

Charter Management Organizations 2017

Executive Summary

In order to receive permission to open additional charter schools, we believe a current charter operator should have to demonstrate its current schools are successful. This would seem like a reasonable policy and a simple one to implement. The fact that even after controlling for student differences, a number of charter school networks deliver below average student academic growth indicates such policies are not in effect. This leads to the question of what is the actual performance of charter network affiliated schools. The purpose of this report is to create measures of effectiveness of scale and business practices across the charter sector in US K-12 public education.

To achieve the desired insight, this report examines charter schools across 24 states, New York City, and Washington DC. In addition to looking at overall results, we also break the charter school population down into multiple subpopulations. Included in the report are analyses by state, by racial/ethnic group, by special categories of students, and by school type. Breaking the overall charter effect into analyses by subpopulations is critical to understanding the impact charter school networks have on their students. Students facing different challenges have different needs. While charter networks may serve some students well, other students may be left struggling. Without breaking out the effects by group, the lower outcome for the left behind students may be disguised in the average effects or overpowered when the struggling group makes up the minority of enrollment. Finally, by providing estimates of individual network effects, we give charter and traditional school operators a list of exemplars from which to learn practices which can enhance learning for students.

In addition to examining the effects of charter networks, we also look at the larger organizations called super-networks. CREDO introduced the concept of the super-network in our 2013 Charter School Growth and Replication Study. A super-network can be thought of as a network of networks. These super-networks can serve tens of thousands of students through their multiple organizations. However, size is not what makes a super-network. What distinguishes a super-network from just a large network is that the super-network manages multiple organizations. Super-networks have a hierarchy of institutions which require more complex management structure whether it be operating multiple similar networks across the country or operating multiple brands of charter schools each with its own objectives.

This study presents two new analyses. The first considers the management arrangement of the charter school and its effect on student success. At its core, this analysis seeks to provide guidance on the necessary span of control needed to assure that students are benefitting academically. The second is a test of the profit status of the organizations operating charter schools. We explore whether there are differences in how schools perform based on whether they are non-profit or for-profit.

Methods and Data

The data for this report includes 3,677,822 individual records from 26 states¹. CREDO works diligently with its state partners to ensure all work meets the standards of the Family Educational Rights and Privacy Act (FERPA) and all additional state regulations for data access. As such, this study is fully compliant with FERPA and individual state regulations.

The primary method of analysis for this study is the Virtual Control Record (VCR) method developed by CREDO. Through the VCR process, CREDO matches each charter student with up to seven traditional public school (TPS) students who are identical to the charter student on the six observable matching criteria and have identical or similar prior academic achievement. The process creates a “virtual twin” which represents the performance we would expect the charter student to achieve if that student remained in a TPS setting. The VCR process matched 83 percent of charter students in math and 86 percent of charter students in reading to a virtual twin.

By examining the difference in the growth of the charter students and their virtual twins, we estimate the impact on academic growth of attending a charter school for students with specific characteristics. The statistical analyses control for the difference in student demographics and needs for special support programs such as English language learner programs by using proven statistical control methods. These methods give us a high level of confidence in the appropriateness of the estimates included in this study.

While the statistical analytic methods and controls used provide reliable and accurate statistical estimates of academic growth, those estimates are produced in standard deviations. To aid the lay reader in understanding the magnitude of the statistical values, we include a transformation of the statistical outputs into days of learning. The days of learning should be used as a general guide to determine if the size of a given effect are large enough to be meaningful as the statistical models are capable of detecting minute effects.

Demographics

The charter school sector has been continually growing over the years. With that growth has come a broadening of the enrollment in and type of charter schools. This study includes data from 5,715 schools. Of those schools, 3,608 are independently operated charter schools. The remaining 2,107 charter schools are part of one of the 286 charter network organizations. These organizations consist of Charter Management Organizations (CMO) and Vender Operated Schools (VOS). For the purposes of this study, both types of networks must have at least three operating schools in a given year, but not all schools must have tested students. The major difference between a CMO and an VOS is who holds the charters for the schools. For CMO organizations, the charter is held by the CMO. Thus CMOs operate their own schools. For VOSs, the schools’ charters have been granted to a third party who then hires the VOS to provide a specified level of services to the school. An VOS can be replaced by the charter holder, and the school would still have permission to exist. While unusual, it is possible for a CMO to hire an VOS to operate their school, a Hybrid. The categorizations of charter schools in this study do not relate to the for-profit or non-profit status of the schools’ operation. The categorization focuses on management practices rather than business mode. The study does include a breakout of effects by for-profit/non-profit status, but these categories are independent of charter school sector.

