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Charter School Type Matters When Examining Funding and Facilities: Evidence From California[1]

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Abstract
Currently, charter schools represent one of the fastest growing movements of educational reform. The first charter school opened in 1992 and there are now over 3,400 charter schools nationwide. Despite this growth, we are only beginning to learn about the performance and operation of these schools. This article adds to our knowledge of charter schools both by examining the finances of charter schools in California, which has more charter students than any other state, and by highlighting their fiscal challenges. Using survey data of California charter and conventional public schools, the results suggest that the degree charter schools are struggling with resources and facilities depends upon charter school type.
Keywords: school choice; school finance.

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Introduction

In 1992, California became the second state to enact legislation that created charter schools. Charter schools are publicly funded schools of choice that operate autonomously outside the direct control of conventional school districts. Instead, they operate under the authority of quasi-contracts, or charters, granted generally by a public body. These schools are designed to provide greater educational choice to families, reduce bureaucratic constraints on educators, and provide competitive pressure to induce improvement in conventional public schools while remaining publicly accountable and having wide ranging approaches to educating students. In most states, charter schools can be converted from conventional public schools or can be started from scratch, known as "start-up" schools. Some charter schools are as small as a half-dozen students while others can be as large as 10,000 students. Some charter schools are part of larger for-profit or non-profit Educational Management Organization while others run independently of any larger organization. Much of how charter schools operate is a function of individual state charter laws. In total, 40 states plus the District of Columbia have charter laws with nearly one million students attending over 3,400 charter schools, and nearly a fourth of those students attending charter schools in California (Center for Education Reform, 2005).

As charter laws have spread across states, some have voiced opposition to this growth. One concern is that charter schools drain public schools of much needed resources leaving school districts in desperate fiscal conditions. Critics argue that ultimately the loss of revenue created by transferring student to charter schools forces many districts to close schools, layoff teachers, and generally feel a financial pinch in the overall operation of schools. Meanwhile, charter school proponents argue that charter schools are not playing on a level playing field financially and note that charter schools need additional revenues to fully educate students (Finn, Mammo, & Vanourek, 2000). For example, one key source of inequity between public school and charter school funding is often the lack of facility funding for charter schools (RPP International, 2000; Sugarman, 2002; Thomas B. Fordham Institute, 2005). In addition, other factors, such as a lack of participation in specific state and federal funding programs, may also affect charter school funding.

The question of charter school finances is an important one, particularly given the rapid growth in charter schools across the nation. California has been at the forefront of the charter movement and presents an interesting site for examining charter school funding. In 1992, California was the second state to pass charter school legislation and nowhere is the growth in charter schools more apparent than in California. In addition, charter school financing in California is influenced by the extensive public school finance reforms instituted over time.

California's current public school finance system evolved through a combination of court decisions, legislative actions, voter-approved initiatives, and government regulation. The transformation began in 1971 when the California Supreme Court ruled in *Serrano v. Priest* that differences in property tax revenue per pupil across districts could not be related to differences in the property wealth of those districts. Since that ruling, California has moved to equalize revenues among local school districts. Proposition 13, passed by California voters in 1978, helped shape the new system by imposing a 1% limit on general-purpose property tax rates. California quickly moved from a system in which each school district determined its own revenue through local property taxes to a system in which school revenues are controlled at the state level, with school districts heavily dependent on state aid for support.

This effort to create greater equity within California raises questions of whether charter schools are being equitably funded. Against this backdrop, we examine charter school funding in California. We begin by discussing existing charter school research, much of which has focused on

student achievement effects of charter schools with little attention given to charter school finances. We then describe some of the general characteristics and trends of California's charter schools, their funding, and the research methodology used to examine charter school finances. Finally, we evaluate charter school funding sources and the provision of charter school facilities. The analysis sheds light on the fiscal challenges of charter schools.

Literature

While the debate over charter schools has spurred research, most of it has focused on student achievement and the racial/ethnic integration effect of charter schools with mixed results. Much of the current student achievement literature uses school-level or cross sectional analysis, which masks changes over time in the school's population of students and variation of performance across different subjects and grades and cannot factor out the various non-school forces at work (Carnoy, Jackson, Mishell, & Rothstein, 2005; Greene, Forster, & Winters, 2003; Hoxby, 2004; Miron, Nelson, & Risley, 2002; Nelson, Rosenberg, & Van Meter, 2004; Rogosa, 2003). The best student achievement research currently uses longitudinally-linked student-level data, which provides the ability to track students over time and creates a mechanism for controlling for differences among student who choose to go to charter schools and those who do not. Currently, there is a handful of such studies focusing on individual states, including Arizona (Solmon, Paark, & Garcia, 1999), California (Zimmer et al, 2003), Florida (Sass, 2005), North Carolina (Bifulco & Ladd, in press), and Texas (Booker Gilpatric, Gronberg, & Jansen, 2004; Gronberg & Jansen, 2001; Hanuskek, Kain, & Rivkin., 2002). These studies have not created a consensus but generally have suggested that charter schools have either small positive or negative effects, which vary by state. For our current research, the most relevant research is of California. Zimmer et al. found that charter schools' performance is on par with conventional public schools and that the performance of charter schools varies by charter type.[2]

While student achievement analyses have received the bulk of attention, there is also a growing literature that has examined the effect charter schools have on racial/ethnic integration of students. Although a number of studies have examined the racial/ethnic representativeness of charter schools, most of these studies compared snapshots of charter-school enrollments with the average enrollments of their surrounding districts and states (Frankenberg & Lee, 2003; Miron & Nelson, 2002; Powell, Blackorby, Marsh, Finnegan, & Anderson, 1997; RPP International, 2000; Zimmer et al., 2003). This approach, while providing some important insights, cannot determine whether individual students are moving from hetergenous to homogenous schools or vice versa. One study that has used student-level data (Bifulco & Ladd, 2005) examined migration patterns of North Carolina students of different race/ethnicity as they choose to go to charter schools. The study suggests that black students are more likely to go to charter schools with higher concentration of black students than their exiting school. These results raise some concern that charter schools may be creating greater segregation among students and suggest a closer examination of these schools.

