Scale of Operations and Locus of Control in Market- Versus Mission-Oriented Charter Schools*

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Objective. The objective of this article is to investigate two distinct strands in the charter school movement: one that emphasizes school-based management and another that emphasizes market efficiency. We were interested in whether charter schools that were founded or co-founded by for-profit education management organizations (EMOs) tend to pursue economies of scale and are less likely than others to implement school-level decision making in key areas. *Methods.* The analysis uses data drawn from a survey we conducted of the population of charter schools in Arizona, Michigan, Pennsylvania, and Washington, DC. *Results.* We find that charter schools that were founded or co-founded by EMOs tend to be larger and are *less likely* to exhibit decision-making control at the school level. *Conclusions.* Our analysis underscores the importance of disaggregating the charter school phenomenon into its distinct constituent parts in order to draw meaningful lessons from this evolving and significant experiment in alternative education delivery mode.

A persistent debate in education policy is over the roles of scale of operations and locus of control in schools. The lessons of industrial production suggested to early 20th-century reformers that larger centralized districts and schools could offer educational services more efficiently, comprehensively, and coherently than could small, scattered rural or disorganized urban schools (Tyack, 1974). The result was consolidation of districts, bigger schools, and a growing distance between those responsible for setting policies and those responsible for carrying them out. Despite a growing

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population, there were more than 100,000 fewer school districts and more than 160,000 fewer schools in the nation in 1987 than in 1937 (U.S. Bureau of the Census, 2003:Table 87). Today, the average public elementary school has about 475 students and the average secondary school about 715; nearly 1 in 10 schools has 1,000 students or more (U.S. Bureau of the Census, 2003:Table 95).

Over time, critics argue, these well-meaning reforms brought about numerous unintended negative consequences. In some cases, they created enormous, hard to manage districts crushed under layers of bureaucracy and burdened individual schools with a host of rules and regulations (Hill, Pierce, and Guthrie, 1997). In some cases they spawned large ''mega'' schools, whose sheer scale seemed to undermine community, order, and focus. In the minds of some critics, the result has been a perverse structure that empowers officials far removed from the classroom and constrains the discretion of those who *are* in close contact with students and their families (Lipsky, 1976; Elmore, 1979).

This criticism has sparked two distinct, though largely complementary, new trends in school management: making schools smaller and devolving more decision-making authority from the district to the school level. Both gained legitimacy from studies showing that community, teamwork, shared responsibility, and decision-making discretion among teachers and principals can be associated with higher levels of student performance, even when student racial and economic characteristics are taken into account (Chubb and Moe, 1990; Purkey and Smith, 1983). Underlying the small schools movement is a belief that large schools foster diseconomies of scale due to associated problems of managing complex organizations, maintaining order, and creating a sense of community among students and staff (Lee and Smith, 1995; Lawrence et al., 2002). Underlying the devolution movement and reforms such as school-based management (SBM), are the beliefs that principals and teachers work harder and do a better job when they feel efficacious and that schools are better able to respond to family and student desires when they are freed from bureaucratic constraints (Hill and Bonan, 1991).

Although claims about the benefits of small schools and school-based decision making remain contested (Haller, 1992; Malen, Ogawa, and Kranqdz, 1990; Monk and Haller, 1993; Wohlstetter and Mohram, 1994), there is little doubt that these movements have been ascendant in recent years. A distinct line of debate is less over the presumed benefits of scale and devolution than over the question of whether these can be achieved within traditional public school systems or, conversely, only through the introduction of more market-oriented alternatives such as vouchers and charter schools. Efforts such as the Bill and Melinda Gates Foundation initiative to sponsor small high schools or Chicago's 1989 experiment with giving local school councils strong budgetary powers and authority to select principals (Bryk, Lee, and Holland, 1998) are grounded in the principle that public school systems can be restructured to make schools more intimate and less

bureaucratically bound. Some proponents of vouchers and charter schools, however, argue that traditional school systems are incapable of such changes; their size and centralization are inevitable consequences of majority rule and interest-group politics when played out in heterogeneous democratic systems (Chubb and Moe, 1990).