Charter schools enroll student body which differs demographically from the TPS sector. Table 1 shows the characteristics of students from the study states enrolled in TPS, schools which loose students to charter schools

¹ We include New York City and Washington DC as separate states.

(feeder schools), and charter schools. Charter schools serve a smaller percentage of White students than TPS. The difference is offset primarily by an increase in the percentage of Black students enrolled in charter schools. On the whole, charter schools serve a similar percentage of English language learners and special education students as do TPS. Additionally, charter schools in the study serve a slightly higher percentage of students in poverty.

Table 1: Student Population Demographics by Sector

	TPS Feeder		
	All TPS	Schools	Charter Schools
Number of Schools	63,616	32,119	5,786
Percent Students in Poverty	50%	56%	55%
Percent English Language Learner Students	11%	13%	10%
Percent Special Education Students	12%	12%	10%
Percent White	48%	39%	34%
Percent Black	13%	15%	27%
Percent Hispanic	29%	36%	31%
Percent Asian/Pacific Islander	5%	6%	4%
Percent Native American	1%	1%	1%
Percent Multi-Racial	2%	2%	2%
Average Total Enrollment per School	555	693	411
Total Enrollment	34,429,712	21,582,524	2,180,342

Most charter schools regardless of network affiliation are non-profit organizations (see Table 2). Eighty-two percent of charter students attend a non-profit school. A slightly higher percentage of ELL students, 89 percent, and Asian students, 87 percent, attend non-profit charter schools. Only 75 percent of Multi-racial students attend a non-profit charter school. These variations in enrollment do not seem to be directly attributable to school performance.

Table 2: Percent of Students Attending Nonprofit and For-Profit Charter Schools

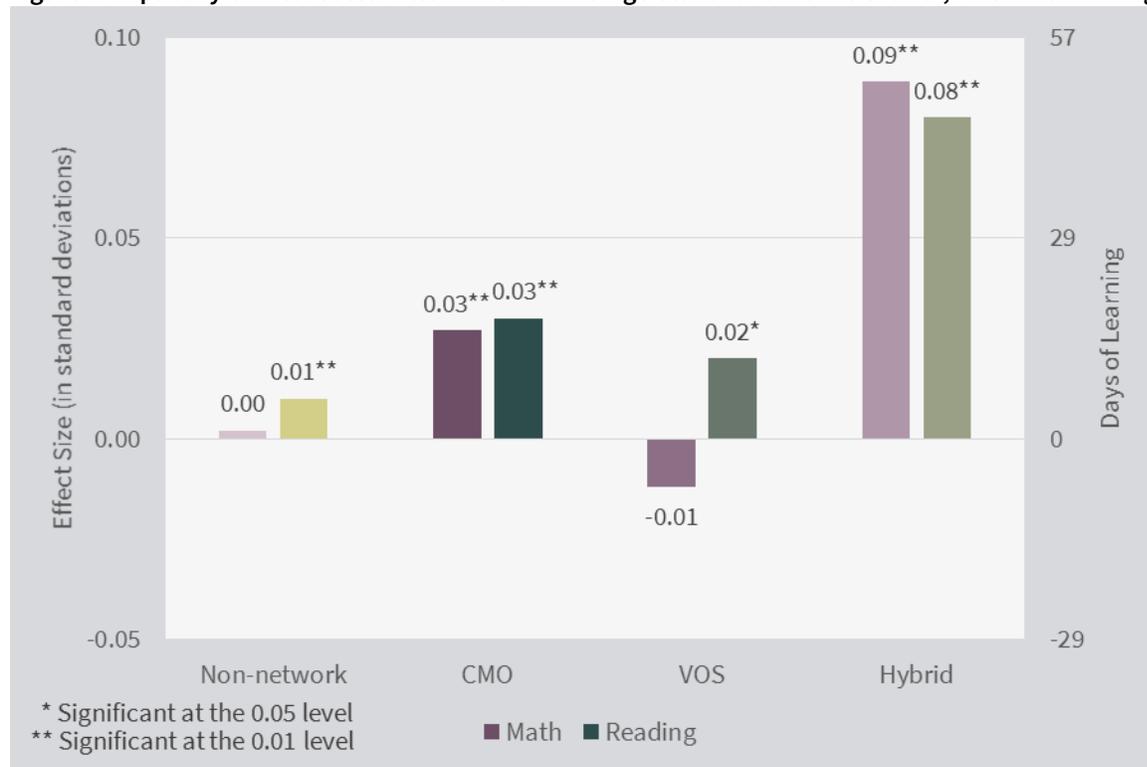
	Nonprofit	For-Profit
Black	82%	18%
Asian / Pacific Islander	87%	13%
Hispanic	83%	17%
Native American	83%	17%
White	80%	20%
Multiracial	75%	25%
Non-Poverty	81%	19%
In Poverty	82%	18%
Non-ELL	81%	19%
In ELL	89%	11%
Non-SPED	82%	18%
In SPED	80%	20%

