for Public Charter Schools 2014). Much of this growth has occurred in the last decade, as shown in **Figures 1** and **2**. In the 1999–2000 school year, there were 1,542 charter schools serving 349,714 students, and as of this writing, the number grew to 6,440 schools serving 2,569,029 students. Just over half of the charter schools are located in urban areas, approximately one-fifth are in suburban locales, and the rest are in rural or small town areas. Over the past 10 years or so, the number of charter schools has more than tripled. In part, this significant expansion is likely due to bipartisan support for charter schools at the federal, state, and local levels, but there are still many questions about what other factors have led to charter school expansion and about the variability within and across states in charter school legislation, expansion, and implementation (Corcoran & Stoddard 2011, Renzulli & Roscigno 2005, Stoddard & Corcoran 2007, Wong & Klopott 2009, Wong & Shen 2008).

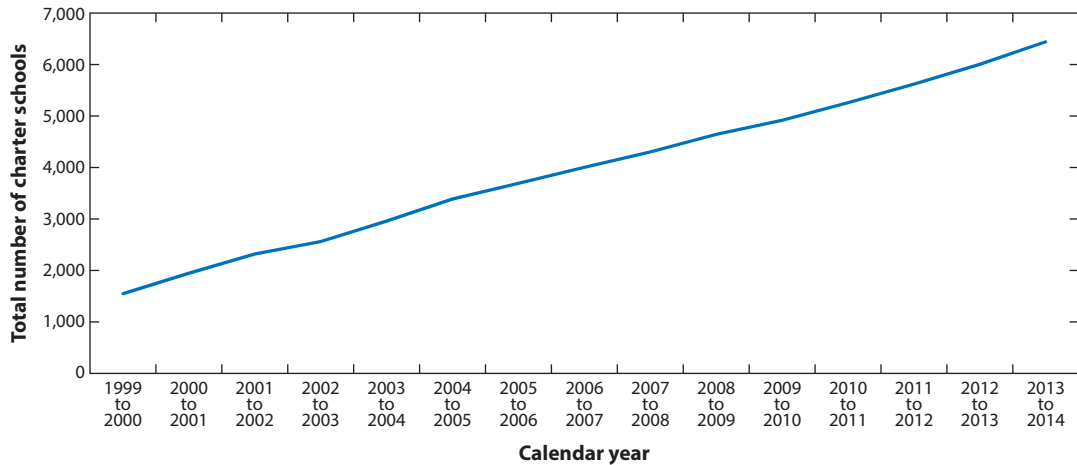


Figure 1

Total number of charter schools from 1999–2000 through 2013–2014. Adapted with permission from the National Alliance for Public Charter Schools.

There is concern about the racial/ethnic composition of students in charter schools in terms of promoting social integration (Ladd et al. 2011, Zimmer et al. 2009). According to data from the National Alliance for Public Charter Schools, the percentage of white or black students attending public charter schools has declined, whereas the percentage of Latino charter students has increased significantly over time. For example, in the 1999–2000 school year, 41% of charter students were white, and this percentage declined to 36% in 2010–2011 (see **Figure 3**). The percentage of African American charter students declined from 32% in 1999–2000 to 29% in 2010–2011. By contrast, in 1999–2000, Latino students comprised 19% of the charter school population, but this percentage increased to 27% in 2010–2011. The percentage of charter students who identify themselves as Asian or some other racial/ethnic group (approximately 3%)

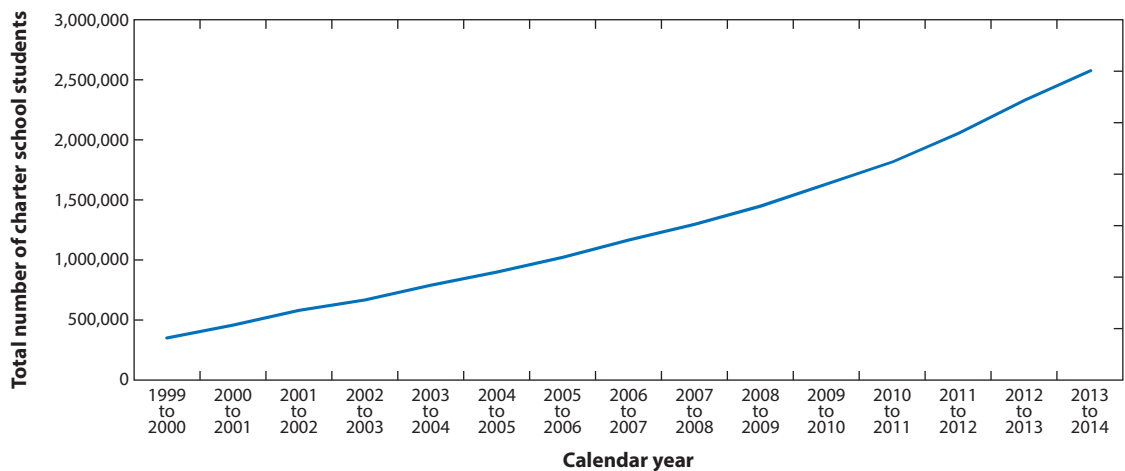


Figure 2

Total number of charter school students from 1999–2000 through 2013–2014. Adapted with permission from the National Alliance for Public Charter Schools.

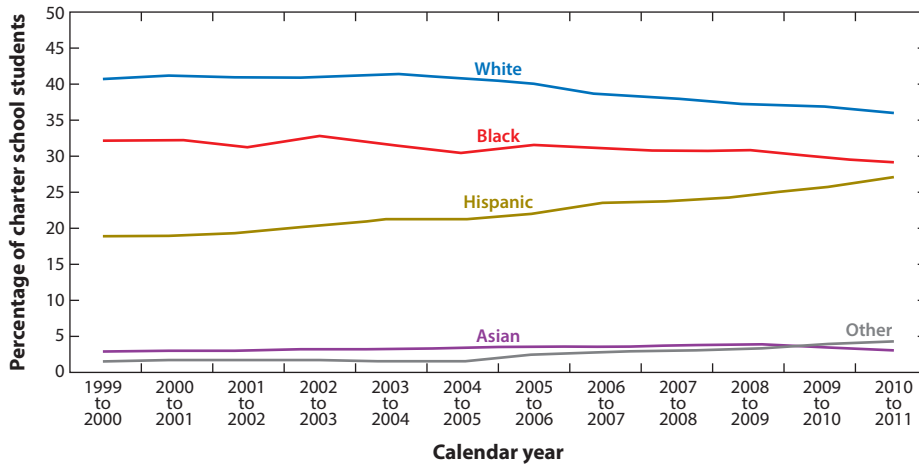


Figure 3

Percentage of charter school students by race/ethnicity from 1999–2000 through 2010–2011. Adapted with permission from the National Alliance for Public Charter Schools.

remained relatively stable over this time period. The changes in demographic characteristics over time are likely due to charter school expansion in states with large percentages of Latino students such as California and Florida; between the 1999–2000 and 2011–2012 school years, the number of charter schools in Florida expanded from 113 to 515 and in California the number expanded from 238 to 984 (National Alliance for Public Charter Schools 2014).

Based on the most recent year with available data for public schools in the United States (2010–2011), in traditional public schools the racial/ethnic enrollment of the student body was 57% white, 14% African American, 21% Latino, 3% Asian, and 5% from some other racial/ethnic group.¹ Thus, when compared with that of traditional public schools, the racial/ethnic composition of charter schools in 2010–2011 is disproportionately African American (29%) and Latino (27%); white students are underrepresented (36%). These differences in racial/ethnic composition are due to many social factors within American society, not the least of which is that charter schools are located predominately in urban centers that have disproportionate numbers of students of color attending public schools, whether traditional or charter.

Over time, it also appears that the percentage of charter school students who are poor is increasing (see **Figure 4**). In the 1999–2000 school year, 27% of charter school students were eligible for free or reduced-price lunch, but this percentage has increased significantly over time—to 53% in the 2010–2011 school year (compare this with 50% of the nation’s students who are eligible for free or reduced-price lunch and attend traditional public schools).

Types of Charter Schools

In addition to the increase in charter schools and the students who attend them, the last five years have seen significant growth in education management organizations (EMOs) and charter management organizations (CMOs) (see Miron et al. 2012). CMOs are nonprofit organizations

¹These data come from the 2010–2011 Common Core Data, gathered by the US Department of Education’s National Center for Educational Statistics.