In this article, we present evidence about the extent to which charter schools do indeed provide the smaller scale and more decentralized decision-making environment that are anticipated. In doing so, we attend to the fact that not all charter schools may be cut from the same cloth. Some charter school proponents have, from the beginning, emphasized a *communal mission* of small-scale, intimate environments, comprised of individuals linked by a common set of values. Others, however, have placed greater emphasis on a *market* perspective, viewing competition for customers and profit maximization as the key to quality education. Although some of the latter see no tension between a vision of small, decentralized schools and their commitment to markets, others recognize that markets under some circumstances can generate powerful pressures for growth and span of control and that, indeed, some of the potential benefits of marketization might depend on the achievement of economies of scale by expanding the size of individual schools and the networks in which they are embedded (Lieberman, 1993). The analysis we present here probes how scale of operations (size) and the locus of decision-making control vary across charter schools founded by organizations driven by fundamentally different philosophies.

Distinct Strands Within the Charter School Movement

Charter school legislation has been supported by diverse coalitions of interests. *Laissez-faire* proponents of pure-market solutions, minority rights advocates, disgruntled parents, education entrepreneurs, progressive educators, and even teachers unions at times have advocated for increased school-level control and have contributed to the political momentum that led to the enactment of charter school legislation in 40 states and the District of Columbia. Though united in their rejection of what they consider to be a stifling bureaucracy-heavy system of public education embracing conformity over innovation, these interests have competing visions of what the alternative ought to be. In particular, we suggest that two visions have emerged, reflecting a fundamental, albeit politically latent, cleavage in administrative and pedagogical philosophy.

One view emphasizes the autonomy of school-level communities of like-minded parents and teachers. This vision of the school as an intimate community itself has distinct antecedents. One is a notion of educational professionalism that emphasizes teacher autonomy when it comes to pedagogy with a mission to provide quality education, rather than emphasizing their credentials and membership in an institutionalized profession. The key

to school reform, from this perspective, is giving teachers the space and resources to utilize their full range of skills and imagination to educate. The kernel of this philosophy, Eric Rofes suggests, is grounded in the concept of the agricultural cooperative (Rofes, 2000). Rather than merely be employees, teachers are to be given an incentive to contribute to the greater well-being of the school by becoming stakeholders, part-owners rather than employees. Joe Nathan, one of the most visible advocates for charter schools, argued: "One of the central objectives of the charter school movement is to empower classroom teachers, administrators, and parents, giving them the opportunity to create the schools they believe will help youngsters" (Nathan, 1999:8; see also Kolderie, 1995:30). The second strain of this communal perspective puts less emphasis on educational professionalism and more on a set of animating values that create a bond between teachers and families. These values may be pedagogical in nature—for example, when families and teachers together subscribe to a common vision of progressive education or a back-to-the-basics approach—but they may also have their roots in racial, ethnic, or religious identity. The key is shared nature of the commitment, cultural affirmation, and the social capital that this can engender (Coleman and Hoffer, 1987; Bryk, Lee, and Holland, 1993; Wells et al., 1999).

Others rally around the better-known charter school concept based on an allegiance to markets, competition, and corporate efficiency rather than community, shared values, service mission, and harmony. By infusing competition and a business approach to education, schools would succeed (or fail) like businesses. Christopher Whittle, president of the Edison Corporation, one of the leading for-profit firms running charter schools, is quoted in *Business Week* as stating:

> The average school district in the U.S. is a cottage industry. [The average district] has just 6 schools, 3,200 students, and a budget of $22 million. And it is run locally. In contrast, we are national and have big advantages of scale. For instance, the typical school district can't support research and development, and doesn't have the scale to do serious design work. (Whittle, 2000)

John E. Chubb, another supporter of the corporate charter school model, echoes these sentiments: "Public education has truly not given scale a try . . . By serving as a sort of mega-district for a larger number of schools, and thus putting scale to good use, a for-profit firm could free up more education dollars for use at the school and classroom level" (Chubb, 2001).