Findings

Overall Results

Overall results show academic benefits from all four charter sectors for students in reading and gains for students attending CMO and Hybrid schools in math. Students attending a VOS or a non-network charter school have growth in math which is not significantly different from their VCRs. For Hybrid students, the effect is equivalent to an additional 51 days in math and an additional 46 days in reading. The effects for CMOs are 0.03 in both reading and math. This is equivalent to approximately 17 additional days of learning. The difference from their VCRs in reading for VOS students is 0.02 or an additional 11 days. While the subset of charter schools associated with both CMOs and VOSs have the strongest results in both reading and math, it is also the smallest sector with only 112 schools and 60,000 students.

Figure 1: Impact by Charter Sector Attendance on Average Student Academic Growth, Math and Reading



For-Profit Results

Results also vary by the for-profit/non-profit status of the charter organization. Charter schools which are non-profit have an average effect size of 0.02, equivalent to an additional 11 days, in both math and reading. Charter school students attending a school run by a for-profit company have math growth which is 0.02 weaker than their VCRs and reading growth which is not significantly different from the VCRs. The difference in growth between for-profit and non-profit charter schools is equivalent to 23 additional days of learning in math for students attending a non-profit charter school and 6 days additional learning in reading for non-profit charter students.

State Differences

As in CREDO's previous reports, the average effect from attending a charter school varies from state to state. This study finds variation not just between states, but within states based on the sub-sector of charter school attended.

CMOs are the most common charter network type. For CMOs, six of the 26 states have average CMO charter growth in math which is significantly stronger than the TPS comparison students. Only two states have weaker math growth. For reading the results are stronger. Half the states, 13, have stronger reading growth for students attending a CMO charter school rather than TPS. In just three states do CMO students have weaker growth in reading.

The results are weaker for VOS charter schools than CMOs. Only four out of 20 states with VOS charter schools have stronger growth in math and just six states have stronger growth in reading. Whereas, in three states VOS charters have weaker growth than TPS and two states are weaker in reading.

The Hybrid schools have the best average effect in the overall measurements, but those effects are not evenly distributed across the eight states which have Hybrid charter schools. Only two states, Florida and Michigan, have stronger growth among its Hybrid charter students compared to their VCRs. This is true for both math and reading. This means the large effects for Hybrid charter schools seen in the overall results are being driven primarily by the exceptional success of the Hybrid schools in Florida and Michigan.

Student Subgroups

As previously stated, different populations of students have different academic challenges and needs. We see in the subpopulation analyses that the various charter sectors have differing levels of success in supporting those needs. To understand the nuances of such a complex system, we evaluate the charter effect by student race/ethnicity, socio-economic status, English language learner status, and special education status.

Black students attending charter schools have significantly stronger outcomes than Black students attending TPS schools in both reading and math if they attended a CMO or VOS charter school, see Table 2. The effect for Black students in a Hybrid charter school was not significantly different from Black students in a TPS setting. In reading, Black students have better average growth than in the TPS sector regardless of the type of charter management organization. The difference in effect size between charter and TPS is largest for Black students attending a CMO affiliated school. These students gain the equivalent of an additional 34 days, 0.06, in math and 29 additional days, 0.05, of learning. Hispanic students also have stronger growth outcomes in network charter schools. The effect for Hispanic students attending a Hybrid charter school are quite strong at 0.13, 74 additional days, in math and 0.11, equivalent to 63 additional days growth, in reading.

