Building Organizations to Change Communities: Educational Entrepreneurs in Poor Urban Area

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“We pay our taxes. We do what you ask. Do what we want now. We want our kids to get an education. It’s so hard to get a school built here, but as soon as she gets to be an adult, they’ll build a jail so easy to put her in.”
- A parent’s plea to the Oakland school board to accept the community’s proposal for a new charter school.

“I was bor i california and im mexican america. My old shcool name was Lockwod wassan ril good.”
- Oakland 4th grader’s response to his first homework assignment as a charter school student.

"Our school will be founded on the belief that all children can learn at a high level... Race, culture, income, and ethnicity will not be predictors of achievement. Instead, our school will hold uncompromisingly high standards for all of its students, while providing active and flexible support to ensure that they meet those expectations.

INTRODUCTION

Despite being one of the wealthiest nations in the world, the U.S. is one of the highest-ranking OECD countries in relative poverty¹ (Foerster and d’Ercole 2005). More than one in five children in the United States lives below the federal poverty line ($21,756 for a family of four),² and families in poverty tend to live in neighborhoods lacking social resources such as good public schools and jobs. They also have increased risks for disease, substance abuse, social isolation, and criminal victimization (Pebbly and Sastry 2004, Jargowsky 1997).

Although many factors contribute to poverty, in this chapter we focus to access to quality education as an important component of the perpetuation of poverty. Beginning with James Coleman’s famous 1966 report, “The Equality of Educational Opportunity,” scholars have understood that family background and socioeconomic status are key contributors to poor educational outcomes (Coleman 1966). Poor children are less likely to complete basic schooling

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¹Relative poverty is an internationally used poverty metric that penalizes for large income distributions. Even with the locally preferred poverty threshold metric that does not count for the poverty gap, the US consistently has a poverty rate around 15%.
and are more likely to perform at lower levels; together these factors depress potential future earnings and perpetuate the cycle of poverty (Rouse and Barrow 2006).

Despite this daunting history, attempts to improve the educational experience of poor children have continued over a long span of time. In fact, many organizations are founded in an effort to enact social change in this challenging environment. The organizational solutions are varied: non-profit organizations offering supplemental educational opportunities and social services, private school scholarship programs, new curriculum offerings or teacher training and development, and public school experiments like magnet and charter schools. Some of these efforts remove children from their local environment (e.g. the SEED School of Washington DC, a boarding school for 320 urban children); others are more minor tweaks on the existing model (e.g. charter schools that innovate at the local school level by providing an extended school day or extended school year). Some reformers are visionaries with specific ideas for how to change the system. Others, like the father quoted at the beginning of this article, are parents who want their kids to get a good, safe education in their own neighborhood.

This chapter focuses on charter schools in poor urban areas. Charter schools are an organizational form that emerged in the early 1990s as one potential solution to failing public schools. Rather than address the performance of charter schools relative to district schools (see Hanushek et al. 2007, Hoxby et al. 2009), we seek to understand differences among urban charter schools. There is much heterogeneity among charter schools by design, and we examine the various human, financial and organizational resources that a charter school utilizes. For example, we measure the involvement of non-educators in the school, the extent to which charters rely on outside funding, and the formalization of the school model. We examine how these resources contribute to the survival of the school and to the academic success of charter
students. We introduce a method useful for examining the combinations of resources and factors that are important to these two outcomes: fuzzy set qualitative comparative analysis (fsQCA). FsQCA is a method that highlights multiple pathways to an outcome, rather than a single solution. It is a useful method for looking at an organizational form that has spawned a great diversity of models. Our results tell a story of two pathways – one driven by the power of community partnerships, and the other by the power of formalization.

**CHARTER CONTEXT and THEORETICAL ORIENTATION**

The charter school movement began as a one response to calls for public education reform in the late 1980s, with Wisconsin and California passing the first state charter laws in 1991 and 1992. As of June 2009, forty-one states have adopted charter laws (Meyerson et al. 2009a). Petitioners submit a charter school application to their district – or in some cases county or state – in which they provide a blueprint of their educational model and proposed school. If a charter petition is approved, charters receive state funding on a per student basis. The school continues to operate with state funding as long as it adheres to the goals set forth in the charter (Meyerson et al. 2009a, Wells et al. 1999b). Although state laws differ from state to state (Wells et al. 1999a), support for charter schools has come from all sides of the political spectrum (Loveless and Jasin 1998, Wells et al. 1999b). The end result is that charter schools are now central in the national dialogue about education reform.