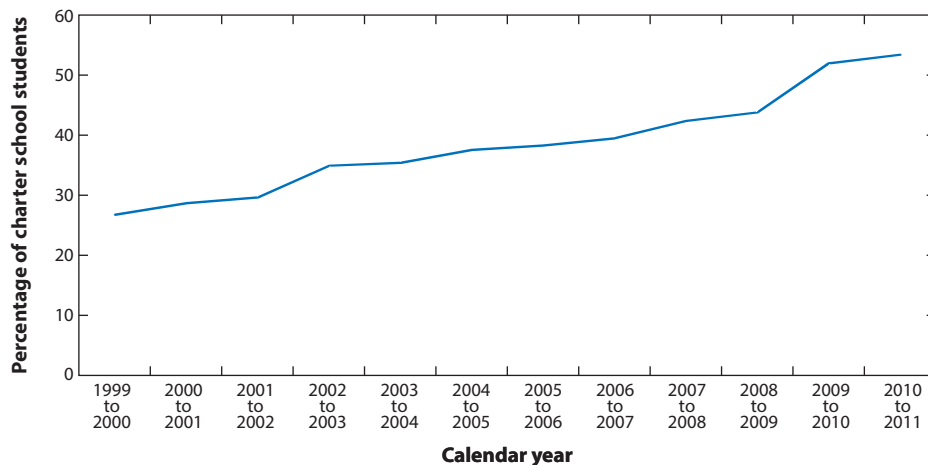


Figure 4

Percentage of charter school students eligible for free or reduced-price lunch from 1999–2000 through 2010–2011. Adapted with permission from the National Alliance for Public Charter Schools.

that operate like districts without borders in the sense that they run multiple charter schools and establish new ones [e.g., Knowledge is Power Program (KIPP), YES Prep, Green Dot Schools, Aspire]. EMOs are similar to CMOs except they are for-profit (e.g., Imagine Schools, Academica, National Heritage Academies, and EdisonLearning, Inc.).

Despite the national attention on EMOs and CMOs in the news media and even movies (e.g., *Waiting for Superman*; Ravitch 2010, 2013), over two-thirds of charter schools are freestanding and not affiliated with either CMOs or EMOs. Yet the growth of CMOs is noteworthy. As **Figure 5a,b** reveals, the percentage of CMO-managed charter schools has increased from 11.5% in 2007–2008 to approximately 20% in 2010–2011. With this increase, the percentage of freestanding charter schools has dropped from 78% in 2007–2008 to 67.5% in 2010–2011. The percentage of EMO-managed charter schools has remained relatively stable, ranging between approximately 11% and 12%, over this time period. As the charter sector has grown, so too have EMOs, from 441 schools in 2007–2008 to 649 schools in 2010–2011.

Another aspect of the charter school landscape is that a large percentage (90%) of charter schools are newly started (start-up) rather than conventional public schools that converted to charter status (conversion) (see **Figure 6**). Since the national data for start-up vis-à-vis conversion charter schools became available in 2009–2010, the number of conversion schools has remained relatively stable (between 422 in 2009–2010 and 488 in 2011–2012), whereas the number of start-up charter schools has grown significantly; in 2009–2010, there were 4,491 start-ups compared with 5,066 in 2011–2012.

With budget crises in pre-K–12 education, many states and districts are moving toward including online learning because of the cost savings. Because charter schools are granted autonomy and flexibility to be innovative, one might suspect that they have a competitive advantage in implementing online-learning strategies and that virtual charter schools may be popular. Yet at this point virtual schools do not constitute a large percentage of all charter schools. Moreover, it is difficult to determine whether charter schools are indeed more innovative in implementing online learning; more research is needed in this area whatever the sector (traditional public, charter public, or charter private) or level (elementary or secondary). In any case, at this point, most charter

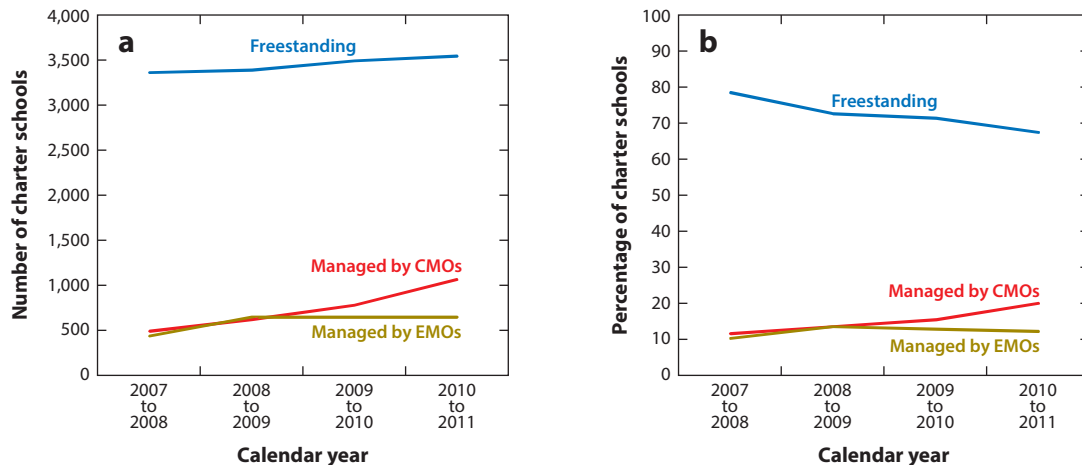


Figure 5

(a) Number and (b) percentage of charter schools by management organization from 2007–2008 through 2010–2011. Adapted with permission from the National Alliance for Public Charter Schools. Abbreviations: CMOs, charter management organizations; EMOs, education management organizations.

schools are nonvirtual (92.4% in 2009–2010), compared with virtual charter schools (4.5% in 2009–2010) and a hybrid version that mixes virtual learning with in-classroom experiences (2.7% of all charter schools in 2009–2010) (see **Figure 7**).

THEORIES INFORMING CHARTER SCHOOL REFORM

Different disciplines have put forth several theories to understand the effects of school choice on student outcomes (see Berends et al. 2009, Henig 1995). In terms of thinking about competing

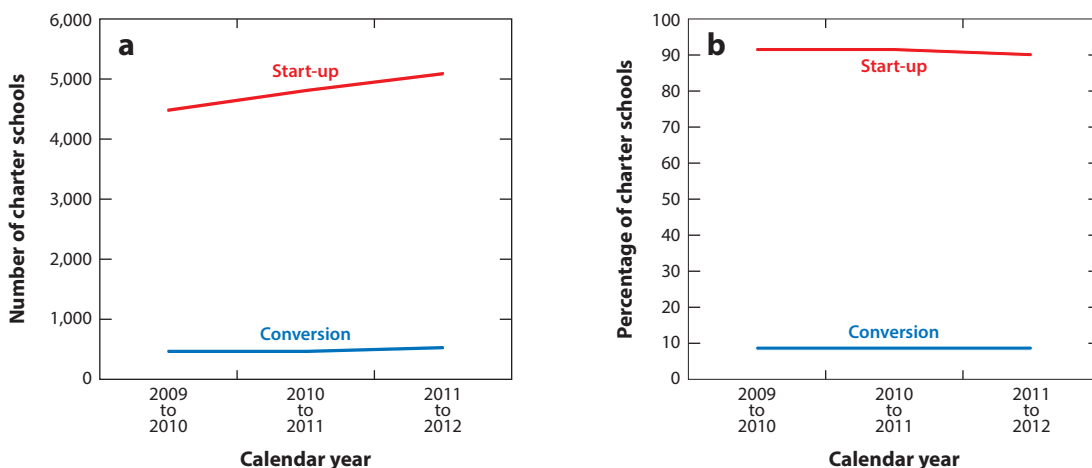


Figure 6

(a) Number and (b) percentage of charter schools by conversion/start-up from 2009–2010 through 2011–2012. Adapted with permission from the National Alliance for Public Charter Schools.

