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“...Michigan’s charter schools spend substantially less on instruction and more on administration than the state’s traditional public schools.”

Charter School Spending: Autonomous and Accountable?

David Arsen

A lot of momentum is presently building behind the idea that educational outcomes can be improved by delegating more power and authority from districts directly to schools. Many observers are concerned that the growth of school district administrative bureaucracy has diverted resources from instructional activities and inhibited principals and teachers’ capacity to creatively respond to children’s needs. Diverse policies—from school-based management to vouchers—are defended on the grounds that management and budgeting decisions ought to be made closer to students. Whether or not any given policy will bring about anticipated improvements in productivity, innovation, or accountability, however, depends entirely on the specifics of program design.

Charter schools offer an important case of decentralized resource allocation. Charter schools enjoy considerable autonomy to implement programs that appeal to students, parents and teachers. Indeed, they are obliged to do so. How does resource allocation change when schools make their own budgeting decisions in a context where survival is premised on the ability to attract students? Despite the heated claims of advocates and critics, we know little about resource allocation in charter schools.¹ Advocates predict that charter schools, once freed from the administrative overhead of traditional public schools, will focus their resources more intensively on classroom instruction. Critics meanwhile suggest that administrative expenditures in charter schools will actually increase due to the loss of scale economies, or the incompetence or dishonesty of charter school operators. How charter schools compare to traditional public schools in their spending on administration versus instruction is but one of many interesting dimensions of resource allocation.

This paper examines resource allocation in Michigan charter schools, officially known as public school academies. Since the passage of enabling legislation in 1994, Michigan’s charter school population has grown rapidly. I will compare expenditure profiles of charter schools and traditional public schools. Michigan’s charter schools are very heterogeneous. So I will also examine expenditure patterns among groups of charter schools disaggregated by various characteristics, including their years in operation and conversion status. Most Michigan charter schools contract with private, for-profit companies for management services. Advocates predict that contracting will redirect resources from administrative bureaucracy toward the central mission of classroom instruction (Hill, et al., 1999). An analysis of charter school resource allocation, therefore, presents an interesting test of the contracting model.

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Resource Allocation in Traditional Public Schools

Previous research on resource allocation in traditional public schools provides a helpful benchmark for examining charter school spending patterns. Studies have found remarkable consistency in the spending profiles of public schools. (See Brewer, 1996; Cooper, et al., 1994; Nakib, 1995; Picus and Fazal, 1995; and Speakman, et al., 1995.) Roughly 60% of current operating expenditures is devoted to instruction, with a range in individual districts consistently falling between 55% and 63%. Instruction’s share of school spending is much more uniform across districts than revenue per pupil, which of course varies dramatically.

If school districts spend 60% of their resources on instruction, where does the remaining 40% go? Is this the deadweight of administrative bureaucracy? Not entirely. Nationally, just about 6% of total expenditures is devoted to school-site administration and an additional 3% to central administration. Picus and Fazal (1995, p. 17) concluded on the basis of their research in New York and Florida that: “The noninstructional dollars represent not an administrative ‘blob’, as some have claimed, but spending for important functions such as maintenance and operations, student transportation, site administration, and instructional support in the form of staff to help teachers and students.” Moreover, in contrast to the conventional wisdom, available evidence suggests that the administration share of expenditures in large central city school districts is lower than in other districts in the same states (Picus, 1991; and Monk and Roellke, 1994).

Most public school expenditures, between 80% 90%, are spent at the school level. This figure is also remarkably consistent across districts, regardless of location, spending level, or demographic composition of the student population (Picus and Fazal, 1995; and Speakman, et al., 1995). Nevertheless, individual schools may have very little discretion over how those funds are spent.

In one important respect, existing evidence reinforces the position of those who advocate more autonomous school-level management. The uniformity of resource allocation patterns among public schools is consistent with the conception of budgeting as lacking discretionary flexibility.