Despite the growth of the research on student achievement and integration, the actual operation, including the critical issue of finances, has not received much attention. Two reports that provide some initial insights into the revenues and expenditures of charter schools relative to public school districts are Miron and Nelson (2002) and Miron, Nelson, and Risley (2002). In the first of

[2] Some of these results are also presented in Buddin and Zimmer (2005).

these two reports, Miron and Nelson (2002) compare instructional expenditures of Michigan charter schools and school districts within the state and found that charter schools spend more money than conventional public schools on administration. This analysis, however, has the obvious drawback that school districts have a different organizational and fiscal structure than an individual school, which affects costs. As part of that study, the authors also conduct in-depth case studies of four schools that provide important insights, including that charter schools focus their attention on less costly students. But because of the limited sample, the results are not generalizable to a statewide or nationwide population of charter schools. Miron, Nelson, and Risley (2002) examine charter schools in Pennsylvania using data provided by Standard and Poors and found that charter schools receive $750 less per pupil than their host districts, a deficit for which charter schools partially compensate by collecting private resources.

A third report by the American Federation of Teachers (Nelson, 2000) examines state financing mechanisms and simulates revenue allocated to charter schools based on the types of students enrolled in different types of charter schools. The analysis assumes that charter schools take advantage of programs available to them. The report shows substantial differences in the allocation of resources among charter schools based on state policies and student makeup of these schools.

More recently, the Thomas B. Fordham Foundation (2005) released a report that examines charter school finances over 16 states and the District of Columbia, which collectively enroll 84% of charter school students nationwide. For their analysis, the authors requested data from states and districts and in some cases received only partial information. However, their examination is the broadest to date and provides some important insights. Overall, the study found that charter schools receive $1,801 less per pupil than conventional public schools. In California, the disparity was greater, with charter schools receiving $2,223 less per pupil. The authors argued that these differences are driven primarily by the lack of facility funding, but other factors may contribute to the shortfall. We argue one such factor is the lack of participation in state and federal categorical programs.

In this study, we build on the previous research but are able to make comparisons between charter and conventional schools through surveys to find out both their level of participation in government funding programs and their level of private support, as well as to analyze the challenges of acquiring facilities.

California Charter Schools

Below, we describe some general characteristics and trends of charter schools in California. One of the major distinctions within California's charter schools are between charter schools started from scratch and charter schools converted from conventional public schools. Figure 1 suggests that the majority of recently implemented charter schools are start-ups and accounted for 70% of all charter schools by the 2001–02 school year.

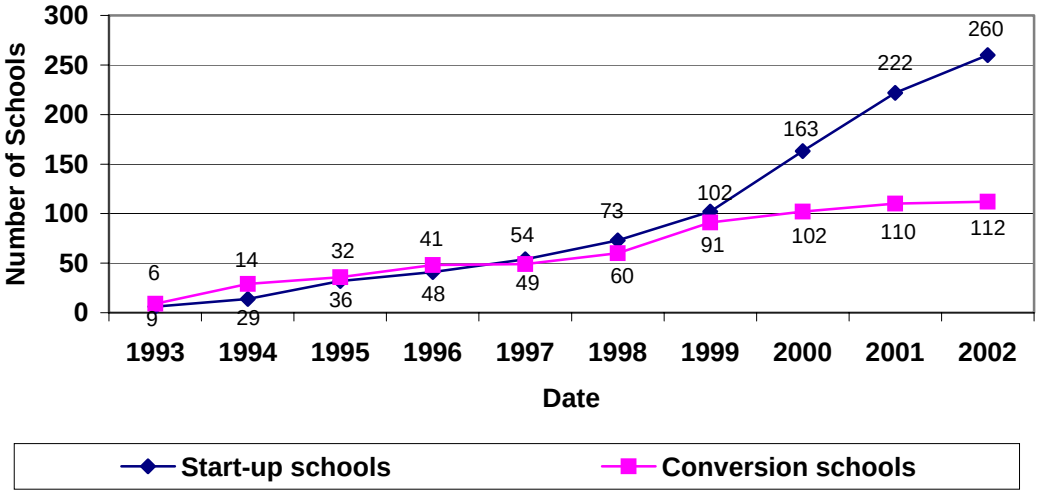

Figure 1
Number of Conversion and Start-Up Schools by Year. (Source: 2001–02 California Basic Educational Data System, or CBEDS)

Breaking the figures down by grade span, Figure 2 shows that 72% of all elementary charter students are in conversion schools with the remaining 28% in start-up schools. In contrast, 46% of all secondary students are in conversion schools, with the remaining 54% in start-up schools.

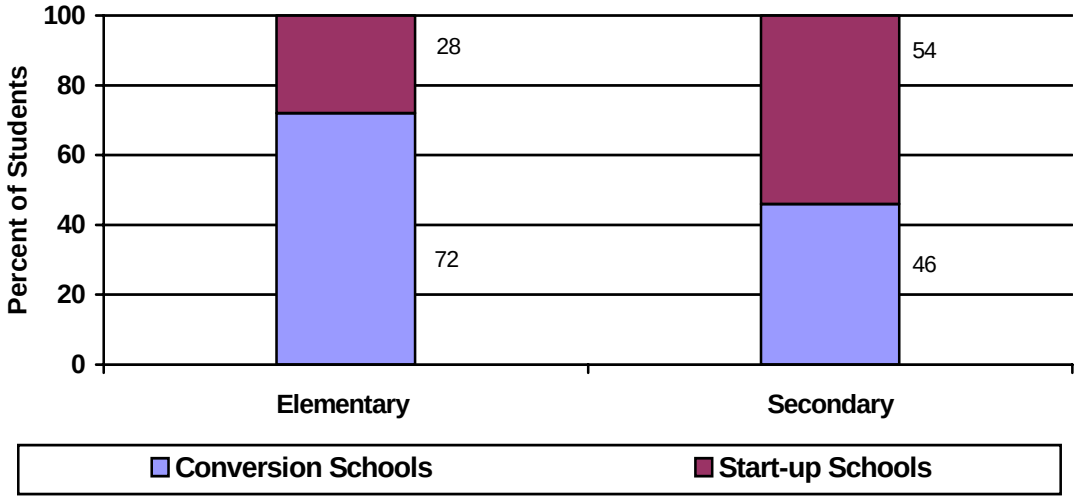

Figure 2
Percent of Charter Students in Conversion and Start-up Schools by Grade Levels. (Source: 2002 California Department of Education Statewide Student-Level Data)

As Figure 3 suggests, the distribution of enrollment sizes varies by school type. Start-up charter schools tend to be much smaller than conversion charters or conventional public schools, while conversion schools more closely mimic the size distribution of conventional public schools.

The differences between start-up and conversion schools in terms of funding is explored in our analysis.