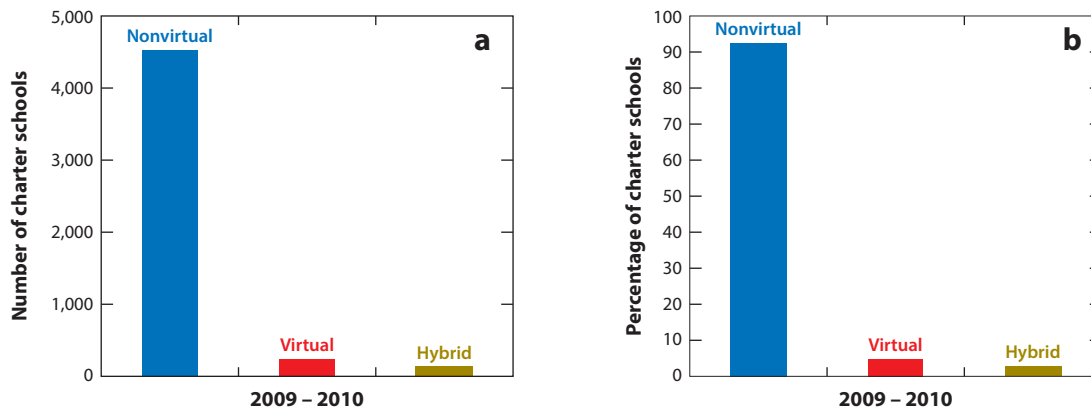


Figure 7

(a) Number and (b) percentage of charter schools that are nonvirtual, virtual, or hybrid for the year 2009–2010. Adapted with permission from the National Alliance for Public Charter Schools.

theories, this review relies on market theory and institutional theory to frame the potential differential impacts of charter school reform (Berends et al. 2010). Economists have relied on market theory, leading to studies that examine charter schools' vis-à-vis traditional public schools' impacts on student outcomes and competition effects of schools; sociologists have focused on the social context of charter schools, examining the social organization of schools and institutional theory.

Economist Milton Friedman (1955, 1962) was one of the first scholars who used market theory to argue that the costs of K–12 education should be covered by the government, but parents should be able to choose the schools, whether public or private, their children attend. To this end, Friedman argued for giving parents government vouchers as a way to accomplish his vision of an education system that was publicly financed but delivered privately and publicly.

Many reformers have used Friedman's arguments for vouchers and applied them to school choice more generally. Such proponents of choice maintain that market-style mechanisms of consumer choice and competition between autonomous schools encourage diverse and innovative approaches to school organization, curricula, teaching, and learning (e.g., Betts 2005, Chubb & Moe 1990, Walberg & Bast 2003). The assumption is that as school choice undercuts bureaucratic political control of public education, it provides educators in schools of choice the opportunity and motivation to experiment with new organizational and instructional strategies to improve student achievement.

Proponents of charter school choice argue that providing this freedom not only diversifies educational opportunities but also creates incentives to improve traditional public schooling through increased market competition for services (Chubb & Moe 1990, Friedman 1962). In large part, this argument is about how market competition decreases the amount and influence of historical bureaucratic structures to increase the opportunities for parents and school staff to establish better relationships to meet parents' demands. Critics of the market model, however, raise questions about the empirical validity of its key assumptions about parent-consumers (demand side), schools (supply side), and the products that a market in education would generate (Finnegan 2007, Henig 1995, Levin 1998).

By contrast, institutional theory is an alternative theory about the consequences of school choice. Stemming from broader organizational analysis, this new institutionalism, developed by John Meyer and colleagues (DiMaggio & Powell 1983; Meyer 1977; Meyer & Rowan 1977,

1978; Powell & DiMaggio 1991; Scott & Davis 2007; Scott & Meyer 1994) over several decades, characterizes schools as institutions with persistent patterns of social action that individuals take for granted.

Although in agreement with market theorists that the bureaucratic form of schooling dominates the public school sector in the United States (and many other countries), institutional theorists take a different tack in their analysis of the education environment. For instance, the increase in bureaucratization of schools has increased the rational coordination among the nested layers of the school—from the federal government to the state, districts, schools, and classrooms. According to institutional theorists such as Meyer & Rowan (1977, 1978), this bureaucratic, rational network has resulted in a system of categories or rules, called ritual classifications, that define the actions of schools, teachers, and students. Over time these ritual classifications become institutionalized and accepted as the norm for what constitutes a legitimate school and schooling activities (Bidwell & Kasarda 1980). Institutional theorists argue that because of these institutional pressures, schools will look much more alike than different; they refer to this phenomenon as isomorphism and have documented its diffusion both in the United States and throughout the world (Bidwell & Dreeben 2006, Meyer & Ramirez 2000).

When applied to charter schools, institutional theory emphasizes that all schools operate within highly institutionalized environments, which define what counts as legitimate schooling. All types of schools, no matter the sector or organizational form, adopt rituals, norms, and myths to support their validity and legitimacy (Meyer & Rowan 1977, 1978; Scott & Davis 2007). Thus, even schools of choice pay attention to institutional rules such as teacher certification, curricular subject matter, instructional time, reasonable class size, and mostly age-based grade organization.

Within the context of charter schools, these competing theories provide competing hypotheses. On the one hand, market theory predicts that students attending charter schools will experience greater gains in student achievement because parents are choosing charter schools that better fit their children's needs. Moreover, within market theory, parents with good information will select better schools that are likely to be more innovative and mission driven and have a school culture and climate that fit their and their children's preferences. These arguments are implied by researchers, such as Chubb & Moe (1990) and Walberg & Bast (2003), who point to the research on the positive effects of charter schools and the effective school characteristics that researchers put forth as explaining those positive effects.

On the other hand, institutional theorists argue that schools are likely to look more alike than different in terms of their organizational structure and processes. Thus, students choosing charter schools over traditional public schools are not likely to experience positive achievement gains because the charter and traditional public schools may be much more similar than different. Indeed, students who transfer to a charter school may even experience achievement losses, because student mobility is often associated with negative school outcomes, independent of the quality of the school (Mehana & Reynolds 2004, South et al. 2007).²

These competing theories provide a helpful framework to assess charter schools, but sociologists are also interested in additional theories related to school choice, such as sense making and social network theories (Jennings 2010). In addition, sociologists have a keen eye toward examining the racial and socioeconomic inequalities related to school choice. For instance, using her ethnographic work in Philadelphia and the city's expansion of school choice options, intended to

²Research on school effects of the past several decades has found that approximately 10–15% of the total variance in student achievement lies between schools, so there are significant debates about establishing school effects and reducing selection bias of nonrandom assignment of students to schools (Coleman et al. 1966, Konstantopoulos 2006, Rowan et al. 2002, Scheerer & Bosker 1997).

attract the city's middle- and upper-class families into the city and its schools, Cucchiara (2013) shows that school organization may reflect significant differences among social classes, and that the vision of lower-class families is often overwhelmed by the vision and preferences of middle- and upper-class families. Moreover, the choices that families make—and are able to make—often have implications for how society is stratified and segregated by social class and race/ethnicity (see Lareau & Goyette 2014, Patillo et al. 2014, Roda & Wells 2013, Sattin-Bajaj 2014, Wells 1993).

CHARTER SCHOOLS AND STUDENT OUTCOMES

Are charter schools higher quality in terms of their effects on student outcomes? Although charter schools are the fastest-growing area of school choice, upon examination of the effects on student achievement, the evidence base is weak for scaling up charter schools; a more consistent positive story emerges when examining longer-term outcomes, such as high school graduation and college attendance. Thus, there is somewhat of a school choice paradox: mixed effects on achievement and positive effects on high school graduation and college attendance [a paradox that has been noted in other areas of school choice such as vouchers (Wolf et al. 2013)].

Student Achievement

With the expansion of the charter school sector over the past decade, alongside the dramatic increase in test-based accountability with NCLB, it is no surprise that student achievement is an important goal of charter schools—particularly because they are given autonomy and flexibility in exchange for accountability. In fact, the focus on raising student achievement is written into the vast majority of state charter school laws, and those authorizing charter schools use test scores for accountability purposes, which may result in charter school closures (Wohlstetter et al. 2013).

Have charter schools increased student achievement over the past decade? Unfortunately, the answer is “it depends.” It depends on the data, location, methods, and interpretation. As Betts & Hill (2010) explain, there have been many studies of charter school reform over the past 20 years, but many of these studies are low quality. They point out that over the past decade, the quality of research on charter schools' effects on student achievement has improved because of the increase in value-added analyses of longitudinal student data systems and in the number of schools that are oversubscribed such that they are required to hold lotteries, which allows researchers to employ a randomized design to examine charter school achievement impacts on lottery winners and losers over time.

Some studies using randomized designs show that academic achievement gains are greater for students who attend charter schools than for students who do not, but these studies are limited to certain cities in the United States, such as New York City and Boston (Abdulkadiroglu et al. 2009, 2011; Angrist et al. 2011; Dobbie & Fryer 2011; Hoxby & Murarka 2008; Hoxby et al. 2009). For example, Hoxby et al.'s (2009) lottery-based, longitudinal study of charter schools in New York City shows significant effects on achievement for students attending charter schools. In the third grade, when students take the state test for the first time, charter school students' scores in mathematics and English are 0.14 and 0.13 standard deviation units, respectively, higher than the scores of traditional public school students. Inferring the cumulative effects over time, the authors noted that students who attended charter schools in New York City over a longer period (e.g., kindergarten through eighth grade) matched the mathematics performance gains of their peers in affluent suburban schools—what they called the closing of the Scarsdale-Harlem achievement gap. Hoxby et al. found that charter school students closed 86% of the Scarsdale-Harlem

mathematics achievement gap and 66% of the English gap. Also in New York, Dobbie & Fryer (2011) examined students who won and lost the charter school lotteries in the Harlem Children's Zone, and they found that the effects of charter elementary schools were large enough to close the racial achievement gap across subjects—i.e., students gained approximately 0.20 of a standard deviation per year in both mathematics and English/language arts.