As is often the case with broad typologies of this sort, the distinction between the communal and market-oriented visions of charter schooling is blurrier in its real-world manifestations than in the realm of theoretical abstraction. Adherents of the more communal vision need not abjure market principles; Kolderie and Nathan, for instance, often enrich their case for giving parents and educator communities greater autonomy with reference

to the benefits of competition and the stifling effects of public monopolies. Those promoting a more corporate, business-like approach to charter schooling often talk about the benefits of small schools and point to community-based, mission-oriented schools as evidence that their model can be successful even in low-income and minority neighborhoods that markets have not always served well; and some aggressively seek to partner with community-based organizations. Such blurring of the distinction between community and market at times may be tactical—a self-conscious effort to broaden the constituency for what is still a fledgling policy notion—and at times may reflect a genuine belief that charters, as a new organizational form, can make it possible to have the best of both worlds. However, for analytic purposes, and in trying to gauge the likely directions of charter schooling, retaining the distinction can be important. Despite his support for the roles of competition and markets, for example, Nathan worries that the charter school movement is "misrepresented by critics who say that the ultimate rationale for charter schools relies on markets" (2002:30). Proponents of more corporate approaches have been anxious to distinguish themselves from some of the more informal and amateurish charter schools that have created negative publicity due to mismanagement, disorganization, and dubious practices.

Though subject to the legal and political constraints of the states in which they were enacted, charter school policy appears remarkably flexible in its capacity to accommodate both these approaches. Legislation in many states permits diverse organizations, both local groups and national companies, to manage charter schools, permitting a wide range of models. Consequently, after several years of charter school policies in many states, we now see clear examples of supporters of each of these philosophies operating schools. Some schools have been started by communities, so-called Mom and Pop charters, often by teachers and principals converting from a public or private school (Wohlstetter and Griffin, 1998). In other cases, for-profit management companies, sometimes national in scope, have opened up 10 to 20 schools within one or across several states. Molnar, Wilson, and Allen (2004) report that between the 1998–1999 and 2003–2004 school years, the number of for-profit educational management organizations (EMOs) nearly quadrupled and the number of schools they were managing increased from 135 to 463.[1] Edison Schools, Inc. alone operates 43 public charter schools that educate roughly 70,000 students nationwide. Other large providers include the Leona Group, Chancellor Beacon Academies, National Heritage Academies, and Mosaica. Many schools have less comprehensive partnerships or contracting relationships with EMOs or other firms providing education or back-office management services (Miron and Nelson, 2002).

[1]This includes 376 charter schools and 87 noncharter contract schools.

Charter schools do not operate without boundaries; their organizational form and strategies unfold within constraints set by demography, economic context, and state laws. Indeed, the fact that most individual charter schools are formally constituted as 501(c)3 nonprofit organizations is almost certainly due to the fact that most states either require or strongly insist that this be the case. Although all charter schools face state legislative and regulatory constraints on their behavior, the differing backgrounds of the founders and their core educational philosophies may lead schools to behave differently within the environments they face. Elsewhere (Henig and MacDonald, 2002; Lacireno-Paquet et al., 2002; Miron and Nelson, 2002; Lacireno-Paquet, forthcoming) researchers have found that there are important differences in the types of students served between more market-oriented schools (i.e., those founded by or with EMO partners) and more mission-oriented or independent schools (i.e., those founded by education professionals, social service agencies, etc.). Using new data from a multistate survey, we continue to explore whether charter schools with different founding and collaborative partnerships are systematically different from each other. We approach this issue from two perspectives: scale of operations and locus of decision-making control. We ask whether schools with different types of founders exhibit differences in the scale of operations, specifically in terms of current enrollment and projected enrollment. Are mission-oriented schools more insulated from the influences of outside forces and thus more likely to exert school-based decision making? Are schools run by for-profit management companies more likely to centralize decision making in an attempt to improve economic efficiency?

Four-State Survey

The analysis presented here uses data drawn from a survey we conducted of the population of charter schools in Arizona, Michigan, Pennsylvania, and the District of Columbia.[2] We selected these jurisdictions using multiple decision criteria. First, we selected states that had charter schools in place for several years in order to have a large enough sample and for firm decision-making processes to emerge in most schools. The four selected states had their charter school laws in place by 1997, and charter schools operating by 1999. Second, because we are interested in how schools with close ties to for-profit firms might differ from more community-oriented charter schools with strong nonprofit backgrounds, we limited our focus to states containing school districts in which at least one of the major for-profit

[2]This research was supported by the Spencer Foundation. We refer to the District of Columbia as a state to simplify the presentation. Although sharing many qualities with the 50 states, DC's dependent status vis-à-vis the national government makes it different in some important ways.

charter management firms had established a presence. Third, among those states that met the preceding criteria, we sought to maximize variation in state political ideology and racial diversity, as operationalized by Erikson et al. (1993) and Hero (1998), respectively.[3] This combination of criteria means that these states cannot be assumed to be representative of all states with charter school legislation. As a demographically and politically heterogeneous group of states with relatively established and organizationally diverse charter school populations, however, they are good windows into how the phenomenon may look as it matures over time.