Table 2: Charter Effect by Racial/Ethnic Subpopulation, Math and Reading

	CMO		VOS		Hybrid	
	Math	Reading	Math	Reading	Math	Reading
White Students	Negative	Negative	Negative	Similar	Similar	Similar
Black Students	Positive	Positive	Positive	Positive	Similar	Positive
Hispanic Students	Positive	Positive	Positive	Positive	Positive	Positive
Asian Students	Positive	Positive	Similar	Similar	Similar	Similar
Native American Students	Negative	Similar	Negative	Similar	Similar	Similar
Multi-racial Students	Similar	Similar	Negative	Similar	Similar	Similar

We also examine students by other characteristics such as being in poverty, being an English language learner, or receiving special education services. Table 3 has the results for these comparisons. While students in the Hybrid setting have positive results for all three groups of students receiving special services, these schools also serve less than 1 percent of all students.

Table 3: Charter Effect by Special Services Subpopulation in Charter vs. TPS, Math and Reading

	CMO		VOS		Hybrid	
	Math	Reading	Math	Reading	Math	Reading
Students in Poverty	Positive	Positive	Similar	Similar	Positive	Positive
ELL	Similar	Similar	Similar	Similar	Positive	Positive
SPED	Negative	Negative	Negative	Negative	Positive	Positive

School-Level Results

One of the concepts introduced in CREDO’s 2009 study Multiple Choice (Center for Research on Education Outcomes 2009) was the school quality curve. The quality curve compares schools to their baseline to determine what percentage of schools are performing significantly better than or worse than their local market. Across all charter sectors, more schools are outperforming their VCRs than are underperforming them. This is an improvement in performance since the release of CREDO’s second National Charter School Study released in 2013 (Cremata, Davis et al. 2013). Figures 2 and 3 show the quality curve results from each sector in math and reading.