Michigan’s Charter School Movement

Michigan’s charter schools represent an interesting setting to examine the impacts of autonomous school-level budgeting.² First, among the states with charter school legislation, Michigan’s legislation ranks among the most permissive, granting a high degree of autonomy to charter schools (e.g., Wohlstetter, et al., 1995; and Mintrom and Vergari, 1997). Second, the state has many charter schools, ranking behind only Arizona and California on this count. Third, charter schools in Michigan need not be authorized by local school districts, and the vast majority of the state’s charter schools are completely autonomous from any traditional public school district. Fourth, unlike a number of other states, Michigan provides its charter schools with full funding levels roughly equivalent in most cases to the per pupil revenue of the local district in which they are located. Fifth, Michigan’s charter school legislation permits schools to contract with for-profit management companies to provide administrative and instructional services, and private firms currently manage most of the state’s charter schools.

Michigan charter schools have independent legal status. Chartering agents appoint school boards of directors that are free to make business and educational decisions. Existing public and private schools can convert to charter status. Charter schools are not responsible for transporting their students to and from school. They are required to participate in the federal free and reduced lunch program, and to provide appropriate education for students with disabilities or special education needs.

Michigan's charter schools are exempt from the collective bargaining agreements of the surrounding district (unless the chartering agent is the local school board), and also from the state's teacher-tenure regulations. Teacher certification requirements for charter schools are identical to those of local school districts. Charter schools must contribute to the Michigan Public School Employees' Retirement System (MPERS) on behalf of their employees, but they do not have to contribute for personnel working in their building who are employed by an outside company. Charter schools are free to contract with private companies to provide any portion of their educational and support services. Chartering agents are permitted to annually charge schools they charter up to 3% of their state foundation aid in return for their oversight services.

Michigan's school finance system, adopted by voters in 1994, has important implications for charter schools. The finance reforms shifted Michigan from a district power equalization system to a foundation allowance program (Addonizio, et al. 1995). The new system also shifted primary funding responsibility from local districts to the state, and strictly limited districts' ability to raise additional general fund revenue. State funds are distributed to districts and charter schools by a formula that is essentially driven by the number of pupils enrolled. The practical consequence of the new system is that effective ownership of educational revenues has shifted from districts to individual students, because students moving from one district to another or to a charter school take their entire state grant with them. In this respect, Michigan's funding system closely approximates conditions envisioned by proponents of market-like educational service delivery systems.

Michigan's charter schools receive a per pupil foundation allowance from the state equal to the foundation grant received by the surrounding district, up to a few hundred dollars more than the state 'basic' foundation grant. Charter schools also have access to categorical state and federal funds in the same manner as local districts. Approximately 20% of charter schools received more total revenue per pupil (foundation plus categorical grants) than their surrounding district in 1996-97 (Horn and Miron, 1999).

Table 1 offers a summary profile of Michigan's charter schools. In the 1999-2000 school year, there were 173 charter schools in operation, with an enrollment of approximately 50,000 students, representing about 3% of the state's K-12 enrollment.

Table 1. Michigan's Charter School Population, 1995-2000

School Year	Number of Schools	Number of Students	Percentage of Public K-12 Students
1995-96	43	5,500	0.3
1996-97	79	12,500	0.7
1997-98	108	20,000	1.2
1998-99	138	30,000	1.9
1999-2000	173	50,000	3.0

Source: Michigan Department of Education.

Data Sources and Methodology

The empirical work presented here is based on data from the Michigan Department of Education's Form B report, which presents audited financial information submitted by all local school districts and charter schools. I examine general fund expenditures across detailed functional categories for alternative groupings of traditional and charter schools. In every instance, group means presented here are pupil weighted. In effect, the expenditures for a given function among a group of schools were summed and divided by the group's total enrollment, so large schools or districts count more than small ones in calculated means.

Resource Allocation in Charter and Traditional Public Schools

Table 2 displays spending across major functional categories in Michigan's traditional and charter schools. In 1997-98, mean current operating expenditures in Michigan's traditional school districts were \$6817, or about \$530 more than in charter schools. There were, however, significant differences between charters and districts in how this money was spent.