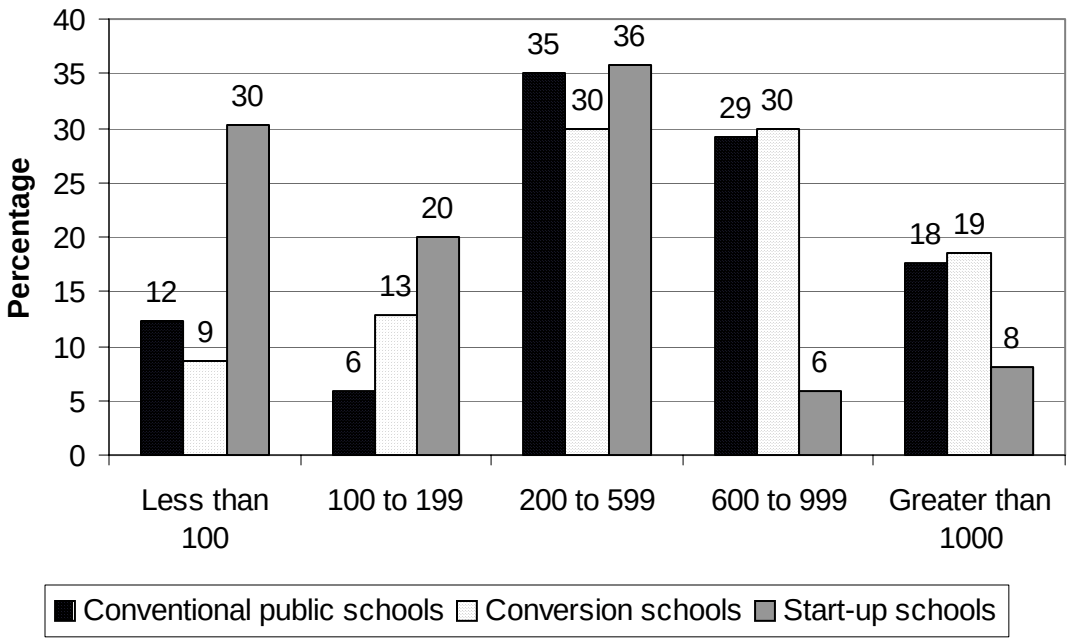

Figure 3
Differences in School Size by School Type. (Source: 2002 CBEDS)

Charter-School Funding

A basic precept of charter schools across all states is that money should follow the students. However, the formula varies from state to state. Generally, across states, there are four bases for determining how much money should follow a student to the charter school: per-pupil revenue of a district, per-pupil expenditures of a district, per-pupil statewide average expenditures, or a per-pupil district budget formula (Nelson, 2000). The per-pupil revenue of a district approach relies primarily upon the taxable revenues of the district coupled with the characteristics of students that the school serves, including low-income and special needs students. In contrast, in the per-pupil expenditure approach, charter schools receive the same level of average per-pupil expenditures as the rest of the district, which assumes the district and any particular school serve similar students. The third option, statewide average expenditures, is usually a straightforward funding system in which the schools receive a flat per-pupil rate. Finally, a fourth approach leaves the funding decision up to the district that charters the school and often results in a negotiation process between the district and the school.

In California, public school funding in California is provided by the State and funneled through the districts, but the system has evolved. Under the initial charter school funding model, funding was modeled on the system used to fund conventional public schools. Charter schools received funding through two means: state revenue limit funding which is general purpose money allocated based on average daily attendance (ADA) at a school; and categorical aid which is generally more restricted state and federal funding for particular students or programs and based on application and eligibility. The per-pupil revenue limits that are set by the state each year are

essentially equalized across all districts but vary based on the level and size of the district. Categorical aid, on the other hand, is allocated to serve specific purposes and/or specific populations of students. The California courts do not require categorical aid to be evenly distributed. Most categorical aid is accompanied by conditions for its use, in contrast to revenue limit funding. Currently, about one-third of school funding is earmarked by the state for about 70 specific categorical aid programs. Over time, revenue limit funding has declined as a percentage of total state K–12 while the proportion of funding devoted to categorical aid has grown. While revenue limit funding has become more equally distributed, it has also become a smaller fraction of total funding (Carroll, Krop, Arkes, Morrison, & Flanagan, 2004).

One concern regarding this initial model for funding charter schools was that charter schools may have trouble applying for and administering individual categorical aid programs. Because many charter schools are started from scratch and are relatively small in size, they may not have the experienced administrative staff who knew about the various programs or be willing or able to go through the challenges of applying for and maintaining the programs. Therefore, there was concern that charter schools are not receiving appropriate aid due to a lack of categorical funds.

In 1999, the legislature passed AB544, requiring the California Department of Education to propose a funding model for charter schools that would provide operational funding equal to total funding received by a school district serving a similar pupil population. In addition, the model was to provide charter school funding in a simple manner [Ed Code 47630]. Out of this mandate, a charter school block grant system was created.[3]

The charter school block grant funding model contains two parts, a general purpose entitlement in lieu of revenue limit funding and a block grant in lieu of some categorical funding. Both block grants are provided on an ADA basis calculated separately for each of four grade ranges (K–3, 4–6, 7–8, and 9–12). The general-purpose block grant is based on comparable revenue limit funding so that conventional public schools and charter schools receive similar per-pupil general purpose monies. General purpose funding rates per student in ADA for the 2001–02 school year were $4,421, $4,478, $4,600, and $5,341 for grades K–3, 4–6, 7–8, and 9–12, respectively. The funds are unrestricted and may be used for any school purpose.

The categorical block grant is provided in lieu of funding for many state categorical programs. Therefore, a charter school is not eligible for separate funding for any state program included in the categorical block grant. Charter schools must apply separately for categorical programs not included in the block grant. Charter schools are exempt from the program requirements of the individual state categorical programs included in the block grant calculation. The federal government does not allow charter schools any flexibility on the use of federal funds, so charter schools must continue to apply for and fully comply with the conditions of federal programs. Like the general-purpose block grant, the funds provided in the categorical block grant may be used for any purpose determined by the charter school. Many of the largest state categorical programs and all federal categorical programs fall outside of the state categorical block grant and are applied for separately, as is discussed in greater detail later in the paper.