Researchers have also found large positive effects in Boston charter schools. Comparing students in Boston, Abdulkadiroglu et al. (2011) found that middle-school students who won a charter school lottery outscored the lottery losers by 0.40 of a standard deviation in mathematics and 0.25 of a standard deviation in English/language arts. Many of the Boston charter schools aimed to raise minority students' achievement, and the authors noted that the effect size of the charter school was large enough to reduce the black-white reading achievement gap in middle school by two-thirds and eliminate the middle-school black-white mathematics achievement gap. The effect sizes (approximately 0.20 of a standard deviation in both math and English/language arts) at the high school level were large enough to eliminate the black-white achievement gaps if students attended all four years of high school.

Other studies relying on broader samples of schools within a lottery-based randomized design reveal more mixed effects on student achievement (Furgeson et al. 2012, Gleason et al. 2010). In the largest study of charter schools across the nation that rely on lotteries for admission, Gleason et al. (2010) examined 36 charter schools in 15 states and found no significant effects on mathematics and reading achievement (see also Clark et al. 2015). However, they did find a great deal of variability in effects on achievement, with math impacts ranging from -0.78 to $+0.65$ standard deviation units and reading impacts ranging from -0.43 to $+0.33$ standard deviation units. Relying on both lottery-based and quasi-experimental approaches, Furgeson et al. (2012) examined charter schools in 22 CMOs and found no significant effects on student achievement. They found that among the 22 CMOs in their study, 11 had significant positive effects in mathematics, 7 had significant negative effects, and the remaining 4 had no significant effects.

Researchers relying on quasi-experimental methods show mixed results for the effect of charter schools on student achievement (Booker et al. 2007; CREDO 2013; Davis & Raymond 2012; Hanushek et al. 2007; Bifulco & Ladd 2006; Sass 2006; Zimmer & Buddin 2006; Zimmer et al. 2009, 2012; for a review see Betts & Tang 2014, Teasley 2009). These types of studies reveal that students in charter schools perform similarly to, but not better than, students in traditional public schools. For example, relying on a matching algorithm to compare charter school students with their traditional public school peers, the Center for Research on Education Outcomes (CREDO 2013) examined charter schools in 27 states and found that the achievement gains of charter students and those of traditional public school students differed by no more than 0.01 standard deviations. Similarly, Zimmer et al. (2009, 2012) examined charter schools in seven states and generally found no statistically significant charter school effects.

In a recent meta-analysis of the more rigorous studies—i.e., lottery-based and quasi-experimental value-added analyses—Betts & Tang (2014) find overall that charter schools produce higher achievement gains in mathematics than traditional public schools do.³ Although most of the effects are positive, they find no overall statistically significant differences in reading achievement between charter and traditional public schools. Betts & Tang (2014) also find that the studies of KIPP reveal large and significant effects on mathematics and reading achievement

³In their review, they note that to date only 8 studies have used a lottery-based approach and 52 studies used quasi-experimental value-added approaches.

when compared with other types of charter schools. In addition to these overall positive effects on mathematics, they emphasize the heterogeneity of effects across different types of charters: “Overall, our findings confirm that the impact of the charter sector on outcomes varies considerably—especially across geographic areas” (p. 54).

Although studies show that the effects of charter schools on student achievement are mixed (some positive, some negative, and some neutral), it is important to note a couple of key findings about achievement impacts of charter schools. First, some studies have found significant and substantial positive effects of charter schools, particularly in urban areas where it has been difficult to implement meaningful educational reforms, and for certain types of charter schools (e.g., KIPP and “no excuses” charter schools) (Angrist et al. 2011, Betts & Tang 2014, Dobbie & Fryer 2011, Tuttle et al. 2010). Second, there is great variation in the effects of charter schools (Betts & Tang 2014, CREDO 2013, Furgeson et al. 2012, Gleason et al. 2010). Third, altogether the evidence suggests that the overall average performance of charter and traditional public schools in the United States is currently positive but small (Betts & Tang 2014, CREDO 2013).

Educational Attainment

Compared with the growing numbers of studies that examine the effects of charter schools on achievement, very few studies examine the effects of charter schools on educational attainment (i.e., high school graduation, college attendance, and college persistence). Although these effects are understudied, the few studies that examine them consistently find positive significant effects. The samples, however, are confined to certain geographic areas, so it is difficult to generalize to other locations.

Booker et al. (2011) examined charter high schools in Chicago and Florida, where they found that charter high school students were 7–15 percentage points more likely to graduate and 8–10 percentage points more likely to enroll in college compared with students who attended charter middle schools but then attended traditional public high schools. Booker et al. (2014) extended this study to examine college persistence and earnings. In Florida and Chicago, they found that charter high school students are more likely to persist at least two years in college compared with students who attended charter middle schools but then attended traditional public high schools. The authors were able to examine earnings outcomes only in Florida, where they found that charter high school attendance was associated with a \$2,347 increase in earnings for 23- to 25-year-olds (approximately 13% higher earnings than for comparable students who attended charter middle schools but then attended traditional public high schools).

In their study of CMO charter high schools, Furgeson et al. (2012) matched CMO charters to traditional public schools and found that for four of the CMOs with available data, two of them had large positive effects on college enrollment: Compared with traditional public school students, charter students were 21–23% more likely to enroll in college. The authors found that the effect on high school graduation varied by the type of CMO. The other two CMOs revealed no significant effects on educational attainment.

In New York, Dobbie & Fryer’s (2011) lottery-based study in Harlem found positive effects on high school graduation and college attendance, but they examined only one school. In their lottery-based design in Boston charter high schools, Angrist et al. (2013) found a positive effect on college preparation as measured by SAT scores, no effects on high school graduation, and a positive effect of students transitioning from two-year to four-year colleges. Although more studies on educational attainment and other outcomes are needed, to date the findings suggest

a large positive effect of charter schools on educational attainment when examining high school graduation and college enrollment (see also Betts & Tang 2014).⁴

OPENING THE BLACK BOX OF CHARTER SCHOOLS

Although studies of school choice shed some light on charter schools' main effects on achievement and educational attainment in different locales, they provide limited information about the schools as organizations and the conditions within them that may promote these student outcomes, particularly the curriculum and instruction most likely to affect student learning, thereby leading to achievement growth and additional educational opportunities. To better understand the conditions under which schools of choice have (or do not have) positive effects on achievement, many researchers and policy makers advocate looking inside schools, pointing to the importance of detailed information about curriculum, instruction, organizational conditions that promote achievement, and teacher characteristics and qualifications (Berends et al. 2008a,b, 2010; Betts & Loveless 2005; Cannata & Engel 2012; Cannata & Peñaloza 2012; Cravens et al. 2012; Gill et al. 2007; Goff et al. 2012; Zimmer & Buddin 2007, 2008; Zimmer et al. 2003). To date, however, these calls to examine the organization of schooling within the charter sector by and large have not been heeded. Instead, studies have focused on particular characteristics of effective schools or specific innovative practices.

Characteristics of Effective Charter Schools

Some studies—particularly those relying on lottery-based, randomized designs—have looked at some individual school characteristics that are correlated with positive impacts of charter schools on achievement. These characteristics include longer school days, school-wide focus on achievement, school behavioral policy, coaching and feedback to teachers, and data-based decision making. Although these studies have deemed these attributes as effective characteristics of charter schools, these are characteristics of effective schools in general, and the autonomy that charter schools have in certain contexts may facilitate the implementation of effective structures and processes (Bryk et al. 2010, Gleason 2014, Goldring & Berends 2009).

Longer school days. Longer school days allow for more instructional time, which several studies of charter schools associate with positive effects on achievement. In their study of KIPP schools, Tuttle et al. (2010) found that KIPP schools had positive impacts on student achievement (see also Gleason et al. 2014). However, although the KIPP school model has longer school days than traditional public schools do, it is not simply more time, per se, that leads to better achievement; Tuttle et al. found that KIPP schools with shorter days had more positive effects on achievement than did KIPP schools with longer days. Thus, it was not time, but how the time was used. Furthermore, Tuttle et al. reveal that KIPP schools that spent more time on instructional activities had greater achievement gains than KIPP schools that diverted time away from core instructional practices.