Leaving aside the question of whether charter schools provide advantages over district schools, we seek to examine diversity among charter schools in urban areas. Given the rhetoric of decentralization, autonomy, and choice, it is perhaps not surprising that charter schools themselves are remarkably heterogeneous (Wells et al. 1999a, Henig et al. 2005, King, Clemens
and Fry forthcoming). Yet it means that when we talk about ‘charter schools’, we are talking about schools that adhere to vastly different curriculum and philosophies, with different levels of financial and community support. We seek to unpack those differences and examine variety within charter schools. This is an important task because it allows us to uncover the multiple pathways by which charter schools attempt to reach their goals.

Using fsQCA, we examine the different paths by which charter schools survive and succeed. We differentiate between organizational success and survival as judged by the institutional logics of legitimacy and accountability. Schools, although traditionally judged by the logic of legitimacy, are increasingly subject to the accountability pressures as a result of standards-based reform (Elmore 2000). These logics are more intense for charter schools because a charter school is generally founded with the agreement that it will demonstrate its effectiveness or be closed; while a more traditional school is seen to be legitimate by their “incorporation of institutionalized elements… that protects the organization from having its conduct questioned” (Meyer and Rowan 1977: 349). The end result is that charters are both legitimate because they have been approved in a highly institutionalized setting and accountable because they are measured by student scores on standardized tests (the state accepted measure of performance that demonstrates accountability). Thus, theoretically, charter schools are an interesting case where pressures for legitimacy and accountability are both present. As a result of these dual logics of legitimacy and accountability, we have an opportunity to explore whether the factors that lead an organization to survive as a legitimate organization are the same as the factors that lead an organization to be successful according to accepted standards of performance.

Although the context for this study is charter schools in an urban area, the larger question raised by this book revolves around positive social change. Whether charters succeed in
accomplishing social change, and whether this change is, in fact, positive, is a matter of some debate. From an entrepreneurial lens, however, spurring positive social change is the entrepreneurial intent for many of these charter operators (e.g., see the third introductory quote). Although most charters are focused on change within the local context, charter management organizations (CMOs) expressly talk in terms of high impact and scalability (Meyerson et al. 2009b). The fact that at least some of these entrepreneurs are interested in large-scale social change makes legitimacy both more important and more contested. Social change goals by definition threaten the status quo, and thus goal attainment implies some disruption of the existing system – positive from the perspective of the social change agent, but not necessarily from that of the institutional actors. In a delicate balancing act, social change organizations must obtain enough legitimacy to be seen as an entity worthy of support – which the organizational form in and of itself can provide (McCarthy and Zald 1977, Snow and Soule 2010) – but also create enough waves to allow the organization to effect the change it seeks.

To summarize, we seek to understand the different combinations of human, financial and organizational resources that help charter schools succeed and survive. More broadly, in the context of this book, where understanding large-scale social change is the object, we examine the factors that shape the success of small-scale deviations of form. We discuss the multiple pathways by which organizations accomplish dual goals (legitimacy and accountability), and we introduce qualitative comparative analysis as a useful method for examining these larger questions.

DATA & METHODS

Sample and Data Sources
The context for this study is the population of charter schools in Oakland, California. We focus on this urban city because of the high rates of poverty in Oakland and the stated intention of many charters to focus on helping this underserved population. As one informant put it, all schools in the area movement are “aiming for equity and giving poverty kids the same chance as others.” The key measure of socioeconomic status among schools is the percentage of students in the National School Lunch Program (NSLP), which offers free and/or reduced price meals to students in low-income families.\(^3\) The state average NSLP participation among public school students in California is 54%, the average for all Oakland Unified School District (OUSD) schools is 70%, and is 80% for OUSD charter schools. Thus, Oakland charter schools as a group have a higher proportion of poor children than all Oakland schools and than the average California school. Thus this narrow scope of OUSD allows us to look at the factors that help these charter organizations survive within a high poverty urban education context where the goal of helping children in poverty is widely shared. That said, even within this narrow population, there is variation in what a charter looks like and the resources on which it draws, and it is this variation that we seek to examine.