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[3] The new funding model was established by AB115 in the 1999–2000 state budget "education trailer bill." All new charter schools—those assigned numbers after June 1, 1999—are funded under the Charter School Funding Model. Charters that were previously assigned numbers were allowed to continue to operate through the 2001–02 school year under a district apportionment or be funded through the Charter School Funding Model. The exception to this is district-wide charter schools, which retain the option to be funded under the revenue limit model or the Charter School Funding Model.

At the option of the school, charter schools may receive their funding through local or direct allocation of funds. Under local funding, the charter school has its funds deposited in the appropriate fund or account of the authorizing local education agency. Under direct funding, the charter school has its funds deposited in the appropriate fund or account of the charter school. The decision on whether to be locally or directly funded does not affect the amount of block grant funding provided to the charter school. In general, local funding tends to be a more popular option with conversion schools and those that rely on a district for fiscal services. In addition, some districts prefer the local option if they intend to help charter schools with cash flow because of the sense of control or recourse by handling the state dollars and passing them through. Direct funding tends to be a more popular option with start-up charter schools, possibly giving them a greater sense of control as the money goes directly to them.

The decision to be locally or direct funded can affect the level of support provided to apply for and manage the categorical programs outside of the block grant. Charter schools that choose to be funded locally must apply through the approving local educational agency for categorical programs that are not included in the block grant, unless legislation for individual programs specifically allows charter schools to apply separately. Locally funded charter schools can work with their approving local educational agencies to ensure they are included in those agencies' applications for programs for which the charter schools are eligible and in which they choose to participate. In particular, conversion charter schools that are chartered by their local districts already have the mechanisms in place to be included in the sponsoring districts' applications for categorical aid programs.

In contrast, start-up charter schools do not have a history of participation in categorical aid programs and are more likely to be direct-funded. A charter school that is direct-funded must apply individually for state or federal funds not included in the block grant. The school may not be included in the application or eligibility of the authorizing entity for any categorical programs. An election to receive funding directly applies to all funding the charter receives, including other state and federal categorical aid.

Method

To examine the finances of charter schools in California, we use both secondary and primary data sets. The secondary data set includes the California's Basic Education Data System (CBEDS) and J–200 data. CBEDS data are compiled by the California Department of Education (CDE) and include school enrollment, free and reduced-price lunch program participation, racial and ethnic breakdowns, and other student characteristics. J–200 data, also compiled by CDE, include detailed revenue and expenditure data for each school district across the state, data which provide a good base for determining the type and size of revenues school districts receive and how they spend their money.

The primary data sources are based on a survey of the universe of charter schools and a matched sample of conventional schools, and a supplemental financial survey of charter schools. The surveys of charter schools and the matched sample of conventional schools use consistent questions as much as possible to allow comparisons. A third supplemental survey was administered

to probe charter schools with more detailed questions of expenditures and revenues.[4] Each of these surveys was administered in the spring of 2002.

Survey Sample

To identify the universe of California charter schools, we began with a list from merging the California charter school office publicly available data with the charter schools listed in the 2000–2001 CBEDS data. Schools were eligible if they opened before September 15, 2001 and were operating as of February 2002. In total, 357 schools met these requirements. We then contacted the individual schools and their respective chartering authorizers to verify the data in our initial list. We made changes in our database to reflect updated information we received during these interviews, including adding any schools that were not in our original list. Twenty schools were added to our sample this way, while 25 were eliminated. Of the 25 schools that were dropped, nine had never existed,[5] five schools responded they were not charter schools (three told us that were no longer charters and two said they were not "public charters"), two others were ineligible for our sample because they had not opened, and nine had either closed or had their charter revoked. Thus, the final sample included 352 charter schools. One limitation to this method is the small possibility that a charter school was not included in our sample because it was not in either the California charter office data or the CBEDS data.

Crucial in our analysis are the matches we created for the charter schools. In the past, researchers have generally found that charter schools disproportionally serve low-income and high-minority students (Finnigan, et al., 2004; Gill, Timpane, Ross, & Brewer, 2001; Zimmer, et al., 2003), a fact that may cause schools to have different cost and governance structures. To avoid confounding differences associated with school type with differences related to students served, we matched charter and non-charter schools by an estimated *propensity* score (Rosenbaum & Rubin 1983). The propensity score is the probability that a school with a given set of characteristics is a charter school as opposed to a conventional public school. These propensity scores can then be used to match charter schools to non-charter schools by finding those that have similar propensity scores.

To carry out the propensity match, we used a four-step process. First, we stratified charter schools into eight categories (elementary schools, middle schools, high schools, county schools, continuation schools, juvenile hall schools, special education schools, and alternative education schools) used by CDE to designate school types for all public schools.[6] Roughly 60 charter schools

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[4] In a pilot of our surveys, we found that charter schools are more capable of answering detailed financial questions than are conventional public schools, primarily because the district handles more of the financial responsibilities for conventional public schools. Thus, we created a one-page supplemental survey of financial questions answered only by charter schools.

[5] Through our investigation, we could find no evidence that the charter schools ever opened.

[6] Some charter schools had grade ranges that intersected multiple strata (e.g., and kindergarten through grade 12 school intersects the elementary, middle and high school strata). In these cases, the charter schools were included in each category and matched to a traditional public school for each category. Due to the small sample of county, continuation, juvenile hall, special education, and alternative education schools, a propensity match was not used in these cases. Instead, if demographic data were available for these schools, the schools were matched based on the criteria of getting schools within 10% of racial characteristics of the charter schools. In many cases, demographic characteristics were not available for these schools and schools were matched to a traditional public school of the same school type within the district or the closest district.

were new in the 2001–2002 school year and were not included in the 2000–2001 CBEDS data, and thus, could not be matched to public schools. Second, within grade range strata, we fit a logistic regression model to predict designation (1=charter; 0=conventional public) as a function of aggregate school characteristics, including percentage ethnicity (percentage White, percentage Blacks, percentage Asian, and percentage Hispanic), pupil socioeconomic status (percentage free-and-reduced lunch),[7] and percentage English language learners. Using these characteristics, predicted values for charter school *i* and conventional public school *j* were created (p_i and p_j). Then, the distance between these schools (d_{ij}) are estimated as the absolute value of the difference between their propensity scores, $d_{ij} = | p - p_j |$. We calculated the distance between each charter school and every conventional public school. Fourth, we matched to each charter school a conventional school that minimizes d_{ij} over all California conventional public schools *j*.

As part of the matching process, we allowed a conventional public school to be matched to multiple charter schools due to budget and time constraints. While the propensity scores do not create perfect matches, they do create a sample of conventional public schools with characteristics that closely resemble those of charter schools. Table 1 displays the characteristics of the matched elementary, middle, and high schools for charter and conventional public schools.