But this finding about increased instructional time is not unique to the KIPP charter school study. Most of the other lottery-based studies reviewed above find a positive relationship between longer school day and effects on student achievement, whether in New York, Boston, or across

⁴Only a few studies examine the effects of charter schools on student outcomes other than test scores and educational attainment, such as student attendance and behavior in schools (Dobbie & Fryer 2013, Gleason et al. 2010, Imberman 2011, Tuttle et al. 2010). Additional social, emotional, and behavioral outcomes need to be examined (Hamilton & Stecher 2010).

the nation (Angrist et al. 2013, Dobbie & Fryer 2013, Furgeson et al. 2012, Gleason et al. 2010, Hoxby et al. 2009).

School-wide focus on achievement. A school-wide focus on achievement is another characteristic associated with positive charter school effects on mathematics and reading achievement. Several of the lottery-based studies relied on principal reports to assess schools expectations, finding that charter schools that had positive impacts on student achievement consisted of principals who responded that students were expected to exceed state academic standards and of schools relentlessly focused on academic goals (Dobbie & Fryer 2013, Furgeson et al. 2012).

Using propensity score matching to match charter and traditional public school students, another study found that aggregated teacher survey reports about the school's focus on achievement were positively related to student achievement gains (Berends et al. 2010). The measure for focus on achievement was a scale based on questions that asked teachers whether they expected students to complete every assignment, whether they encouraged students to keep trying even when the work is challenging, and whether they set high expectations for academic work.

School behavioral policies. Although this characteristic is measured differently across studies, researchers have shown that charter schools that set high expectations for student behavior and consistently enforce rules for behavior have positive effects on student achievement. School behavioral policies ranged from zero-tolerance policies for dangerous behavior and parent-student agreements about behavior (Furgeson et al. 2012) to expectations that students and teachers be courteous, with small behavioral infractions punished consistently (Hoxby et al. 2009), to a "no-excuses" school culture (Angrist et al. 2013).

Coaching and teacher feedback. Coaching and providing teachers with feedback about their instruction are also characteristics of charter schools that have positive achievement impacts. Lottery-based studies found that the highest-performing charter schools provided the most teacher coaching and feedback about their instructional practices (Dobbie & Fryer 2013, Furgeson et al. 2012).

Data-based decision making. Another characteristic of high-performing charter schools is data-based decision making, in which teachers rely on student data to guide their instructional practices. In New York, Hoxby et al. (2009) found that charter schools relying on diagnostic student assessments during the school year had higher achievement gains on the state tests administered at the end of the school year (see also Dobbie & Fryer 2013). Similarly, in Boston, Angrist et al. (2013) found that additional assessments during the school year to gauge students' progress was positively related to charter school impacts on the state test. In the broader CMO study, Furgeson et al. (2012) found that when charter school teachers used data to inform their instructional practice, their students experienced higher achievement gains.

Although these studies inform us about some of the correlates that may explain the positive achievement impacts of charter schools across different locales and some of the possible innovative organizational and instructional practices, we still lack an understanding of how these individual characteristics are assembled in coherent organizational and instructional designs for schools (Berends et al. 2002, Cohen et al. 2014, Peurach 2011).

Charter School Innovation

In addition to these effective characteristics of charter schools, some researchers have attempted to address one of the core tenants of charter schools: innovation. Central to market theorists' argument for choice is that charter school autonomy and accountability produce organizational

innovations that promote new organizational structures and processes that lead to changes in instructional practices, which in turn lead to better student outcomes (Chubb & Moe 1990, Walberg & Bast 2003). As Lubienski (2003) states, “choice, competition, and innovation are cast as the necessary vehicles for advancing academic outcomes” (p. 397). Moreover, the argument goes, practices and conditions related to autonomy, innovation, and accountability will differ across schools (and school types), thus responding to parental and community preferences and further promoting student achievement (Walberg 2011).

Yet what do we mean by innovation? What does the research show about innovation in charter schools? It is important to define what one means by innovation. In charter schools, the definition varies. What one considers innovative may be standard or conventional practice to another. Some scholars claim that charter schools in and of themselves constitute an innovation (Center for Education Reform 2008; US Department of Education 2004, 2008). Others define innovation simply as the ability to hire their own teachers. Still others see it as the ability to implement comprehensive designs that aim to change the teaching staff, professional development, and the organization of time, curriculum, and instruction, either at the local level or in partnership with an external CMO or EMO provider (e.g., KIPP, Expeditionary Learning, Green Dot, National Heritage Academies).

Researchers have arrived at definitions in different ways. For instance, Lubienski’s (2003) conceptualization of innovation distinguishes between “*educational* changes (practices regarding curricular content and instructional strategies with immediate impact at the classroom-level) and *administrative* changes (organizational-level practices and structural designs that do not directly affect classroom techniques or content)” (pp. 404–5; italics in the original). In his review of the literature, which attempted to be as inclusive as possible, resulting in 56 empirical studies of charter schools, Lubienski (2003) found that although some charter schools were organizationally innovative, classroom practices tended toward the familiar. Noted organizational innovations included the use of smaller class sizes, parent contracts with the school, and teacher merit pay. He also described some innovative classroom practices—using technology to support instruction, cooperative learning, and individualized instruction—but then noted the widespread use of such practices in traditional public schools. Thus, although Lubienski’s review is a helpful start, it does not provide a context in which to evaluate when particular educational or administrative changes are indeed innovative and unique.

Other researchers have relied on state charter school laws to determine what policy makers envision as charter school innovation. Wohlstetter et al. (2013) examine charter school laws across the United States in order to set expectations for what researchers might empirically observe across charter schools. Reviewing charter school laws in 32 states, they categorize the goals of the laws as affecting classrooms (e.g., providing teachers with new professional opportunities, implementing innovative programs and practices, and improving student performance), the school community (increasing autonomy, parent involvement, and accountability), and the school system (increasing public school competition, increasing the general capacity of the K–12 system, and improving student achievement district-wide).

Wohlstetter et al. (2013) find that “more than ninety percent of the state charter laws included as one of the purposes behind the law to encourage school communities to use their autonomy in the classroom to experiment, innovate, and create new educational options for students” (p. 38). Rather than create completely new innovative learning models, charter schools tend to adopt specific practices and serve specific student populations. In their review, Wohlstetter et al. find that charter schools have filled niches in the public school market in which traditional public schools have not performed well, such as charter schools serving students at risk of dropping out or using technology to create cyber or hybrid learning models. In addition, they find that

instructional programs include certain characteristics such as college preparation, team teaching, bilingual education, or a back-to-basics curriculum.

Others have looked at innovation by focusing on the local context (Preston et al. 2012). That is, do charter schools implement innovative organizational and instructional practices that other traditional public schools within (or nearby) the same district do not? Using the nationally representative Schools and Staffing Survey (2007–2008) and analyzing over 200 charter schools and over 700 traditional public schools in 36 states, Preston et al. (2012) examine whether charter schools implement innovative (*a*) staffing practices (i.e., teacher compensation and tenure not governed by unions), (*b*) academic support services (after-school tutoring or extended-day instruction), (*c*) school organizational structures (year-round schools, block scheduling, looping, houses or families of classrooms, and multigrade or mixed-age classrooms), and (*d*) governance (stakeholder involvement). Overall, they find that charter schools do not fulfill the expectations for innovation when compared with traditional public schools.

DISCUSSION AND FUTURE RESEARCH

We have learned a great deal about charter schools over the past 20 years, especially the past 10 as longitudinal student data systems have increased, and there is still much to learn. As stated above, future research that draws on the social organization of schooling—the structure and processes that occur among and within different types of charter and traditional public schools—is crucial for our understanding of the variability in charter school effects (see Berends et al. 2010, Dreeben 1994, Gamoran et al. 2000, Schneider 2003).

Sociologists have long considered the relationship between school factors and student achievement, specifically how school structure and processes correlate with the societal stratification of educational, occupational, and economic opportunities (see Coleman et al. 1966). More recent research has shown that, although student achievement varies among schools, the differences among classrooms and teachers are critical for students' achievement growth (see Rowan et al. 2002). Central to this line of research are what goes on inside the black box of schools and how school and schooling factors contribute to both social inequality and productivity (Berends & Zottola 2009).