We sent a survey to the principal or director of every charter school in each of the selected states in January 2002.[4] Basic descriptive information about the school was collected, along with responses to closed-ended questions regarding the school's founding, operations and recruitment strategies, and relations with government and support organizations. We received a total of 270 surveys for a response rate of 35 percent.[5]

We categorized responding schools based on the nature of the organizations that were among their founders. Those indicating that they were founded by a for-profit EMO, either alone (10.7 percent) or in collaboration with other organizations (6.3 percent), we labeled "market oriented." The remainder of schools, which we categorized as more "mission oriented," were formed by educators (40.3 percent),[6] social service or nonprofit

[3]Arizona and the District of Columbia, compared to Pennsylvania and Michigan, score relatively high on Hero's index of culture (which essentially reflects racial and ethnic diversity); Arizona is much more conservative than the others on the Erickson, Wright, and McIver index (Hero, 1998; Erickson, Wright, and McIver 1993).

[4]A list of school addresses was drawn from state and national databases of schools and school districts. We included only schools that were open as of the 1999–2000 school year and verified that schools opened before 1999–2000 were still in operation whenever possible.

[5]This is not as robust a response rate as we had hoped for, but it is relatively good when measured against the track record of other efforts to get information on charter schools, which are often quite small, often quite overwhelmed, and sometimes quite suspicious of outsiders. By comparison, the Center for Education Reform, a highly visible organization that takes a pro-charter school position, reports a response rate of just over 20 percent in its 2002 Annual Survey of Charter Schools (CER, 2002). Our efforts were complicated somewhat, too, by the anthrax scare that affected postal service during the fall of 2001. To gauge how representative our sample is, we compared our responses to those of the 1999–2000 Schools and Staffing Survey (SASS) conducted by the U.S. Department of Education. In our survey the responding schools had a mean enrollment of 276 students, comparable to the mean enrollment of 220 in the SASS data set for the same jurisdictions; 62 percent of the schools responding to our survey reported offering a theme, while 56 percent of the SASS charter schools reported that they offered "programs with special instructional approaches." The fact that our sample comprises somewhat larger schools is likely accounted for by the fact that our survey was conducted two years after the SASS effort; as one would expect, and as our data show, charter schools have been generally getting larger as the schools and movement mature. That said, the possibility of response biases remain, so our findings should be read somewhat cautiously.

[6]Including public school conversions, private school conversions, those founded by former public school teachers, and those who checked "other" but indicated they were formed by private school teachers or administrators.

organizations (13.4 percent),[7] community and parent groups (9.1 percent),[8] local businesses (6.7 percent),[9] or a mix thereof (13.4 percent).

Analysis and Results

In this section we present the results of our analysis of differences in the scale of operations of charter schools, as well as differences in the locus of control of decision making between schools with different types of founders. As our theoretical distinction is between two general, if not mutually exclusive, types of charter schools, we reduce our seven categories into two general types of schools.[10] Specifically, we compare those founded or co-founded by market-oriented EMOs to the broadly defined mission- or community-oriented schools. Given the focus on differences within the population of charter schools, this analysis does not make comparisons with traditional public schools.

Scale of Operations

As noted above, while much of the theory on which charter schools are based reflects a smaller-is-better set of presumptions, the philosophy to which the EMOs are more likely to adhere suggests that economies of scale can be achieved through size (Plank et al., 2000). The average school size among our respondents is 275.7 students. In Table 1 we compare EMO-founded or co-founded schools to all other types and observe large, statistically significant differences. In particular, EMO-founded or co-founded schools are larger on average than their mission-oriented counterparts with a very substantial 213.2 difference in means. Schools might reasonably plan to phase in growth gradually, in order to balance the need to attain economies of scale against the need to build capacity and maintain an orderly environment during the start-up period. Accordingly, we also explored whether there were differences between the two groups of schools in terms of expected enrollment in three years. Both types of schools anticipate growth, but in absolute terms, the size of the gap appears to be widening.