Table 1:
Match School Ethnic/Racial and Low-English Proficient Breakdown [8]

Schools	Percent White	Percent Black	Percent Hispanic	Percent Asians	Percent Others	Percent LEP
Elementary schools						
Charter schools	48.5	14.9	27.8	2.7	6.1	15.6
Match public schools	51.5	13.3	27.7	2.9	4.6	17.1
Middle schools						
Charter schools	51.8	11.7	23.8	2.3	10.4	9.4
Match public schools	54.3	13.8	22.5	4.0	5.4	10.6
High schools						
Charter schools	52.9	9.6	26.4	4.0	7.1	10.0
Match public schools	53.2	5.3	28.8	6.8	5.9	10.2

Source: 2001–02 CBEDS Data

Response Rates

Not all of the charter or matched conventional public schools responded to our survey. Table 2 highlights the number surveyed, the number of respondents, and the percentage response

[7] It was later discovered that many charter schools do not participate in free-and-reduced lunch programs. Since the original propensity match included percentage free and reduced lunch, the final sample had to be weighted to account for this bias.

[8] We only matched conventional public schools to charter schools for those schools we had demographic information.

rate for each sample. As highlighted in the table, our response rates were nearly 75% for both charter and conventional public schools, and 56% for the charter supplemental survey.

Table 2
Response Rate

Survey	Sample	Respondents	Response Rate
Charter school survey	352	257	73%
Charter school supplemental survey	352	200	56%
Conventional public school survey	245	184	75%

To adjust for differential response rates among and across charter and conventional schools, which may create bias in our results if types of charter schools are underrepresented, we weighted the data so that the sample of charter schools reflected the population of charter schools in the state, and conventional public school results were weighted to ensure comparability with the full sample of conventional public schools created through the propensity match. To weight the data for non-response, we used a logistic regression that predicts whether the school responds or not based on demographic characteristics of a school, including percentage racial/ethnic breakdowns, percentage free-and-reduced lunch (including a dummy variable for whether the school participated in the free-and-reduced lunch program), and percentage language proficient (Little & Rubin, 1987). In this approach, the universe of charter and conventional public schools is included in a single data set. Using the coefficient estimates from the regression, we plug each schools characteristics to gain a predicted probably (p) of responding. This analysis weight for each charter and conventional public school that responded is the odds of responding p/(1-p) as described by Hirano, Imbens and Ridder (2000). Table 3 displays the characteristics of the sample after weighting.

Table 3:
Student Characteristics of Weighted Sample

School Type	Percent White	Percent Black	Percent Hispanic	Percent Asians	Percent Others	Percent LEP
Charter schools	50.1	13.5	26.8	2.8	6.8	14.8
Conventional public schools	47.4	11.6	30.7	3.9	6.4	17.7

Source: 2001–02 CBEDS data

The data produced from the surveys serves as the foundation for our analyses in the rest of the paper. In some cases, we compare the responses of charter and conventional schools. In other cases, we examine differences among charter schools by analyzing the difference in responses between schools that are converted from conventional public schools, or conversion charter schools, and schools started from scratch, or start-up charter schools.

Limitations

Before we proceed, we should also mention some possible drawbacks of our analysis. First and foremost, we are relying upon self-reported information through a survey of charter-school

principals, whose responses may have some errors. In addition, other states use different mechanisms of funding charter schools, and this current analysis may have limited implications for those schools. In addition, while we did have a high response rate, and did weight for non-response, we did not have 100% response rate, which also may create small errors in our percentages and averages. Finally, because special education is a major educational cost, we would have liked to match charter and conventional public schools based on the percentage of special education students. However, we were unsure whether charter and conventional public schools consistently classify special education students. In particular, we were not sure if the percentage of special education students were accurately reported for charter schools. Therefore, we did not include it in our matching procedure. This may create some limitations in the comparison between charter and conventional public schools.

Results

Participation in Categorical Funding Programs

In California, the charter school categorical block grant is intended to simplify the process of obtaining and maintaining state categorical aid for charter schools as well as to allow charter schools freedom in the use of the funds. The block grant model is desirable for charter schools both because the cash is more likely to be received in a timely manner and because charter schools can avoid the applications and reporting involved in obtaining funds from a large number of categorical programs (Sugarman, 2002). Charter school operators are often unsophisticated in completing the forms and carrying out procedural activities that have taken districts years to master. In addition, charter schools may not have the economies of scale to operate categorical programs on their own. Approximately 30 state categorical programs are currently included in the charter school categorical block grant. It is important to note that several of the largest state categorical aid programs and all federal categorical aid programs—including K–3 Class Size Reduction, Transportation, Special Education, and Title 1 funding for disadvantaged pupils—fall outside of the categorical block grant and require charter schools to apply separately and to adhere to the statues and regulations that govern the programs. Also, the categorical block grant rates have declined over time largely due to the removal of several state programs from the block grant and to the expiration of or reduction in programs that previously contributed to the block grant.

Participation or lack of participation in categorical aid programs can have significant financial effects on schools. Charter school and conventional public school finances may be relatively equal per pupil based on the general purpose block grant. But, as noted earlier, categorical funds are not required by the California courts to be equally distributed. Over time, categorical aid has become a larger share of total school funding—currently about one-third. Through the charter school and conventional public school surveys, we sought to address a number of questions related to charter school participation in categorical programs *outside of the block grant*. First, do charter schools participate in programs outside of the block grant? If charter schools choose not to participate in these programs, why?

Specifically, for nine relatively large state and federal categorical aid programs outside of the block grant, we asked charter school and conventional public school principals whether they are currently receiving funding, have an application pending, are ineligible to apply, are not applying but eligible, or don't know whether eligible or not. To adjust for multiple related questions within the

survey, we used a Bonferroni correction to offset the chance of incorrectly reporting statistical differences.

Table 4 shows the percentage of principals who reported "currently receiving funding" for start-up charter schools, conversion charter schools and matched conventional public schools for each individual categorical program. Start-up charter schools have statistically significant lower participation rates for every categorical program compared with matched conventional public schools. By contrast, conversion charter schools in general have similar participation rates in categorical programs as matched conventional public schools and, in some cases, have higher participation rates (but those differences are not statistically significant).