Charter schools spent significantly less on instruction and more on business and administration than traditional public schools. On average, public school districts spent about \$1,150 more per pupil on instruction than charter schools. Public districts also spent \$460 more on instructional support than charter schools.³ Charter schools, meanwhile, spent over \$1000 more per pupil on business and administration than public districts. Charters spent about \$200 more per pupil on operations and maintenance, while districts spent about \$200 more on student transportation. The higher expenditures by charters on operations and maintenance are expected. Since they do not have bonding capacity to finance capital expenditures, most charter schools are forced to rent their buildings. This expenditure falls under the operations and maintenance category.

Overall, spending profile differences are readily summarized. Districts spent about \$1600 more per pupil than charters on instruction and instructional support combined, and \$1000 less on business and administration. The difference between these sums roughly matches the \$500-\$600 by which total per pupil spending in districts exceeded that in charter schools, since expenditure differences on other sub-functions are relatively small and offsetting.

Table 2. Resource Allocation in Michigan Charter and Traditional Public Schools, 1997-98

	Traditional Public Schools		Charter Schools	
	Mean \$ per Pupil	% of Total	Mean \$ per Pupil	% of Total
<u>Instruction</u>	4239	.62	3081	.49
Basic Instruction	3215	.47	2874	.46
Special Ed	517	.08	68	.01
Compensatory Ed	281	.04	42	.01
Vocational Ed	94	.01	59	.01
Adult Ed & Other	130	.02	39	.01
<u>Instructional Support</u>	632	.09	172	.03
Staff Support	271	.04	103	.02
Pupil Support	361	.05	69	.01
<u>Business & Administration</u>	722	.11	1749	.28
School Admin	437	.06	622	.10
General Admin	135	.02	580	.09
Business Office	150	.02	547	.09
Operations and Maintenance	788	.12	1010	.16
Transportation	316	.05	112	.02
Other	122	.02	164	.03
Total	6817	100	6288	100

Source: Computed by author from Michigan Department of Education data.

Table 2 also displays the shares of current general fund expenditures devoted to each functional category. Spending shares in the state's traditional public schools are quite typical of school districts nationwide. Overall, Michigan's school districts devoted 62% of current expenditures to instruction. Charter schools meanwhile devoted only 49% to instruction. Business and administration accounted for 11% of expenditures in traditional public schools, but a startling 28% for charter schools.

Consider spending across sub-functions within the "Instruction" category. Most of the higher spending in districts was devoted to "Added Needs" not basic K-12 instruction. Overall, districts spent only about \$350 more per pupil on "basic instruction" than charter schools. Both groups devoted about the same share of current spending to basic instruction. Charters devoted 46%, districts 47%. Public school districts, however, spent much more on special education, compensatory education, vocational education, and adult education. These categories together represent about 15% of spending in districts, compared to only 4% in charters.

On average, Michigan charter schools spent nearly two and one-half times more per pupil on business and administration, than did traditional public schools. Charter school spending was higher in each of the three administrative sub-functions disaggregated in Table 2. The greatest disparity occurs not for school-level administration, where charters exceed districts by about 40%, but rather in the two central administration sub-functions, "general administration" and "business office". In both areas, per pupil spending by traditional public schools was only about a quarter of charter school spending.

On average, Michigan charter schools spend a good deal less on instruction and more on administration than traditional public schools, both in terms of absolute dollars per pupil and expenditure shares. Charter schools, however, are very heterogeneous. There is much more extensive variation in spending profiles among charter schools than among traditional public schools. This is to be expected, and could be taken as a desirable sign of charter school experimentation. The coefficient of variation for the instruction share among the traditional public schools was only 0.06, while the coefficient for the business and administration share was 0.20. Both of these figures represent a high degree of uniformity across school districts. The corresponding coefficients of variation for charter schools were both substantially higher, 0.23 for the instruction share and 0.93 for the business and administration share. I turn now to examine a series of factors that may affect charter school resource allocation and account for this variation.

Resource Allocation by Charter School Characteristic

Charter School Vintage

The establishment of new schools entails significant challenges and financial commitments. Spending patterns may change over time, as charter schools overcome initial start-up hurdles. In particular, charter schools' high level of administrative spending could reflect exceptional, non-recurring, start-up expenses that taper off once schools get established. This hypothesis is tested in Table 3, which displays resource allocation in 1997-98 for groups of charter schools disaggregated by years in operation. For example, in 1997-98 schools initiated by 1995-96 were in at least their third year of operation. The data provide no evidence of a vintage effect. At least within their first three years, charter school resource allocation across major functional categories is not significantly different from spending in first-year schools.