Although charters are prevalent in many urban cities, we focus on Oakland because it was an early adopter of the charter form. Oakland’s charter movement was catalyzed by early investment in new schools by “philanthropic elites” involved in the technology boom of the 1990s with an interest in education reform (Meyerson et al. 2009b). The first charter in Oakland

\(^3\) Free meals are offered to students whose families are from 0-130% of the national poverty line; for example, a child in a family of four making less than $28,665 in 2009 qualifies for free lunch. See USDA Food and Nutrition Service for more information on eligibility guidelines: [www.fns.usda.gov/cnd/governance/notices/iegs/iegs.htm](http://www.fns.usda.gov/cnd/governance/notices/iegs/iegs.htm).
was authorized in 1992, and as of June 2010, 51 OUSD charter schools had been founded, with 35 still open in the district.\textsuperscript{4}

Our primary data source is archival and includes the approved founding charter petition documents and state-level historic data. All charter schools in California must submit a petition to be considered by their school districts for charter school status. We chose these initial documents because we know the early resource endowments and decisions made about the structure of the organization shape future decisions and outcomes (e.g., Aldrich and Zimmer 1986, Baum et al. 2000, Beckman and Burton 2008, Hannan et al. 1996). Although these documents are aspirational rather than measures of actual practices, they reflect the entrepreneurial intentions and initial resources of the organization. One interviewee suggested these documents contain “the kernel” of the mission but may be vague because of the subsequent accountability to the charter document. To the extent this is widely true, our measures may not capture the full diversity of charter models. The content of the petitions varies, but all contain sections on the school’s mission, goals, curriculum, board and governance structure, human resources, admission and discipline policies, and financial planning information. Many of the charter petitions contain supplemental materials including letters of support and board bylaws. We also collected 16 additional variables from state sources including test scores, demographics, teacher credentials, and poverty rates. Unfortunately, we are limited in these additional variables. For example, charters are often (although not always) established with non-unionized teachers and with lotteries to manage excessive demand. We cannot examine any potential variation in our population with regard to unionization and student demand. This is an important limitation.

We combined the archival and state sources of data. In addition to collecting the archival data, we compiled field notes from three site visits and two informal telephone interviews with charter

\textsuperscript{4}Data from OUSD Charter School Office.
school staff members. Additional qualitative depth came from a book on the early charter school movement in Oakland and conversations with the book’s author (Schorr 2002).

The majority of these petitions, which range between 15 and 430 pages, are available online through Oakland Unified School District’s Legislative Information Center. Of the 51 schools whose petitions were approved, we were able to locate 39 of the original documents (information for an additional 5 charters were obtained from Schorr’s 2002 book). For 48 of the 51 schools on this list, we were able to gather supplemental historic data from state sources. The three schools without historic data were approved but never opened. Our final sample includes 41 schools. These schools are largely representative of charters in Oakland, although they are larger, have more Hispanic/Latino students, and have fewer African-American students than the 7 charters for which we have no petition information. The missing schools are not significantly different in age, API scores, levels of poverty, or teacher credentials.

Variables and Coding Procedures

Our coding procedure began with a theoretically guided list of thirty preliminary coding categories. Using Atlas ti qualitative analysis software, we broadly coded for information on vision and mission, educational philosophy, parental involvement, partnership types, curriculum and program structure, funding sources, teacher salaries and student to teacher ratios, board and decision-making, admissions, demographics, goals and metrics of success, facilities, key personnel, disciplinary and human relations information, level and size of the schools, and length of the petition document. From these categories, we created 65 codes in 9 categories that we used to code the documents. Of particular importance for this analysis, we coded for whether the school is part of a charter management organization (CMO), board composition, external
funding, partnerships, and parental involvement.⁵ We use these as measures of formalization and governance, financial resources, and community and local level social capital, respectively.

Table 1 reports descriptive statistics for some key variables.