Table 4

Percent of Schools Currently Receiving Funding from Various Categorical Aid Programs, Separately for Conversion Charter Schools, Start-Up Charter Schools, and Matched Conventional Public Schools [9]

Categorical Program	Conventional Public Schools		Conversion Charter Schools			Start-up Charter Schools		
	N	*%*	*N*	*%*	*p*	*N*	*%*	*p*
K–3 class size reduction	167	66	69	72	.42	176	40	< .001*
Pupil transportation	172	54	70	55	.85	170	4	< .001*
Public School Accountability Act	169	48	66	47	.90	167	10	< .001*
Special education funding	179	94	70	83	.03	175	67	< .001*
Title 1 funding	173	64	70	73	.19	175	34	< .001*
Staff development buyout days	179	88	68	89	.96	174	47	< .001*
Child nutrition programs	177	82	69	77	.39	180	34	< .001*
Supplemental instructional program	171	59	67	54	.59	172	16	< .001*
Desegregation program	167	10	66	28	.003*	169	3	.026

* indicates charter school percentages that are statistically different from matched conventional public school percentages at .05 level.

[9] In Table 4, we report p values as an example of how we did our analysis. In later tables, we do not report the p values. Instead, we provide an * for when the comparison is significantly different.

To explore in greater detail the lower participation rates of start-up schools, we examined whether schools are "eligible but not applying" and whether schools "don't know whether they are eligible or not." Tables 5 and 6, respectively, show the percentage of start-up charter school, conversion charter school and conventional public school principals who reported their schools were "eligible but not applying" or "don't know whether eligible or not" to specific categorical programs outside of the categorical block grant.

Table 5
Percentage of Charter Schools "Eligible for Categorical Aid Funding but Not Applying" by Matched Conventional Public Schools, Conversion Charter Schools and Start-Up Charter Schools

Categorical Program	Conventional Public Schools		Conversion Charter Schools		Start-up Charter Schools	
	N	*Percent*	*N*	*Percent*	*N*	*Percent*
K–3 class size reduction	167	2	69	2	176	3
Pupil transportation	172	5	70	7	170	8
Public School Accountability Act	169	3	66	3	167	8
Special education funding	179	2	70	3	175	6
Title 1 funding	173	2	70	0	175	23*
Staff development buyout days	179	3	68	0	174	7
Child nutrition programs	177	4	69	8	180	24*
Supplemental instructional program	171	1	67	1	172	12*
Desegregation program	167	4	66	3	169	3

* indicates charter school percentages that are statistically different from matched conventional public school percentages at .05 level.

In general, no more than 5% of conventional public school principals responded that their schools are "eligible but not applying" to the individual categorical programs. Similar results are seen for the conversion charter schools. Start-up charter schools are generally more likely than either conversion or conventional public schools to be "eligible but not applying" to the individual aid programs. In particular, there are large differences for the Child Nutrition programs and Title 1. Both programs provide, on average, relatively large per-pupil funding to participating schools. Participation in Child Nutrition programs can pose a problem to charter schools, particularly those that do not have a sponsoring district willing to include them in their programs. Many charter schools have neither economies of scale nor administrative resources to support a Child Nutrition program on their own (Zimmer et al., 2003). Similarly, Title 1 is a federal aid program with extensive statues and regulations that govern the program as requirements of receipt of funding. Those charter schools without links to a district chartering authority willing to include them in the district's Title 1 program likely cannot participate alone. When asked in the charter school survey to agree or disagree with the statement "our school has given up pursuing certain categorical funds because they are too complex," about 25% of conversion charter schools strongly agreed or agreed and 48% of start-up charter schools strongly agreed or agreed.

Turning to the issue of knowledge about categorical programs, Table 6 again shows that conversion charter schools and conventional public schools are generally similar in the percentages that "don't know whether eligible or not" to the various categorical aid programs. Again, start-up charter schools show considerably larger percentages than either conventional public schools or

conversion charter schools, which may suggest that these principals are relatively inexperienced in applying for categorical programs and ultimately leads to less money for the schools.

Added together, those who responded they are "eligible but not applying" and "don't know whether eligible or not" result in considerably lower participation in categorical aid programs outside of the block grant for start-up charter schools than conversion charter schools or conventional public schools. This suggests that the removal or exclusion of programs from the block grant has a sizable effect on start-up charter schools in particular.

Table 6
Percentage of Charter Schools "Don't Know Whether Eligible or Not " by Matched Conventional Public Schools, Conversion Charter Schools and Start-Up Charter Schools

Categorical Program	Conventional Public Schools		Conversion Charter Schools		Start-up Charter Schools	
	N	*Percent*	*N*	*Percent*	*N*	*Percent*
K–3 class size reduction	167	2	69	7	176	3
Pupil transportation	172	26	70	20	170	35
Public School Accountability Act	169	38	66	38	167	60*
Special education funding	179	1	70	7	175	11*
Title 1 funding	173	3	70	7	175	15*
Staff development buyout days	179	5	68	9	174	21*
Child nutrition programs	177	6	69	9	180	9
Supplemental instructional program	171	35	67	40	172	46
Desegregation program	167	53	66	42	169	62

* indicates charter school percentages that are statistically different from matched conventional public school percentages at .05 level.

The results from this section suggest that start-up charter schools have a lower participation rate in categorical programs, which implies that these schools are receiving less public revenue. A portion of the lower participation rates can be explained by the fact that some start-up charter schools do not know whether they are eligible for these categorical programs. In other cases, the start-up schools know that they are eligible for the program but do not participate for what are likely a variety of reasons, including the administrative complexity of participation, the lack of economies of scale necessary for participation and a lack of fiscal administrative experience by charter school principals.

It should be noted that statewide data do not exist on how much individual schools receive from individual categorical aid programs, and statewide data are collected at the district level. In addition, as categorical aid is generally distributed at the district level with the district providing services with the money, schools generally do not know how much they receive from categorical aid programs. Therefore, we cannot put dollar amounts to the lower participation in these large categorical aid programs. However, our survey results suggest that charter schools received about

$6,500 per pupil in 2001–02 compared to $8,000 for conventional public schools and that this difference may be partially explained by differences in participation in categorical programs.[10]

Private Donations to Charter Schools

Private donations may play a unique role in charter schools. Especially for start-ups, charter schools face a number of costs ranging from books and materials to facility needs. In addition, some charter schools have distinct educational focuses that may be used to identify and attract donors. Previous research (Miron, Nelson, & Risley, 2002) has suggested that private donations can be a mechanism charter schools use to make up for insufficient public funding.[11] Because there is little systematic public data quantifying how much money or in-kind services schools receive from private donors, we asked both conventional and charter school principals how much private funding their schools received for the 2001–02 school year.