Understanding the social relationships that occur within schools, particularly the interactions within classrooms, is important because these experiences provide students with the most immediate socialization (Bidwell 1972, Bidwell & Friedkin 1988, Oakes et al. 1992). The significance of instruction dates back to Waller (1932, p. 33), who argued that the give-and-take during classroom instruction constitutes the “nucleus” of the school; Parsons (1959, p. 297), who claimed that the classroom is “where the ‘business’ of formal education actually takes place”; and Bidwell (1972, p. 5), who emphasized the importance of studying the immediate social relations of students in schools and classrooms to discover “fairly sizable effects on students.” Gamoran et al. (2000, p. 59) provide a summary of this approach:

An organization is a system of linked relationships, not simply a collection of individuals or of isolated categories. . . For this reason a sociological study of an organization calls for a study of relationships, centering on how relationships become ordered, how they change, and how they influence outcomes. What may prove intriguing across organizations are differences in the character of the linkages that prevail.

It is also important to understand the collective nature of schools, particularly when examining different types of schools of choice. Dreeben (1994, p. 38) elaborates on the necessity of considering schooling processes in addition to schools' collective properties (school structure):

Taking the internal structure of schools seriously will mean paying attention to those organizational properties and activities that immediately influence the experiences of students and shape their learning rather than assessing global characteristics of schools and school systems as if they were internally homogeneous. It will also mean thinking about the organization of instruction. . .and about the curriculum as both an organizational entity (Dreeben & Barr 1987) and as an institutional one (Meyer 1977).

Such an approach informs both market and institutional theories of charter schools that have conflicting hypotheses about charter school reform. Institutional theorists argue that the institutional environment of American schooling is so strong that significant changes in educational approaches are likely to be rare or short-lived (see Elmore 2007). Meanwhile, market theorists claim that increased choice will result in widespread autonomy, promoting innovation, competition, and increased satisfaction and outcomes (Chubb & Moe 1990, Friedman 1962, Hess 2002).

Both theories not only predict different outcomes for school choice policies, but also motivate the examination of school differences in terms of organizational and instructional conditions such as school mission and goals, leadership and learning climate, instructional designs, teacher professional communities, professional development, and parent involvement and support (see Berends et al. 2010, Bryk et al. 2010).

Additional research on key indicators of school improvement is needed to examine differences between charter and traditional public schools. This research is relevant not only for the studies of CMOs and EMOs, but also for nearly two-thirds of charter schools that are independent—a significant proportion of the charter school sector overlooked by researchers and critics of charter schools (Ravitch 2010, 2013). We are largely ignorant about these independent schools, their effects, and their organizational and instructional conditions because few systematic studies have focused on this large, important portion of the charter school sector.

In addition to the effective characteristics of charter schools reviewed above, researchers need to examine what we know about effective schools, charter or traditional. Thus, we can make systematic comparisons within and between sectors to inform the competing hypotheses between market and institutional theories. To date, researchers have focused on several organizational conditions that enable student achievement, such as mission and goals, principal leadership, expectations for students, instructional program coherence, professional development, professional learning community, and curriculum and instruction aligned to standards and assessments (Berends et al. 2010, Renzulli et al. 2014). Researchers have also shown that school mission and goals are important for guiding school activities (Bryk et al. 2010, Renzulli et al. 2014). Education research has well recognized the significance of principal leadership for school reform and improvement, with several studies showing the value of leadership in establishing effective school improvement efforts, in terms of both setting the school's vision and mission and providing instructional direction (Berends et al. 2002, Bryk et al. 2010, Cravens et al. 2012, Goff et al. 2012).

The coherence of the set of interventions schools adopt may matter at least as much as the nature of each intervention alone. Such instructional program coherence has been—and can continue to be—analyzed along several dimensions, including the degree to which a school's interventions dovetail in terms of their demands on teacher attention and other resources, the alignment of classroom content with external standards and assessments, the consistency of the content taught among teachers of particular grades or courses, and the appropriate sequencing of content across grades (Cohen et al. 2014, Newmann et al. 2001). Examining whether charter schools foster greater program coherence than traditional public schools do may be critical for understanding the heterogeneity of effects on achievement. Examining differences in coherence between charter and traditional public schools may be particularly relevant in the future as schools aim to align instruction with challenging standards, such as the Common Core State Standards Initiative.

With the growth of longitudinal data systems in different states, additional data—both quantitative (e.g., linking administrative records and principal, teacher, parent, and student surveys) and qualitative (e.g., interviews, observations, case studies)—can be gathered to better understand organizational and instructional differences between charter and traditional public schools. States and large school districts might also consider partnering with researchers to examine such questions, which are relevant to researchers, policy makers, and practitioners alike (Dynarski & Berends 2015).

In addition, the US Department of Education's National Center for Education Statistics (NCES) might consider oversampling charter schools in its samples of younger students (e.g., future iterations of the Early Childhood Longitudinal Studies) and older students (e.g., its nationally representative cohorts of high school students, such as the High School Longitudinal Study). The test score and survey information from these studies would provide researchers the opportunity to examine for the first time the variety between and within charter and traditional public schools in nationally representative longitudinal samples. NCES might also consider having researchers raise additional funding to supplement the NCES samples with additional quantitative and qualitative data for a more comprehensive examination of charter and traditional public schools.

Future research must focus on questions that go beyond the horse races between charter and noncharter students. Understanding the conditions under which choice options are effective will help scholars push policy debates forward and assess the strengths and weaknesses of market theory and institutional theory. This line of research will cumulate our learning about charter schools into systematic knowledge creation to inform educators, policy makers, and researchers in the revision of policies, programs, practices, and theory. What's more, such research will provide needed findings about the short- and long-term effects on students who have not historically had access to the academic, social, emotional, and financial resources that lead to achievement growth, educational attainment, and other positive adult outcomes.

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LITERATURE CITED

- Abdulkadiroglu A, Angrist JD, Cohodes SR, Dynarski SM, Fullerton JB, et al. 2009. *Informing the Debate: Comparing Boston's Charter, Pilot and Traditional Schools*. Boston: Boston Found.
- Abdulkadiroglu A, Angrist JD, Dynarski SM, Kane TJ, Pathak PA. 2011. Accountability and flexibility in public schools: evidence from Boston's charters and pilots. *Q. J. Econ.* 126:699–748
- Angrist JD, Cohodes SR, Dynarski SM, Fullerton JB, Kane TJ, et al. 2011. *Student Achievement in Massachusetts' Charter Schools*. Boston: Cent. Educ. Policy Res. Harvard Univ.
- Angrist JD, Cohodes SR, Dynarski SM, Pathak PA, Walters CD. 2013. *Charter schools and the road to college readiness: the effects on college preparation, attendance and choice*. Report prepared for the Boston Foundation and NewSchools Venture Fund
- Berends M, Bodilly S, Kirby S. 2002. *Facing the Challenges of Whole-School Reform: New American Schools After a Decade*. Santa Monica, CA: RAND Corp.
- Berends M, Cannata M, Goldring EB, eds. 2011. *School Choice and School Improvement*. Cambridge, MA: Harvard Educ. Press
- Berends M, Goldring EB, Stein M, Cravens X. 2010. Instructional conditions in charter schools and students' mathematics achievement gains. *Am. J. Educ.* 116(3):303–35