Figure 2: Charter School Quality Curve by Sector: Math

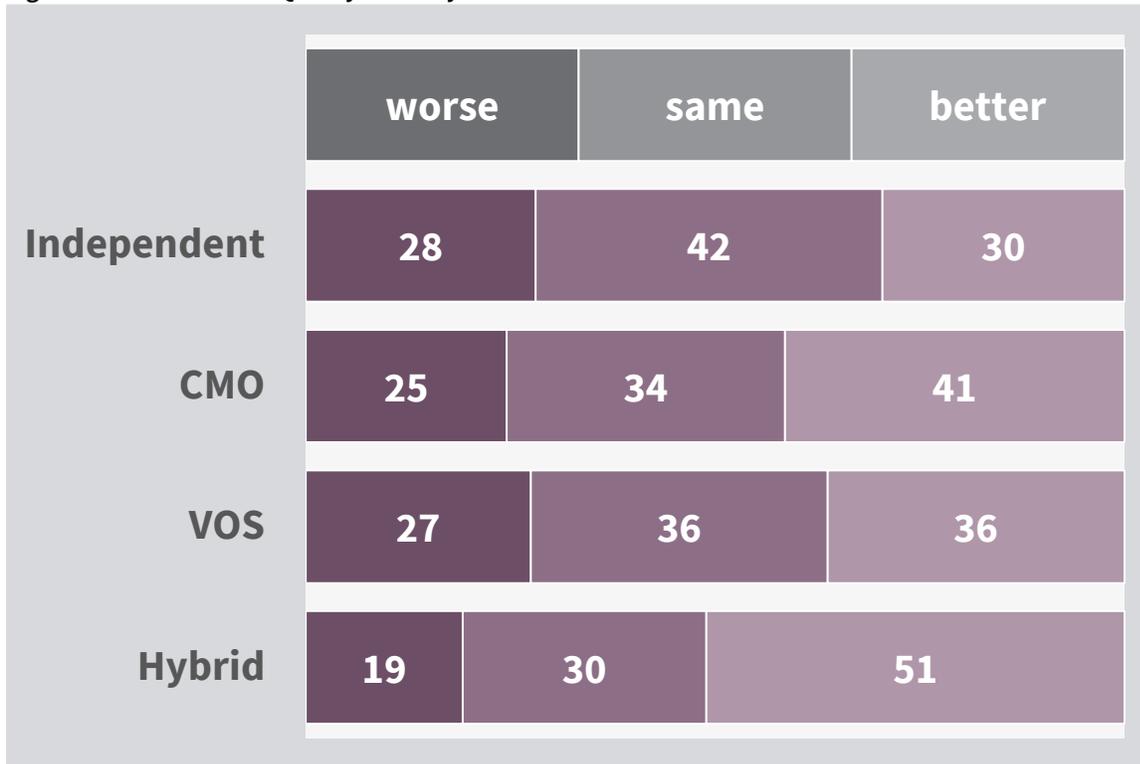
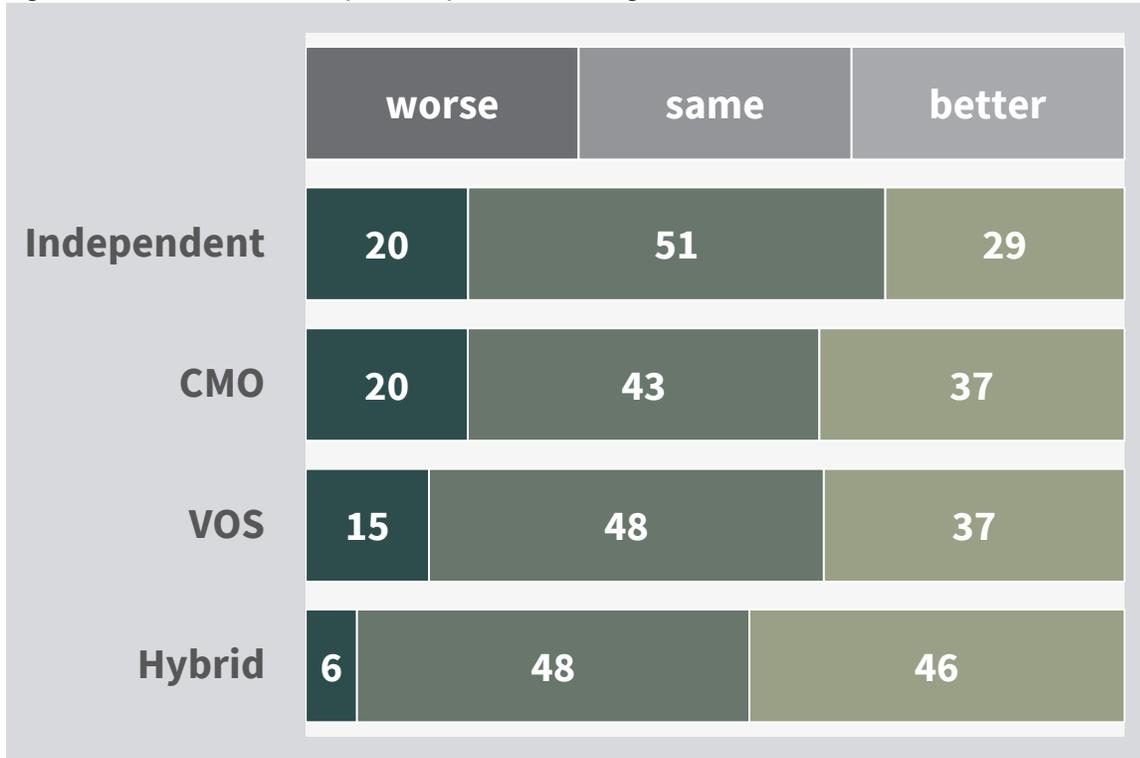