Table 7 shows the average private dollars given to conventional and charter school types. The table suggests that conventional public and conversion charter schools receive similar amounts of private giving per pupil and start-up charter schools receive significantly more. However, these results are skewed by a few start-up schools that received a large share of the total donations. In fact, the median value of per-pupil donations are $0 for conversion schools and $3.86 for start-up schools. The high average per-pupil donation for start-ups is partially driven by three schools that received over $10,000 of per-pupil donations for the 2001–02 school year. Taking these out, the average per-pupil donation for startup schools is $293, which is still significantly more than conversion charter or conventional public schools. In addition, about 17% of start-up schools received a donation of more than $500 per pupil 2001–02. So, even after taken into account some of the outliers, start-up schools appear to receive larger support from private sources than conversion charter or conventional public schools.

The higher level of private support is likely in part due to start-up schools' having greater initial expenses and facility needs. Conversion schools generally have facilities, supplies and materials to begin instruction and so might not have as great a need for private support, particularly in the early years. In addition, start-up schools may seek private donations to fill some of the gap in categorical funding described in the previous section. Ideally, we would know the extent to which private funding merely helps to compensate for the fact that start-ups need to pay for facilities while conversions do not versus as well as the extent to which private funding is used for other purposes such as teacher salaries, curriculum, or other instructional activities. In addition, we do not currently know if private funding consists of one-time gifts or ongoing contributions. Nevertheless, it is safe to assume that these private contributions are generally not making up for the average shortfall of approximately $1,500 per charter school.

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[10] Charter school per-pupil revenue is derived from our survey of charter schools in the 2001–02 school year. Conventional public school revenue per pupil is derived from the National Center for Education Statistics website, http://nces.ed.gov/quicktables/Detail.asp?Key=760.

[11] Public schools call on a variety of private givers to provide a spectrum of goods and services. Recent research suggests public schools have increasingly sought private support (both financial and in-kind) in recent years (Brunner & Sonstelie, 1997; Zimmer, Krop, Kaganoff, Ross, & Brewer, 2001). However, private financial contributions still account for a relatively small share of total resources for the vast majority of public schools.

Table 7
Private Funding to Conventional Public and Charter Schools

School type	N	Average Dollar Value
Conventional public	184	$83
Conversion charter school	63	$56
Start-up Charter School	153	$576*

* Charter school percentages are statistically different from matched conventional public school percentages at .05 level.

Charter School Expenditures

Having examined California charter school participation in revenue programs, we now turn to charter school expenditures. Several expenditure-related questions issues of how charter schools spend their resources, how spending differs among types of charter schools, and how charter school expenditures differ from conventional public schools. These questions are difficult to answer given current data sources. First, there are no systematic state data collected in California, or in most other states, at the school level on expenditures. Instead, data are collected and reported at the district level. Even if there were systematic, reliable charter school expenditure data at the school level, these data could only be compared to public school district averages. Further, it is also difficult to collect expenditure data for individual charter schools. For example, some locally funded charter schools rely on a district to pay for some large expenditures while others do not. Data reported by the charter schools may or may not include expenditures that are assumed by the district, and charter schools may not be able to accurately report such expenditures. In addition, charter school expenditures are influenced by large capital expenditures in a given year. Without a detailed cost study—one that correctly apportions overhead, administration, and personnel to the "right" schools—it is difficult to document and compare school expenditures.

Due to the lack of systematic charter school or conventional public school finance data collected by the state, we addressed questions about charter school expenditures through a supplemental survey as described earlier. In addition to other items, we asked charter schools to report their total expenditures, teacher salary and benefit expenditures, and other staff salary and benefit expenditures for the 2001–02 school year. These numbers should be interpreted with caution given the limitations discussed above.

Charter schools as a whole reported an average total expenditure per student of $6,204 for the 2001–02 school year.[12] This appears to be lower than the reported statewide average per-pupil expenditures. There are various sources of average total expenditures per pupil for California schools, and although the exact number differs depending on what is included, the reported statewide averages tend to be closer to $6,500 per pupil.[13]

[12] The mean expenditures throughout this section are influenced by several high outliers, often due to the inclusion of capital expenditures in total expenditures. In the cases of extreme outliers, we called the survey respondents to confirm the reported numbers. The median total expenditure reported b`y charter schools is $5,408 for the 2001–02 school year. The standard deviations for total expenditures per pupil are as follows: all charter schools, $4,984; start-ups, $4,658; conversions, $6,084.

[13] For example, the National Education Association (NEA) reports statewide average expenditure per ADA in California for 2000–01 to be $6,837. The California Department of Education reports the statewide average expense of education per unit of ADA to be $6,360 for the 2000–01 school year.

In addition, we looked at how per-pupil total expenditures, teacher salary and benefit expenditures, and other per-pupil staff salary and benefit expenditures differ among different types of charter schools. Charter schools report per-pupil teacher salary and benefit expenditures of $2,841 and other per-pupil staff salary and benefit expenditures of $1,075. Table 8 documents these expenditures for start-up and conversion charter schools.

Table 8
Charter School Expenditures Per Pupil, 2001–02

Type of Charter School	Total Expenditures Per Pupil	Teacher Salary and Benefit Expenditures Per Pupil	Other Staff Salary and Benefit Expenditures Per Pupil
All Charter Schools	$6,204	$2,841	$1,075
Start-Up	$6,168	$2,729	$1,006
Conversion	$6,366	$3,237	$1,340

The table suggests that, on average, start-up charter schools spend less overall per pupil as well as less per pupil on teacher salaries and benefits and other staff salaries and benefits compared with conversion charter schools. In addition, start-up charter schools, on average, allocate about 60% of their total expenditures to teacher and other staff salaries and benefits compared with about 72% for conversion charter schools. This may be due to start-up charter schools' need to allocate larger shares of their expenditures to such items as facilities and start-up costs.[14]

The results from examining statewide average per-pupil expenditures suggest that charter schools as a whole may have lower per-pupil expenditures than conventional public schools. An accurate estimate of the difference in per-pupil spending between charter schools and conventional public schools is difficult to secure given current data sources. With that said, a possible inference from the charter school survey data, which would need to be affirmed through a systematic collection of detailed conventional public school and charter school costs, is that charter schools, and particularly start-up charter schools, receive lower revenues from categorical programs and spend less per pupil than conventional public schools.