[7]Including those formed as an extension of an existing social service organization and those that checked "other" but listed a nonprofit organization, religious institution, or religious leader.

[8]Including those founded by a group of parents and those that checked "other" but indicated they were formed by a "community-based organization" or a particular community organization.

[9]We initially anticipated that schools founded by local businesses, business organizations, or local entrepreneurs would resemble those schools founded by EMOs. Our analysis shows that they more closely resemble the mission-oriented schools and, accordingly, for this analysis we grouped them with those schools.

[10]We will be empirically exploring the distinctions among the non-EMO charter schools in other work not yet published.

TABLE 1

Scale of Operations: Difference in Means*

Charter School Founder Type	Enrollment Mean (Standard Error)	Projected Enrollment Mean (Standard Error)
EMO-founded or co-founded schools	454.56 (39.17)	641.78 (19.89)
All other schools	241.41 (14.39)	356.55 (69.06)
Combined mean (or proportion)	275.74 (14.41)	402.05 (20.99)
Difference	213.15	285.23
t-statistic (*p*-value)	5.75 (0.000)	3.97 (0.0002)
Combined *N*	267	257

*Prior to calculating the *t*-tests, we conducted tests to see if the standard deviations were significantly different. For projected enrollment, we conducted a *t*-test with unequal variances, based on the results of this test.

Locus of Decision-Making Control

With the debate in the literature about the value of school-level decision making in mind, we chose to examine patterns of decision-making control in charter schools. More specifically, we were interested in whether charter schools that were founded or co-founded by management firms are less likely than others to implement school-level decision making in key areas. Bulkley (2004) found that the degree of centralization of decision making varies among different types of EMOs, with some exhibiting high levels of centralization and others much lower levels. We were interested in whether EMOs overall are more likely to centralize decision making and thus reduce autonomy at the school level. In the case of curriculum, a decentralized system might permit a principal, or even a teacher, to make important decisions about instructional topics and textbooks, while in a centralized system the partner organization would make curricular decisions that the school would then be compelled to follow. This section compares these two groups of charter schools in the extent to which their school-level decision-making power differs in seven areas: teacher recruitment, curriculum, testing and standards, student discipline, student recruitment, general administration, and facilities. In the survey we asked each school if they currently collaborated with any outside partners, including EMOs, unions, foundations, and so forth. For each school that indicated it had a partner, we then asked whether decisions about curriculum, testing, facilities, and other issues were made mostly at the school level, mostly by the partner, or in equal measures. Here we compare the responses of all schools that reported a

partnership; again disaggregating into the EMO-founded and co-founded schools compared to all other schools.[11]

As Table 2 indicates, EMO-founded or co-founded schools exhibit significantly less school-level decision making in the areas of curriculum, testing and standards, student discipline, facilities, and general administration, compared to other charter schools, as the corporate model would suggest. In particular, among schools with at least one partnership, only 33.3 percent of EMO-founded or co-founded schools make curricular decisions mainly at the school-level versus 77 percent of all other schools. This finding is particularly interesting because it reinforces the notion of multiple types of charter schools. The EMO-founded or co-founded charter schools exhibit low levels of school-site decision making in key areas, as the corporate model would suggest. The other charter schools in our survey were much more likely to report school-level decision making in these areas, much like the idea of charter schools rooted in the autonomy of education professionals at the school site would suggest.

Multivariate Analysis of Scale of Operations

Identifying differences between our two general types of schools serves as a launching pad for investigating differences in behavior produced by these organizational differences when alternative factors are held constant in multivariate statistical models. Below we develop two such models to investigate the relationship between charter school founders and scale of operations.[12] First we look at current enrollment and then at projected enrollment. Controls are included for the size of the school, whether the school is located in an urban setting, and the maturity of the school.[13] We expect that schools located in urban settings enroll more students simply due to the comparatively larger size and higher density of the market from which they recruit. By including a variable for the age of the school, we control for the reality that many schools began operating with a few elementary grades and grew by adding grades as students matriculated. Age of school might also be interpreted as an indicator of organizational maturation. New organizations

[11]Note that there is the possibility that a school that was not founded or co-founded by an EMO but that subsequently contracted with an EMO would still be in the group of non-EMO schools, and vice versa. Indeed, several EMO-founded or co-founded schools did not report any partnerships, even though we specifically asked about partnerships with EMOs. This may be because their relationship with the EMO has since ended or because, for whatever reason, they do not view the EMO as a partner.