Our outcome variables warrant particular attention. As with any social change endeavor, defining and measuring success is a challenging task.⁶ School closure may happen for multiple reasons (e.g., financial problems, poor performance, or loss of leadership), and there is no clear district guideline for when a school should be closed. Charters must be renewed every five years but a school can close outside of this schedule as well. Broadly speaking, school closure is an indication that the school is not longer legitimate. In terms of accountability, we focus on the school’s performance on the state recognized metrics for student performance – standardized tests. Measuring education quality is a contentious issue and Oakland’s charter schools certainly differ in their philosophies about how to measure student achievement. However, regardless of how objectively valid the metrics are, a school’s ability to achieve success by these criteria is a sound measure of accountability within the institutional context of public education. These are the measures on which they have agreed to be judged.

In California, a primary standard metric – institutionalized with the Public Schools Accountability Act of 1999 – is the Academic Performance Index (API). The API is a composite on a scale of 200-1000 of scores from the Standardized Testing and Reporting (STAR) Program and the California High School Exit Examination (CAHSEE) tests. These tests generally cover (as applicable by grade) Language Arts and Mathematics for elementary students, in addition to

⁵ We thank Debra Meyerson for sharing her coding of CMO status as a means of verifying our coding.
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Science, Life Science, and History-Social Studies for older students. School-wide API scores for the most recent year reported are the metric of accountability we use in this analysis.

Analysis Technique

We are interested in the combination of resources that charter schools rely on to survive and to perform well on standardized tests. Analyzing causal complexity is a strength of fuzzy set qualitative comparative analysis (fsQCA) (Fiss 2007), our method of choice. This technique uses Boolean algebra, set logic, and calibrated variables for comparative case study or small n analyses (Ragin 1987). By focusing on the presence or absence of causal conditions contributing to an outcome, it offers a means to reveal and reduce causal complexity to a parsimonious set of causal combinations, or “recipes” (ibid – see also Ragin 2008 for more background on this methodology).

Before presenting the results of our analysis, we must briefly explain two central fsQCA concepts. First is the set-theoretic consistency with which the existing examples of a causal combination display the outcome in question (Ragin 2008). For example, if having funding and having many partnerships lead to high API scores in every school that exhibits that combination, the consistency would be 100%, or 1.0. Ragin suggests a minimum consistency score of 0.8 to draw any causal conclusions (2008), so this is the cut-off we use in our analysis. The second concept is set-theoretic coverage which assesses the degree to which a single causal recipe or pathway accounts for instances of an outcome (Ragin 2008). The total coverage score is similar to an R² value in regression analyses. The best scores with theoretical merit in our dataset have total coverage scores ranging from .50-.60. This means the recipes we report account for over 50% of the possible pathways to the given outcome. The fsQCA method requires theory driven
exploration to find recipes with both theoretical merit and good consistency and coverage scores (Rihoux 2006, Ragin 2006, 2008), and the recipes reported here are the result of that process.

RESULTS and DISCUSSION

The five variables that emerge as important causal conditions for our two outcomes are detailed in Table 2. As noted above, API scores and whether the school remains open are the two outcomes of interest. We consider schools with average API scores of 800 or higher to be high performing schools; school with scores of 600 or lower are considered low performing. The cut-off for high performance is based on state metrics that allow for more flexibility for schools with greater than a 800 API score. This cut-off is much higher than the 2009 average API score in OUSD of 695. The five independent variables include measures of financial and social resources (external partnerships, parental involvement, and funding), as well as measures of structure and governance (board composition and CMO structure). We examined other variables of human capital, such as teacher experience and credentials, as well as extended class time, the level of poverty in the schools, and the ethnicity of the students, but these variables did not appear in causal recipes that had a significant amount of coverage. Thus we do not include them in any of the models below.

--------------------------Insert Tables 2 and 3 about here --------------------------

Survival Pathways

Table 3 presents the results of our analysis. For the legitimacy outcome, school survival, three pathways exist. Two of these pathways (1 & 2) suggest that schools meeting accountability metrics (i.e., high test scores) are likely to survive. We see attention to test scores by many of the charter schools. For example, at KIPP Bridge Charter School, a school that is part of a successful
national charter network, a “rock the test” campaign with banners listing goals such as "at least 90% advanced or proficient" was in progress during our visit. More surprising, a lack of funding, appears in two paths. The American Indian Model (AIM) charter school, for example, is a thriving charter school with high test scores despite a very lean staff and budget. In our tour of the school grounds, as we passed through a tiny blacktop where children ran laps on our way from one surprisingly small classroom building to another, our guide simply commented: “Humble facilities, but it works.” Consistent with other research on mobilization in low-resource contexts, strategic use of available resources can offset a lack of traditional resources (Cress and Snow 2000).