- Berends M, Springer MG, Ballou D, Walberg HJ, eds. 2009. *Handbook of Research on School Choice*. New York: Routledge
- Berends M, Springer MG, Walberg HJ, eds. 2008a. *Charter School Outcomes*. New York: Taylor & Francis
- Berends M, Watral C, Teasley B, Nicotera A. 2008b. Charter school effects on achievement: where we are and where we're going. See Berends et al. 2008a, pp. 243–67
- Berends M, Zottola GC. 2009. Social perspectives on school choice. See Berends et al. 2009, pp. 35–53
- Betts JR. 2005. The economic theory of school choice. See Betts & Loveless 2005, pp. 14–39
- Betts JR, Hill PT, eds. 2010. *Taking Measure of Charter Schools: Better Assessments, Better Policymaking, Better Schools*. Lanham, MD: Rowman & Littlefield
- Betts JR, Loveless T, eds. 2005. *Getting Choice Right: Ensuring Equity and Efficiency in Education Policy*. Washington, DC: Brookings Inst.
- Betts JR, Tang YE. 2014. *A meta-analysis of the literature on the effect of charter schools on student achievement*. Natl. Charter School Res. Proj., Cent. Reinventing Public Educ., Bothell, Univ. Wash.
- Bidwell CE. 1972. Schooling and socialization for moral commitment. *Interchange* 3:1–27
- Bidwell CE, Dreeben R. 2006. Public and private education: conceptualizing the distinction. In *School Sector and Student Outcomes*, ed. MT Hallinan, pp. 9–37. Notre Dame, IN: Univ. Notre Dame Press
- Bidwell CE, Friedkin NE. 1988. The sociology of education. In *The Handbook of Sociology*, ed. NJ Smelser, pp. 449–71. Thousand Oaks, CA: Sage
- Bidwell CE, Kasarda JD. 1980. Conceptualizing and measuring the effects of school and schooling. *Am. J. Educ.* 88:401–30
- Bifulco R, Ladd HF. 2006. The impacts of charter schools on student achievement: evidence from North Carolina. *Educ. Financ. Policy* 1(1):50–90
- Booker K, Gill B, Sass T, Zimmer R. 2014. *Charter high schools' effects on long-term attainment and earnings*. Work. Pap. Mathematica Policy Research
- Booker K, Sass T, Gill B, Zimmer R. 2011. The effects of charter high schools on educational attainment. *J. Lab. Econ.* 29:377–415
- Booker TK, Gilpatric SM, Gronberg TJ, Jansen DW. 2007. The impact of charter school student attendance on student performance. *J. Public Econ.* 91:849–76
- Bryk AS, Sebring PB, Allensworth E, Luppescu S, Easton JQ. 2010. *Organizing Schools for Improvement: Lessons from Chicago*. Chicago: Univ. Chicago Press
- Cannata M, Engel M. 2012. Does charter status determine preferences? Comparing the hiring preferences of charter and traditional public school principals. *Educ. Financ. Policy* 7(4):455–88
- Cannata M, Peñaloza RV. 2012. Who are charter school teachers? Comparing teacher characteristics, job choices, and job preferences. *Educ. Policy Anal. Arch.* 20(29):1–21
- Center for Education Reform. 2008. *America's Attitudes Toward Charter Schools*. Washington, DC: Cent. Educ. Reform. <https://www.edreform.com/2012/01/americas-attitudes-toward-charter-schools-2008/>
- Chubb JE, Moe TM. 1990. *Politics, Markets and American Schools*. Washington, DC: Brookings Inst.
- Clark MA, Gleason PM, Tuttle CC, Silverger MK. 2015. Do charter schools improve student achievement? *Educ. Eval. Policy Anal.* In press
- Cohen DK, Peurach DJ, Glazer JL, Gates KE, Goldin S. 2014. *Improvement by Design: The Promise of Better Schools*. Chicago: Univ. Chicago Press
- Coleman JS, Campbell E, Hobson C, McPartland J, Mood A, et al. 1966. *Equality of Educational Opportunity*. Washington, DC: US Government Print. Off.
- Corcoran SP, Stoddard C. 2011. Local demand for school choice: evidence from the Washington Charter School Referenda. *Educ. Financ. Policy* 6(3):323–53
- Cravens XC, Goldring EB, Peñaloza RV. 2012. Leadership practice in the context of school choice in the United States. *Leadersh. Policy Sch.* 11:452–76
- CREDO (Cent. Res. Educ. Outcomes). 2013. *National Charter School Study*. Stanford, CA: CREDO. <https://credo.stanford.edu/documents/NCSS%202013%20Final%20Draft.pdf>
- Cucchiara MB. 2013. *Marking Schools, Marketing Cities: Who Wins and Who Loses When Schools Become Urban Amenities?* Chicago: Univ. Chicago Press
- Davis DH, Raymond ME. 2012. Choice for studying choice: assessing charter school effectiveness using two quasi-experimental methods. *Econ. Educ. Rev.* 31(2):225–36

- DiMaggio PJ, Powell WW. 1983. The iron cage revisited: institutional isomorphism and collective rationality in organizational fields. *Am. Soc. Rev.* 48:147–60
- Dobbie W, Fryer RG. 2011. Are high-quality schools enough to increase achievement among the poor? Evidence from the Harlem Children’s Zone. *Am. Econ J.* 3(3):158–87
- Dobbie W, Fryer RG. 2013. Getting beneath the veil of effective schools: evidence from New York City. *Am. Econ. J.* 5(4):28–60
- Dreeben R. 1994. The sociology of education: its development in the United States. In *Research in Sociology of Education and Socialization*, ed. A Pallas, 10:7–52. Greenwich, CT: JAI Press
- Dreeben R, Barr R. 1987. An organizational analysis of curriculum and instruction. In *The Social Organization of Schools: New Conceptualizing of the Learning Process*, ed. MT Hallinan, pp. 13–39. New York: Plenum
- Dynarski S, Berends M. 2015. Introduction to Special Issue. Research using longitudinal student data systems: findings, lessons, and prospects. *Educ. Eval. Policy Anal.* 37(1S):1S–5S
- Education Week. 2013. *Obama’s Second Term: What’s Ahead for Education Policy*. Bethesda, MD: Editorial Projects in Education
- Elmore R. 2007. *School Reform from the Inside Out: Policy, Practice, and Performance*. Boston: Harvard Educ. Press
- Finnegan KS. 2007. Charter school autonomy: the mismatch between theory and practice. *Educ. Policy* 21(3):503–26
- Friedman M. 1955. The role of government in education. In *Economics and the Public Interest*, ed. RA Solo, pp. 123–44. New Brunswick, NJ: Rutgers Univ. Press
- Friedman M. 1962. *Capitalism and Freedom*. Chicago: Chicago Univ. Press
- Furgeson J, Gill B, Haimson J, Killewald A, McCullough M, et al. 2012. *Charter-School Management Organizations: Diverse Strategies and Diverse Student Impacts*. Cambridge, MA: Mathematica Policy Res./Cent. Reinventing Public Educ.
- Gamoran A, Nystrand M, Berends M, LePore P. 1995. An organizational analysis of the effects of ability grouping. *Am. Educ. Res. J.* 24:687–715
- Gamoran A, Secada WG, Marrett CB. 2000. The organizational context of teaching and learning. In *Handbook of the Sociology of Education*, ed. MT Hallinan, pp. 37–63. New York: Kluwer Academic
- Gill BP, Timpane PM, Ross KE, Brewer DJ. 2007. *Rhetoric Versus Reality: What We Know and What We Need to Know about Vouchers and Charter Schools*. Santa Monica, CA: RAND Corp.
- Gleason PM. 2014. *What’s the secret ingredient? Searching for policies and practices that make charter schools successful*. Presented at Crossroads of America: The Intersection of Research and Policy in the Indiana School Choice Ecosystem, June 9–10, Univ. Notre Dame, Cent. Res. Educ. Oppor.
- Gleason PM, Clark MA, Tuttle CC, Dwoyer E. 2010. *The Evaluation of Charter School Impacts*. Washington, DC: US Dep. Educ.
- Gleason PM, Tuttle CC, Gill B, Nichols-Barrer I, Bing-ru T. 2014. Do KIPP schools boost student achievement? *Educ. Financ. Policy* 9(1):36–58
- Goff PT, Mavrogordato M, Goldring EB. 2012. Instructional leadership in charter schools: Is there an organizational effect or are leadership practices the result of faculty characteristics and preferences? *Leadersh. Policy Sch.* 11(1):1–25
- Goldring E, Berends M. 2009. *Leading with Data: Pathways to Improve Your School*. Thousand Oaks, CA: Corwin
- Hamilton LS, Stecher BM. 2010. Expanding what counts when evaluating charter school effectiveness. In *Taking Measure of Charter Schools: Better Assessment, Better Policymaking, Better Schools*, ed. JR Betts, PT Hill, pp. 33–54. Lanham, MD: Rowman & Littlefield
- Hanushek EA, Kain JF, Rivkin SG, Branch GF. 2007. Charter school quality and parental decision making with school choice. *J. Public Econ.* 91:823–48
- Henig JR. 1995. *Rethinking School Choice: Limits of the Market Metaphor*. Princeton, NJ: Princeton Univ. Press
- Hess FM. 2002. *Revolution at the Margins: The Impact of Competition on Urban School Systems*. Washington, DC: Brookings Inst.
- Hoxby CM, Murarka S. 2008. Methods of assessing achievement of students in charter schools. See Berends et al. 2008a, pp. 7–37