[12]The statistical techniques used included ordinary least squares and logistic regression. We also weighted the regressions by a state population weight calculated, essentially, by dividing the number of completed surveys in a state by the total population of charter schools in the state.

[13]Size of the school is measured as the total enrollment, urban is included as a dummy variable by matching the school to its census area using the Common Core of Data, and the age of the school is measured as the difference between the date of the survey and the reported date that the first classes were offered.

TABLE 2

School-Level Decision Making Among Schools Reporting at Least One Partnership
(Number (percent) of schools with decisions made at the school level)

School Founder Type	Teacher Recruitment	Curriculum	Testing and Standards	Student Discipline	Student Recruitment	Facilities	General Admin.
Founded or co-founded school by an EMO	28 (84.8%)	12 (33.3%)	9 (25.0%)	25 (75.8%)	22 (66.7%)	10 (27.8%)	21 (65.6%)
All other schools	119 (88.1%)	107 (77.0%)	97 (69.8%)	123 (91.1%)	106 (78.5%)	85 (61.1%)	110 (81.5%)
Pearson's X^2 (p-value)	0.264 (0.607)	25.03 (0.000)	24.01 (0.000)	5.9605 (0.015)	2.0533 (0.152)	12.83 (0.000)	3.8463 (0.050)

may take some time to settle into a stable and sustainable pattern of operation; coefficients on this variable might suggest, for example, whether schools tend to gradually gain or lose decision-making autonomy as procedures become more routinized.

We regress these variables on both current and expected enrollments, adding current enrollment as an additional control variable in the latter case (Table 3). We find large and statistically significant differences between the two groups of founders, with EMO-founded or co-founded schools reporting much larger current enrollment than other charter schools. The EMO-founded or co-founded schools had, on average, 277 more students than other charter schools. Interestingly, the control for urban location of the school and the age of the school are also statistically significant. Our expectation that urban schools would be larger is contradicted by this finding and shows a significant negative relationship between urban location and current enrollment. This may be due to the high level of competition for students in urban areas resulting from the concentration of charter schools in cities such as Detroit and Philadelphia, or to the fact that urban areas include a higher concentration of charter schools that deliberately target very high-need populations and that choose to remain small and supplement their resources through philanthropic donations rather than per student reimbursements.

In terms of the enrollment schools expect to have in three years, EMO-founded or co-founded schools are still likely to be larger, but not significantly so when controlling for the current enrollment of a school. Not surprisingly, the control for current enrollment is statistically significant,

TABLE 3

Scale of Charter School Operations
(OLS regressions: weighted coefficients (robust standard errors))

Explanatory Variables	Current Enrollment (OLS)	Projected Enrollment (OLS)
Founded or co-founded by an EMO	277.09***	36.93
	(56.29)	(47.02)
Age of school	29.88***	−12.68**
	(8.33)	(5.06)
Urban location	−66.6**	40.54
	(29.31)	(25.31)
Current enrollment	—	1.32***
		(0.12)
Constant	120.41**	65.27
	(40.82)	(48.98)
F-statistic	13.49***	52.04***
R^2	0.22	0.81

*$p < 0.10$; **$p < 0.05$; ***$p < 0.01$.

suggesting that schools that are larger now also expect to be larger three years from now. The control for the age of the school is negatively related to projected growth, confirming the logic that newer schools are likely to have more room to grow, whereas older schools are likely to have already met their projections. That EMO and non-EMO schools do not differ in projected enrollment once the current enrollment is accounted for suggests that the scale differences between the two types of charter schools reflect their substantially different starting points rather than long and sustained differences in rates of enrollment growth.

Multivariate Analysis of Locus of Decision-Making Control

A simple multivariate model of control of decision is presented in Table 4. It shows that there is in fact a significant relationship between the background of founders and the current locus of decision making. Logistic regression results are presented for each of the seven areas: teacher recruitment, curriculum, testing and standards, student discipline, student recruitment, facilities, and general administration. EMO-founded or co-founded schools are significantly less likely than other charter schools to report that decisions about curriculum, testing and standards, student discipline, general administration, and facilities are made mostly at the school level, even when controlling for the age and the urban location of the school. In the case of student recruitment and teacher recruitment, the lack of a significant difference suggests that the different types of schools may approach these issues in a similar manner or that all types of schools feel these issues need to be handled at the school site.