We also see one pathway to survival that does not rely on high test scores (3). This pathway combines low levels of both funding and parental involvement with high numbers of partnerships. Again referencing one of the AIM schools, we were told quite candidly during one of our campus visits that the basic view of the AIM schools is that parents are part of the problem: unlike parent contracts of many schools where the contract includes commitment to volunteering and other means of parental engagement, this contract entails agreeing to school “the way it used to be done in the old days where the school decides what’s best for the students”. Instead, these schools rely on partnerships for legitimacy. At ARISE, for example, the operations manager talked about the high level of collaboration among charter schools and the importance of respecting and restoring the community. This is also reflected in ARISE’s 11 partnerships described in the founding document.

In sum, these schools maintain their legitimacy through demonstrated performance on tests or through partnerships. That is, they either rely on their success on performance metrics or they develop organizational partnerships that embed them in the community. Interestingly, it is
organizational partnerships and not parents that seem to provide that legitimacy. The coverage for these three pathways ranges from .21 to .39\(^7\), and the total coverage for the combination of variables is .59.

*Performance Pathways*

Again referencing Table 3, three pathways exist for the accountability outcome (high API test scores), with a total coverage of .53. Most notably, two of these pathways require being a Charter Management Organization (4 & 6). A CMO is a charter model that involves centralized support and multiple schools, and these results suggest that high test scores are well supported by this type of formalization (being a CMO). The two CMO pathways include one with high funding but low partnership and local board representation (4), and one with low parental involvement (6). The shortest pathway (6) has about double the coverage of the other two pathways and relies on formalization rather than funding to support performance. The third pathway, which does not include CMO formalization, combines funding, high partnership and local board representation, and low parental involvement to achieve high test scores (5).

Contrary to conventional wisdom, two of the pathways to high test scores include low parental involvement. How can we make sense of these findings? First of all, deciding to send a student to a charter school rather than the neighborhood school requires awareness of the options and an explicit decision of the parent to apply to the charter school (see Hanushek et al. 2007). We are not capturing this parental involvement because all charter parents have selected their school, but rather we are measuring parental involvement in the daily operations of the school like input on school curriculum and classroom volunteering. This is the kind of involvement that

\(^7\) Solution consistency scores for both outcomes were very high, above .98, for all the reported causal combinations and so are only reported individually in Tables 2 and 3. Unique coverage scores are not reported as they were all around .10, with the exception of recipe 3, which was at .27.
seems less helpful to high performance, though there does seem to be a benefit to parental involvement at the board level (5). We hesitate to offer an interpretation of this finding without further research (see also Hoxby et al., 2009), but we do know from our qualitative data that low parental involvement sometimes reflects a philosophical choice on the part of the school. As noted above, one high performance CMO, the American Indian School (AIM), is explicit about keeping parents out of the day-to-day school functioning.

We also see that parental involvement and partnerships never co-occur in a recipe. They seem to act as substitutes for each other, with schools being deeply involved with the parent community or with a larger community of organizations. In terms of social change, this suggests that the micro-involvement of parents creates a local embeddedness that may hinder change, whereas the macro-support of broader community embeddedness can contribute to both legitimacy and performance and thus support social change. Further, board composition with parent membership does seem beneficial and may either be more akin to community embeddedness. Consistent with that, we see organizational partnerships and local representation on the board co-occurring (5). Other research on community engagement in social change across scales has recently begun to point to similar trends (e.g., Lounsbury 2001, Lee and Lounsbury 2010).