Facilities

Acquiring and funding school facilities has been a stumbling block for charter schools as a whole, across states (Finn, Mammo, & Vanourek, 2000; Powell, et al., 1997; RPP International, 2000; Sugarman, 2002;). Charter schools do not have access to similar revenue sources for facilities as conventional public school districts. Conventional public school districts pay for facilities by issuing bonds, an avenue unavailable to many charter schools.[15] In addition, charter schools pay for

[14] Sugarman (2002) suggests that start-up schools often have to redirect perhaps 20% or more of their core funding to pay for space.

[15] In addition, charter schools in California often do not have access to state or district bond monies or other capital resources for school improvements or building of new facilities. Unless the charter provides that its facilities must comply with the Field Act, charter schools are exempt from the Act. Often bond monies or other state or federal facility monies are dependent on Field Act compliance. Conversion charter schools generally comply with the Field Act while start-up charter schools may not.

facility expenses that conventional public schools do not. These expenses may include rent on facilities, utilities, maintenance, and off-site storage facilities. Finally, charter schools often find it difficult to find suitable facilities and face landlords who are cautious about leasing facilities to new entities and to charters that are granted for only a few years.

Until the 2003–04 school year, charter schools in California largely had to find their own facilities. Conversion charter schools often already had facilities that they had been occupying as a conventional public school. Start-up charter schools generally had to acquire facilities. The charter law in effect until the 2003–04 school year stated that a school district in which a charter school operated (which is not necessarily the approving district) shall permit a charter school to use facilities cost-free when not being used by the district for instructional or administrative purposes, unless historically used for rental purposes (ref. E.C. 47614). Some districts in which charter schools were operating were already overcrowded and had no unused facilities. And, the media suggested that a number of districts with unused facilities were not complying with the law (Space Crunch, 2004).

To examine charter school facility issues, we asked charter school principals how they arrange for facilities and whether they are struggling with financing capital expenditures. As Table 9 shows, charter schools appear to use multiple means to arrange for facilities. Among charter school principals, 42% report that their facilities are provided by a district, free or at a nominal cost—with most of these being conversion charter schools. In addition, 30% of charter schools lease their facilities from a commercial source—with most of these being start-up charter schools. About 12% of charter schools used two different means to provide facilities (e.g., leased from a commercial source and donated by sponsors) and about 2% of charter schools used more than two means to provide facilities.

Table 9
Acquisition of School Facilities, by Conversion and Start-Up Charter Schools[16]

Categorical Program	Charter Schools		Conversion Charter Schools		Start-up Charter Schools	
	N	Percent	N	Percent	N	Percent
Leased from Commercial Site	255	30	70	3	185	40
Provided by District, Free or Nominal Cost	255	42	70	91	185	23
Leased at, or Near Market Price from District	255	9	70	3	185	12
Privately Rented or Owned	255	18	70	3	185	24
Donated by Sponsors Other than District	255	3	70	1	185	4
Obtained through Another Arrangement	255	13	70	5	185	16

In addition, we asked charter school principals whether they were struggling with financing charter school capital expenditures. Among the charter school principals, 62% strongly agreed or

[16] We asked charter schools to check all that apply. Therefore, adding across all response categories for start-up charter schools, for example, will result in more than 100 percent.

agreed with the statement "Our school is struggling with financing capital expenditures" (with 68% of start-up charter school principals and 46% of conversion charter school principals agreeing).[17]

In response to charter school facility obstacles, the provision of charter school facilities in California changed in 2003–04. Proposition 39 and Senate Bill 740 requires districts to provide facilities for eligible charter schools and allows reimbursements of facility costs for schools in low-income areas. Approved by voters in November 2000, Proposition 39 took effect in November 2003 for most districts. Proposition 39 directs school districts to provide facilities for charter schools who have an in-district ADA of 80 students or more. The charter school does not need to be currently located within the district, nor does the charter have to have been granted by the district where the eligible students live. The district is only required to provide space for the in-district students. The law states that facilities must be "reasonably equivalent" to facilities which the students would otherwise attend in non-charter schools in that district. Districts may charge the charter school an amount equivalent to what the district spends per student on facilities from their general fund.

Senate Bill 740 is another legislative measure designed to alleviate some of the facilities burden on charter schools. This measure was implemented for the first time in the 2002–03 school year. The legislation created a small charter facilities aid program for schools in low-income areas. Eligible schools receive a cash reimbursement after the close of the fiscal year. The law currently allows schools in which more than 70% of the charter school students are eligible for free or reduced lunch to be eligible for this funding.

The charter school and chartering authority responses presented in this section provide a baseline for changes in charter school facility rules and regulations. Future research will need to examine how chartering authorities respond to and how charter schools are affected by Proposition 39 and Senate Bill 740.

Conclusions

The results from our analysis indicate that any fiscal challenges charter schools are experiencing are most likely experienced by start-up rather than conversion charter schools and that these challenges result in part from lower participation in categorical programs and from facility needs. The disparity in participation may ultimately lead to disparities in funding among charter schools and between charter schools and conventional public schools. Given California's long history to create equity in funding across schools, any resulting disparities are reason for concern. However, because the state is making the categorical programs available to charter schools, it is not entirely clear how it affects the state's legislative requirement to provide equitable funding. Our results further suggest that start-up charter schools may be relying more on private sources of funds than conversion charter schools or conventional public schools. Additional research is needed to determine the extent to which the private funds merely help to compensate for start-up and facility costs versus the extent to which private funds are used for other purposes. Finally, our results also suggest that California's current focus on providing greater facility support for charter schools is warranted.

Together, these results suggest that policymakers need to be particularly conscious of how funding models affect start-up charter schools, especially given the recent growth of these schools.

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[17] We also looked at the charter school responses based on when the charter was granted, but the responses were consistent across different lengths of time since the charter was granted.

In addition, charter schools and policymakers will need to develop innovative solutions that encourage start-up charter schools to participate in categorical programs for which they are eligible to receive funding. For example, to the extent that individual charter schools cannot support child nutrition programs, avenues need to be opened for the schools to be included in district child nutrition programs or to form networks with other charter schools. The state may also want to provide technical assistance to charter schools in accessing and filling out appropriate forms for categorical programs or create networks of charter schools that can facilitate information sharing.

While much of the charter school research has focused on student achievement, this research supports the call for additional research to develop innovative approaches to charter school finances in general and start-up charter school finances in particular.

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