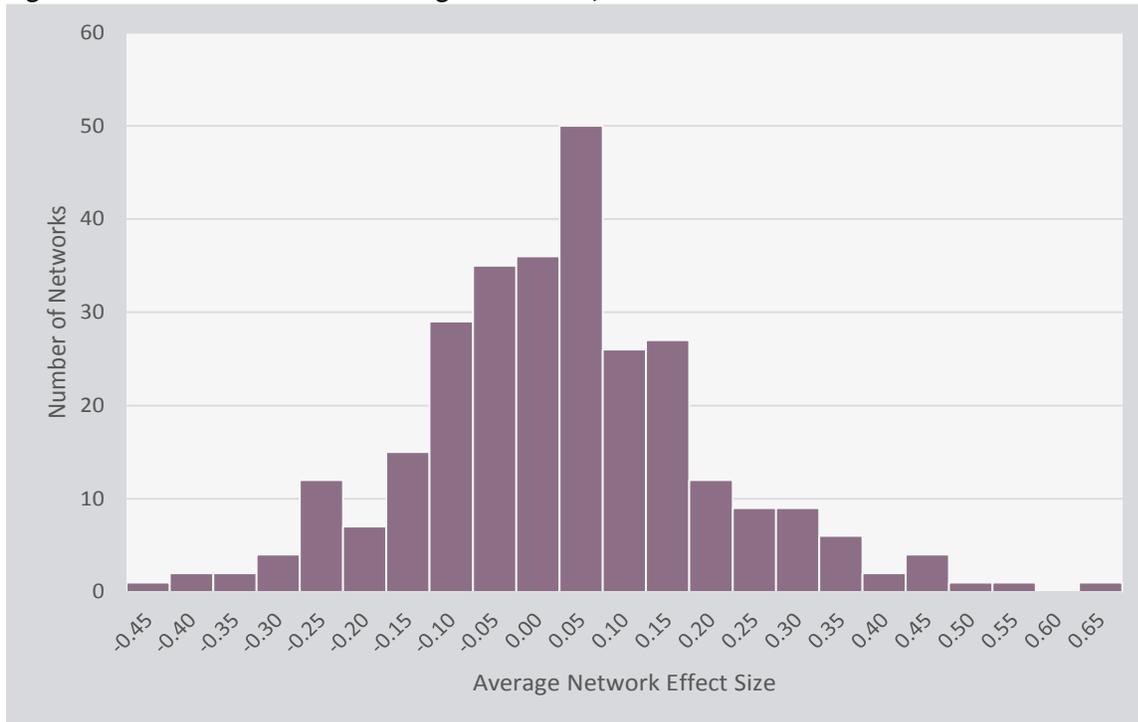
Figure 3: Charter School Quality Curve by Sector: Reading



Network Results

The data show a wide variation in network average performance. In theory, we would expect that only charter organizations with a demonstrated track record of success would be allowed to open multiple schools. However, as Figure 4 shows, there is in fact wide variation in the average performance of charter school networks in math. The average network performance for reading is similar. While it is true the majority of charter networks have above average growth, there are enough with below average growth to suggest a continuing need to improve vetting by authorizers of charter organizations before those organizations are allowed to expand to multiple locations. Organizations such as Charter School Growth Fund have demonstrated that effective vetting processes are possible. But such processes come from close analyses of data and a demand from authorizers for high quality in charter performance.

Figure 4: Distribution of Network Average Effect Sizes, Math



High Level Summary of Findings

This study looks at a wide range of impacts for charter network organizations. Across all of the data included, the following major points arise:

1. On the whole, the analyses in this study show attending a charter school that is part of a larger network of schools is associated with improved educational outcomes for students. The history of CREDO's research work has shown steady and consistent, even if gradual, improvement in charter school network performance. It is reasonable to expect current policies to result in continued improvement. However, there is still room for charter school authorizers to accelerate the rate of improvement by ensuring only the finest of charter school organizations are given the privilege of expanding their services to multiple schools.

2. The management arrangements of the network provider influence the typical gains that students make. Schools that contract with external vendors for much or all of the school operations post lower results than network operators that maintain direct control over their operations.
3. Charter school operators that hold non-profit status post significantly higher student academic gains than those with a for-profit orientation. For-profit operators have results that are at best equal to the comparison traditional public school students (reading) or worse (math).
4. Charter organizations have their strongest effects with traditionally underserved populations such as black and Hispanic students. This finding is consistent with previous CREDO research that shows minority students and students in poverty have the strongest gains from attending charter schools. Encouraging expansion of networks with a proven track records of success with these students has a strong likelihood of improving the quality of educational outcomes across the nation.
5. The effectiveness of charter school organizations varies across states. Several factors can contribute to these differences. One of the most obvious factors is differences in state policies around charter school practices and authorizing. While studies such as this can identify differences, there is a strong need for more qualitative research around state practices which lead to better outcomes for students.

The *charter bargain* has been simply stated as “increased flexibility for increased accountability.” For many organizations and the students they serve, this bargain has been a good one. But much work remains to ensure every charter school is held to the high standards necessary to achieve the high results of the most successful charter schools. This requires study and collaboration between charter schools. Charter network organizations provide a collaborative framework for schools to pass along and share their institutional knowledge. However, not every school has practices which should be shared. As the average network performance models show, some networks have low performance across many schools. Strong authorizing, the “increased accountability” part of the charter bargain, must be implemented to ensure every student is given the best chance to achieve the same levels of success as their peers.

References

Center for Research on Education Outcomes (2009). Multiple Choice: Charter School Performance in 16 States. Stanford, CA, CREDO at Stanford University.

Cremata, E., D. Davis, et al. (2013). National Charter School Study, Center for Research on Educational Outcomes (CREDO).