For the dual logics of accountability and legitimacy, our results make several contributions. First, it appears that these new organizations rely on high student performance to maintain legitimacy in the majority of instances. Rather than legitimacy coming from the approval process alone, student performance acts as an important determinant of survival. Meeting the accountability metrics becomes a predictor of legitimacy. Second, the formalization of the CMO model predicts student performance (success according to accountability metrics)
but not survival itself. In the case of this new organizational form, the structure itself does not provide legitimacy. This is surprising inasmuch as the institutionalized elements of a school might be expected to protect it from having the context questioned (as noted earlier, these charters are incremental tweaks on what it means to be a school and are often not dramatically different in their daily operations). This speaks perhaps to the contested nature of the CMO model in particular within the traditional education community. CMOs are often the organizations that most directly speak to large-scale transformation of the education system. Finally, other resources can substitute and contribute to outcomes as well.

In fact, organizational partnerships create an alternative pathway for both legitimacy (survival) and accountability (high test scores). This is consistent with theory that network forms offer a viable alternative to formal hierarchy (Powell 1990). The presence of partnerships as a key alternative pathway for both outcomes speaks to the importance of cross-sectoral networks for charter school success (Wohlstetter et al. 2004), and more broadly to their relevance for scaling positive social impact (Wei-Skillern and Marciano 2008) and legitimizing change (Greenwood et al. 1999). This community embeddedness may, in fact, be a potential benefit of being a CMO in addition to (or instead of) the structure it provides: CMOs are part of a professional community of other CMOs and charter schools. Our findings speak to the interrelationship between the legitimacy and accountability logics, and highlight potential contestation about the legitimacy of the new organizational form itself.

**CONCLUSION**

Our results indicate that there are a number of ways that urban charter schools serving children from low socioeconomic backgrounds use resources and build organizations. Given the
diversity of charter school models that exist, it is useful to examine the combination of resources that seem to be most beneficial. Formalization stands out as a main positive contributor to meeting the accountability standards. Rather than formalization and structure being tools that allow organizations to decouple from the core of the organization and obtain surface legitimacy, in this instance the structure also appears to help in achieving positive outcomes (e.g., high test scores and accountability).

For organizations that are attempting to create positive social change, these are important findings. The importance of formalization is mirrored in research on the role of organizational infrastructure in supporting political outcomes (Andrews 2001, McCammon et al. 2001) and even enabling more radical action within a legitimated organizational form (Rucht 1999). The CMOs are both legitimate within the larger system of organizations as a recognizable ‘school’ and they are able to operate differently (and with more freedom) than other non-charter schools. They are in a sense embedded and legitimate in two worlds – that of education reform and that of traditional education, and thus their position is in many ways ideal (Hillman 2008). Interestingly, the formalization and structure that a CMO provides has some similarity to the structure of a district in the arguably failing district of Oakland. But the structure is used to support a different set of practices (e.g., low parental involvement in the classroom in the case of AIM, an extended school day or year in the case of Aspire and others, or a strong discipline focus in the case of KIPP).

There are other important implications of these results. The results indicate multiple kinds of legitimacy at play in this context since performance and community embeddedness both offer pathways to survival. The fact that high test scores are not necessary for survival has a few interesting implications. It suggests that other “success” factors may be important in this urban
context. This warrants further research. Perhaps obtaining petition approval protects the charter school from some accountability pressures. Or perhaps simply having a small, safe, community space where children get attention and learn moral and life skills – if not their ABCs – may be valued. Though improved educational outcomes remains essential for improving the lives of impoverished youth in America, a myriad of outcomes may contribute to positive social change in this context. In addition, financial resources are not required for legitimacy, which is a very hopeful finding for those interested in mobilization in a high poverty context. That said, funding is related to two of the pathways to high performance, so financial resources clearly have measurable benefits and provide accountability. Finally, partnership, or community embeddedness, emerges as a key mechanism for social change in contexts where more traditional resources – money or formal organizational structure – are lacking. The importance of this finding for understanding social change in high poverty environments cannot be underestimated.

Taken in total, our results speak to a common debate among those trying to enact positive social change – does change best happen from the top down or from the bottom up? The formalized charters in our sample represent a “top down” approach, and a few of these schools are CMOs from other states that have expanded their system into this context. Is this the effective scaling of impact that so many social change agents and funders aim for (e.g. Bradach 2010, Dees et al 2004)? Is it more effective than the homegrown Oakland schools that represent more grassroots efforts to educate locally? Our results do suggest a benefit to this “top down” approach in terms of accountability. Of course, there may also be a self-fulfilling prophecy in this context in that funders support those efforts that match corporate solutions to scaling. We know that external resources often demand rationalization and professionalization of an
organization (Hwang and Powell 2009). That said, we do see a CMO recipe that occurs without the condition of funding.