Conclusion

As evidenced here, and in other research, charter schools are not uniform in their structural forms, nor in the scale and autonomy of their operations. Even though for-profit EMOs are currently a relatively small percentage of our sample, given their numbers they serve a disproportionately larger percentage of the total students attending charter schools.[14] One of the areas in which we consistently find differences is between those schools founded or co-founded by EMOs and other, more community- or mission-oriented charter schools.

Our findings are at least somewhat ironic when considered in light of the arguments offered by many proponents of charter schools. The first irony

[14]EMO-founded or co-founded schools make up 16.1 percent of the schools for which we have enrollment information, but they enroll 26.6 percent of the total student enrollment reported by our respondents.

TABLE 4

Multivariate Analysis of Decision Making at School Level
(Among schools reporting at least one partnership; logistic regression: odds ratios (weighted and with robust standard errors))

Explanatory Variables	Teacher Recruitment	Curriculum	Testing and Standards	Student Discipline	Student Recruitment	Facilities	General Admin.
Founded or co-founded by an EMO	1.46	0.09***	0.45***	0.27**	0.77	0.23***	0.31**
	(1.01)	(0.05)	(0.03)	(0.17)	(0.41)	(0.1)	(0.16)
Age of school	1.26	1.17	1.13	1.24	1.08	0.99	1.02
	(0.18)	(0.14)	(0.13)	(0.17)	(0.14)	(0.1)	(0.14)
Urban location	1.06	1.48	1.60	3.16*	1.37	0.95	1.08
	(0.60)	(0.70)	(0.72)	(2.12)	(0.64)	(0.4)	(0.51)
N	152	152	152	151	151	149	151
Wald X^2	2.75	24.63***	30.69***	10.23**	1.13	7.9	5.26
Pseudo-R^2	0.03	0.18	0.21	0.12	0.01	0.04	0.04

*$p<0.10$; **$p<0.05$; ***$p<0.01$.

relates to those who favor charter schools based on a communal vision. Proponents of a communal model for education pictured charter school policies as promoting small, intimate schools in which teachers, parents, and students would constitute an autonomous decision-making community. The evidence suggests, though, that there is substantial variation in the size of charter schools, with some beginning to rival traditional public schools in the number of students. Individual schools are becoming larger as they mature.

The second irony concerns the market-based theory for charter schools. In mounting their critique of conventional public school systems, market-oriented choice proponents argued that the introduction of competition would generate better performance precisely because it would lead to school-level responsibility and decision making. However, the most corporate segments of the charter school enterprise are associated not only with growing scale but, on at least some important dimensions, a locus of decision making outside the school and, frequently, outside the local community or even the state.

Significantly, EMO-linked schools, which tend to be larger by design, appear to be gradually increasing their share of charter schools and charter school students. Miron and Nelson (2002:173) report that the percentage of Michigan charter schools with EMO links increased from 16.7 percent in 1995–1996 to 73.9 percent in 2000–2001. They note that since "the EMOs tend to work with large schools, they actually account for an even larger portion of all charter school students"; more than 85 percent by their estimate in 2000–2001. Within our sample, 48.6 percent of the EMO-initiated charters had been approved within the three previous years versus 31.7 percent for all other charters; these represented 21.1 percent of the schools and 39 percent of the students in charter schools that opened during that time period. Molnar, Wilson, and Allen's (2004) analysis suggests, moreover, that within the for-profit EMO universe, the larger providers are dominating; the 13 companies that operate 10 or more schools serve more than eight times as many students as the 38 smaller EMOs on which Molnar, Wilson, and Allen gathered information.

The patterns we uncover, it is important to note, are not necessarily bad for students, teachers, and communities. The precise nature of the linkages among scale, control, and student outcomes in charter schools is still largely speculative, many EMO charter schools remain smaller than traditional public schools, and it may yet turn out that the large charter schools perform better than large conventional schools or that attenuated school-level autonomy has fewer negative consequences when mediated through corporate rather than governmental hierarchies. What our analysis does underscore, however, is the importance of disaggregating the charter school phenomenon into its distinct constituent parts in order to draw meaningful lessons from this evolving and significant experiment in alternative delivery modes.

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