- Hoxby CM, Murarka S, Kang J. 2009. *How New York City's Charter Schools Affect Achievement*. Cambridge, MA: New York City Charter Sch. Eval. Proj.
- Imberman S. 2011. Achievement and behavior in charter schools: drawing a more complete picture. *Rev. Econ. Stat.* 93(2):416–35
- Jennings JL. 2010. School choice or schools' choice? Managing in an era of accountability. *Sociol. Educ.* 83:227–47
- Junge ER. 2012. *Zero Chance of Passage: The Pioneering Charter School History*. Edina, MN: Beaver's Pond
- Konstantopoulos S. 2006. Trends of school effects on student achievement: evidence from NLS:72, HSB:82, and NELS:92. *Teach. College Rec.* 108:2550–81
- Ladd HF, Fiske EB, Ruijs N. 2011. Does parental choice foster segregated schools? Insights from the Netherlands. In *School Choice and School Improvement*, ed. M Berends, M Cannata, EB Goldring, pp. 233–53. Boston, MA: Harvard Educ. Press
- Lareau A, Goyette K, eds. 2014. *Choosing Homes, Choosing Schools*. New York: Russell Sage
- Levin HM. 1998. Educational vouchers: effectiveness, choice, and costs. *J. Policy Anal. Manag.* 17(3):392–91
- Lubienski C. 2003. Innovation in education markets: theory and evidence on the impact of competition and choice in charter schools. *Am. Educ. Res. J.* 40(2):395–443
- Mehana M, Reynolds AJ. 2004. School mobility and achievement: a meta-analysis. *Child. Youth Serv. Rev.* 26(1):93–119
- Meyer JW. 1977. The effects of education as an institution. *Am. J. Sociol.* 83(1):55–77
- Meyer JW, Ramirez F. 2000. The world institutionalization of education. In *Discourse Formation in Comparative Education*, ed. J Schriewer, pp. 111–32. Frankfurt, Ger.: Peter Lang
- Meyer JW, Rowan B. 1977. Institutionalized organizations: formal structure as myth and ceremony. *Am. J. Sociol.* 83:340–63
- Meyer JW, Rowan B. 1978. The structure of educational organizations. In *Environments and Organizations*, ed. MW Meyer, pp. 78–109. San Francisco: Jossey-Bass
- Miron G, Urschel JL, Aguilar MAY, Dailey B. 2012. *Profiles of for-profit and non-profit education management organizations*. Natl. Educ. Policy Cent. Rep. 13-288, Boulder, CO
- National Alliance for Public Charter Schools. 2014. *Overview of public charter schools*. Accessed on August 12, 2014. <http://www.publiccharters.org/dashboard/schools/year/2013>
- Newmann FM, Smith B, Allensworth E, Bryk AS. 2001. Instructional program coherence: what it is and why it should guide school improvement policy. *Educ. Eval. Policy Anal.* 234:297–321
- Oakes J, Gamoran A, Page RN. 1992. Curriculum differentiation: opportunities, outcomes, and meanings. In *Handbook of Research on Curriculum*, ed. PW Jackson, pp. 570–608. New York: Macmillan
- Obama B. 2008. 2008. Politico pre-Potomac primary interviews: on education. February 11. http://www.ontheissues.org/Archive/2008_Politico_Education.htm
- Parsons T. 1959. The school class as a social system: some of its functions in American society. *Harvard Educ. Rev.* 29:297–318
- Patillo M, O'Connor LD, Butts F. 2014. High stakes choosing. See Lareau & Goyette 2014, pp. 237–67
- Peurach DJ. 2011. *Seeing Complexity in Public Education: Problems, Possibilities, and Success for All*. New York: Oxford Univ. Press
- Powell WW, DiMaggio PJ. 1991. *The New Institutionalism in Organizational Analysis*. Chicago: Univ. Chicago Press
- Preston C, Goldring E, Berends M, Cannata M. 2012. School innovation in district context: comparing traditional public schools and charter schools. *Econ. Educ. Rev.* 31(2):318–30
- Ravitch D. 2010. *The Death and Life of the Great American School System: How Testing and Choice Are Undermining Education*. New York: Basic Books
- Ravitch D. 2013. *Reign of Error: The Hoax of the Privatization Movement and the Danger to America's Public Schools*. New York: Knopf
- Renzulli L, Barr A, Paino M. 2014. Innovative education? A test of the specialist mimicry or generalist assimilation in trends in charter school specialization over time. *Sociol. Educ.* 88(1):83–102
- Renzulli LA, Roscigno V. 2005. Charter school policy, implementation, and diffusion in the United States. *Sociol. Educ.* 78:344–65

- Roda A, Wells AS. 2013. School choice policies and racial segregation: where white parents' good intentions, anxiety, and privilege collide. *Am. J. Educ.* 119(2):261–93
- Rowan B, Correnti R, Miller RJ. 2002. What large-scale survey research tells us about teacher effects on student achievement: insights from the *Prospects* study of elementary schools. *Teachers College Rec.* 104(8):1525–67
- Sass TR. 2006. Charter schools and student achievement in Florida. *Educ. Financ. Policy* 1(1):91–122
- Sattin-Bajaj C. 2014. *Unaccompanied Minors: Immigrant Youth, School Choice, and the Pursuit of Equity*. Boston, MA: Harvard Educ. Press
- Scheerens J, Bosker R. 1997. *The Foundations of Educational Effectiveness*. New York: Pergamon
- Schneider B. 2003. Sociology of education: an overview of the field at the turn of the twenty-first century. In *Stability and Change in American Education: Structure, Process, and Outcomes*, ed. M Hallinan, A Gamoran, W Kubitscheck, T Loveless, pp. 193–226. Clinton Corners, NY: Eliot Werner
- Scott WR, Davis GF. 2007. *Organizations and Organizing: Rational, Natural and Open System Perspectives*. Englewood Cliffs, NJ: Prentice Hall
- Scott WR, Meyer JW. 1994. *Institutional Environments and Organizations: Structural Complexity and Individualism*. Thousand Oaks, CA: Sage
- South SJ, Haynie DL, Bose S. 2007. Student mobility and school dropout. *Soc. Sci. Res.* 36(1):68–94
- Stoddard C, Corcoran SP. 2007. The political economy of school choice: support for charter schools across states and school districts. *J. Urban Econ.* 52(1):27–54
- Teasley B. 2009. Charter school outcomes. See Berends et al. 2009, pp. 209–25
- Tuttle CC, Bing-ru T, Nichols-Barrer I, Gill BP, Gleason P. 2010. *Student characteristics and achievement in 22 KIPP middle schools*. Washington, DC: Mathematica Policy Res.
- US Department of Education. 2004. *Successful charter schools*. Off. Innov. Improv. Rep., US Dep. Educ., Washington, DC. <http://www.p12.nysed.gov/psc/documents/USDOESuccessfulCharterSchoolsreport.pdf>
- US Department of Education. 2008. *A commitment to quality: national charter school policy forum report*. Off. Innov. Improv. Rep., US Dep. Educ., Washington, DC. http://www.isbe.net/charter/pdf/National_Charter_School_Policy_Forum_Report2008.pdf
- Walberg HJ. 2011. *Tests, Testing, and Genuine School Reform*. Stanford, CA: Hoover Inst.
- Walberg HJ, Bast J. 2003. *Education and Capitalism: How Overcoming Our Fear of Markets and Economics Can Improve America's Schools*. Stanford, CA: Hoover Inst.
- Waller WW. 1932. *The Sociology of Teaching*. New York: Wiley
- Wells AS. 1993. *Time to Choose: America at the Crossroads of School Choice Policy*. New York: Hill & Wang
- Wohlstetter P, Smith J, Farell CC. 2013. *Choices and Challenges: Charter School Performance in Perspective*. Cambridge, MA: Harvard Educ. Press
- Wolf PJ, Kisida B, Gutmann B, Puma J, Eissa N, Rizzo L. 2013. School vouchers and student outcomes: experimental evidence from Washington, DC. *J. Policy Anal. Manag.* 32(2):246–70
- Wong KK, Klopott S. 2009. Politics and governance in charter schools. See Berends et al. 2009, pp. 115–35
- Wong KK, Shen FX. 2008. Charter law and charter operation: re-examining the charter school marketplace. See Berends et al. 2008a, pp. 131–61
- Zimmer R, Buddin R. 2006. Charter school performance in urban districts. *J. Urban Econ.* 60(2):307–26
- Zimmer R, Buddin R. 2007. Getting inside the black box: examining how the operation of charter schools affect performance. *Peabody J. Educ.* 82(2–3):231–73
- Zimmer R, Buddin R. 2008. Charter schools in California. See Berends et al. 2008a, pp. 163–94
- Zimmer R, Buddin R, Chau D, Daley G, Gill B, et al. 2003. *Charter School Operations and Performance: Evidence from California*. Santa Monica, CA: RAND Corp.
- Zimmer R, Gill R, Booker K, Lavertu S, Sass TR, Witte J. 2009. *Charter Schools in Eight States: Effects on Achievement, Attainment, Integration, and Competition*. Santa Monica, CA: RAND Corp.
- Zimmer R, Gill R, Booker K, Lavertu S, Sass TR, Witte J. 2012. Examining charter school achievement effects across seven states. *Econ. Educ. Rev.* 31(2):213–24