Yet, our findings also point to cases of “bottom-up” success. Each outcome also has a path that involves using networks to offset the lack of the more traditional assets of structure and high performance. In addition, many other idiosyncratic paths not involving formalization showed up in our data, though they were not reported because they had low unique coverage as they usually existed in only a few schools. This is the very nature of the grassroots approach. Thus both top-down and bottom-up strategies are alive and well in the Oakland charter school movement, and the diversity may well be a healthy element of this movement (Clemens and Minkoff 2004). Although the range of charter options that we do see may be driven by the initial legitimacy screening necessary to be approved as a charter (and to receive funding), thus making our findings more conservative with regard to the potential success factors for charters, it suggests that the possibilities for successful models are undoubtedly more diverse than currently exist in the population.

The charter schools that we examine are trying to create opportunities for poor, urban children. Our study examines the factors that help them achieve their goals. The structure of a CMO seems to provide an important tool for the schools to achieve their goals. The support of the community also seems to be helpful. Although the goal of many of these charter school operators is systemic change, they are attacking the problem one school at a time with a variety of financial, organizational, and social resources. These small successes require maintaining legitimacy in a system while simultaneously challenging the system and creating a new model that demonstrates results. Although achievement of the larger goal often seems out of reach, we see positive social change occurring through multiple pathways in local communities. The
eventual goal of reforming the entire education system and eliminating the achievement gap between white and colored and between rich and poor is not one that will be achieved by one solution. The very fact that multiple pathways exist for successful charter schools - at least in one urban education experiment - is ground for hope for charters and for other educational experiments.
REFERENCES


Table 1. Descriptive Statistics

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<td>468-977</td>
<td>37</td>
</tr>
<tr>
<td>Students per teacher</td>
<td>23.7</td>
<td>16.5-50</td>
<td>36</td>
</tr>
<tr>
<td>Years of teacher experience</td>
<td>6.2</td>
<td>1-24</td>
<td>38</td>
</tr>
<tr>
<td>% schools in program improvement</td>
<td>33</td>
<td>-</td>
<td>42</td>
</tr>
<tr>
<td>% students in national school lunch program</td>
<td>80</td>
<td>34-100</td>
<td>38</td>
</tr>
<tr>
<td>% state credentialed teachers in a school</td>
<td>69</td>
<td>0-100</td>
<td>45</td>
</tr>
<tr>
<td>Student ethnicity breakdown:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Hispanic or Latino</td>
<td>44</td>
<td>0-95</td>
<td>46</td>
</tr>
<tr>
<td>% African American</td>
<td>42</td>
<td>2-100</td>
<td>46</td>
</tr>
<tr>
<td>% Asian</td>
<td>6</td>
<td>0-55</td>
<td>46</td>
</tr>
<tr>
<td>% Pacific Islander/Filipino</td>
<td>1</td>
<td>0-7</td>
<td>46</td>
</tr>
<tr>
<td>% White</td>
<td>3</td>
<td>0-48</td>
<td>46</td>
</tr>
<tr>
<td>% American Indian/Alaskan</td>
<td>0.4</td>
<td>0-11</td>
<td>46</td>
</tr>
</tbody>
</table>

* The sample size varies and is often lower than the total 51 charters for two reasons: first, only 39 original charters were available and not all charters reported information on each variable, leading to some sample sizes smaller than 39. Second, we were able to find supplemental information on some variables from state data archives and ethnographic studies of the schools during founding (see in particular Schorr 2002).

** Some schools serve multiple ages (e.g., K-8 or K-12), so the total number by type of school is larger than 48. Schools that intended to expand to include additional grade levels were also included in this count, whether or not those proposed expansions actually happened.

*** Note that student-level data for closed schools comes from the most recent year the school was open, but otherwise this data is reported from 2010. Program improvement is a probation system for California public schools, implemented by the California Department of Education as part of the national Elementary and Secondary Education Act, which demands statewide accountability systems for reading and mathematics test scores.
### Table 2. Analysis Variables

<table>
<thead>
<tr>
<th>Code</th>
<th>Variable</th>
<th>Explanation</th>
<th>Approximates:</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEST</td>
<td>API Scores</td>
<td>0 to 1 calibrated scale of high API. API scale is 200-1000. 1=score of 800 or above, 0=600 or below, and the cross-over point is 700.</td>
<td>Accountability: Test Scores</td>
</tr>
<tr>
<td>OPEN</td>
<td>Open school</td>
<td>Binary. 1=charter school still open; 0=school abandoned, or closed (charter revoked).</td>
<td>Legitimacy: Survival</td>
</tr>
<tr>
<td>CMO</td>
<td>Multiple Charters</td>
<td>Binary. 1=Charter management organization with central office (CMO) or networked schools (e.g., elementary and high school); 0=single school.</td>
<td>Structure and formalization</td>
</tr>
<tr>
<td>FUND</td>
<td>Money, or Supplemental Funding</td>
<td>0 to 1 calibrated scale of the degree of certainty and security of funding outside of the standard state-level public school funds. 1=presence of individual, corporate, and foundation funding. 0=no funders listed.</td>
<td>Financial Resources</td>
</tr>
<tr>
<td>PARENT</td>
<td>Parental Involvement</td>
<td>0 to 1 calibrated scale of the degree to which parental involvement is mentioned and elaborated on as important in founding charter petition. 1= highest coding rating (“parent handbook included”); 0=parents not mentioned.</td>
<td>Internal Social Resources</td>
</tr>
<tr>
<td>PARTNERS</td>
<td>Network, or Partnerships</td>
<td>0 to 1 calibrated scale of network connectedness as measured by the number of intended and actual partners mentioned in charter petition. 1=more than 5 confirmed partners mentioned. 0= no partners listed.</td>
<td>External Social Resources</td>
</tr>
<tr>
<td>BOARD</td>
<td>Locals on Board</td>
<td>0 to 1 calibrated scale of board membership. 1=presence of parents and staff members on board. 0=absence of both.</td>
<td>Structure and Governance</td>
</tr>
</tbody>
</table>

### Table 3. fsQCA Results

<table>
<thead>
<tr>
<th>Recipe</th>
<th>Raw Coverage</th>
<th>Solution Consistency</th>
<th>Cases</th>
<th>Age (av.)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OUTCOME=OPEN: SURVIVAL PATHWAYS</strong> (total coverage: .59)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. TEST*fund</td>
<td>.32</td>
<td>.98</td>
<td>E. Oakland Leadership Academy, N. Oakland Community, World Academy, American Indian (2)</td>
<td>6</td>
</tr>
<tr>
<td>2. TEST*PARENT</td>
<td>.29</td>
<td>.98</td>
<td>Lighthouse (2), Aspire (2), COVA, KIPP, E.C. Reems Academy</td>
<td>6.7</td>
</tr>
<tr>
<td>3. fund<em>parent</em>PARTNERS</td>
<td>.21</td>
<td>.98</td>
<td>Oakland Unity, World Academy, Oasis, Arise, American Indian</td>
<td>4.8</td>
</tr>
<tr>
<td><strong>OUTCOME=TEST: PERFORMANCE PATHWAYS</strong> (total coverage: .53)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. CMO<em>FUND</em>partners*board</td>
<td>.14</td>
<td>.99</td>
<td>Lighthouse (2)</td>
<td>4.9</td>
</tr>
<tr>
<td>5. FUND<em>parent</em>PARTNERS*BOARD</td>
<td>.17</td>
<td>.98</td>
<td>Oakland Charter Academy and High</td>
<td>10</td>
</tr>
<tr>
<td>6. CMO*parent</td>
<td>.36</td>
<td>.99</td>
<td>LPS, World Academy, Achieve, American Indian (2), Aspire</td>
<td>5.6</td>
</tr>
</tbody>
</table>

Causal factors that are present for a recipe are represented in CAPITALS. Factors that are absent in a recipe are represented in lowercase. The first recipe, e.g., can be read as follows: high test scores combined with a lack of private funding and low parental involvement are a pathway by which the charters in our sample remained open. The (2) in parentheses after some of the school names indicates that multiple levels of that school – e.g. middle and high school – showed up in a recipe.