Type of Chartering Agent

A key feature of any state's charter school policy is the designation of organizations with the authority to grant charters. By design, chartering agents serve a critical role in assuring the fiscal and academic accountability of charter schools. In some states, for example California, only local school districts are authorized to issue charters. Some observers fear that this policy choice seriously compromises the desired impact of charter school legislation, since local districts may be reluctant to establish schools that create true competition for themselves. Charter school advocates generally prefer to give other organizations statewide chartering authority. Those who prefer to restrict chartering authority to local districts, on the other hand, maintain that districts unlike other organizations have the capacity and proximity to effectively carry out the required oversight duties.

Michigan gives chartering authority to the boards of its state universities, community colleges, and intermediate school districts, as well as local districts. Only state universities may charter schools anywhere in the state, while the other organizations are restricted to chartering schools within their jurisdiction. State universities have chartered nearly 90% of the state's charter schools, and a single university, Central Michigan University, has chartered nearly half of the schools.⁴ In some instances, concerns have arisen about whether universities were upholding their chartering agent oversight duties (Michigan Auditor General, 1997).

One policy-relevant question, therefore, is whether differences in the organizational capacity or incentives of different types of chartering agents translate into systematic differences in school resource allocation patterns. Table 4 offers some evidence on this question. The shares of

Table 3. Michigan Charter School Resource Allocation by School Vintage, 1997-98

	<i>Mean \$ per Pupil</i>			<i>Share of Current Expenditures</i>		
	Charter Schools Initiated			Charter Schools Initiated		
	by 1995-96	1996-97	1997-98	by 1995-96	1996-97	1997-98
Number of Schools	41	35	29	41	35	29
Total	5981	6607	6297			
Instruction	2878	3266	3081	.48	.50	.49
Instructional Support	257	110	172	.03	.02	.03
Business & Administration	1567	1724	1749	.27	.26	.28
Operations & Maintenance	1025	1195	1010	.17	.17	.16
Transportation	81	125	112	.02	.02	.02

Source: Computed by author from Michigan Department of Education data.

spending devoted to instruction and administration were not significantly different in schools chartered by local districts and universities. The main difference between these groups occurred elsewhere. Schools chartered by local districts devoted more resources to instructional support (11% versus 2% in university charters), and less for operations and maintenance (11% versus 17% in university charters). Schools chartered by intermediate school districts devoted a much larger share of their resources to instructional activities and a smaller share to administration and operations and maintenance than did schools chartered by state universities or local districts.

These results concerning chartering organizations should not be pushed too far. The population of schools chartered by local and intermediate districts are both small. Observed differences in spending patterns are also likely to reflect systematic differences in the types of programs undertaken in schools chartered by different types of chartering organizations. One interesting outcome is that schools chartered by local districts devote a higher share of their expenditures to administration than do the authorizing districts themselves.

Contracted Management Services

One of the most important and interesting charter school developments is the rapid expansion of contracting with private, for-profit education management organizations (EMOs). Nowhere has this development progressed further than in Michigan. In 1995-96, only a handful of Michigan charter schools contracted for management services. In 1996-97, about a quarter of the state's charter schools were managed by EMOs. The EMO market share rose to roughly half of the state's charter schools in 1997-98, and to about 70% by 1998-99. In the 1999-2000 school year, over three-quarters of the state's charter schools contracted with EMOs for management services

The EMOs currently in operation in Michigan represent a very heterogeneous group of firms. They vary in terms of their size, their scope and their management sophistication. Key personnel in these firms come to the field with varying levels of experience in education. EMOs can adopt a variety of organizational forms and market strategies. Some operate a single school. In Michigan, some single-school management companies were set up by the charter school organizers themselves to manage their own schools. The nominally independent companies then contract with their own schools. Increasingly, however, EMOs are managing multiple schools in several states. These so-called "chain" operations sometimes possess significant financial resources and can offer a total package of services (curriculum, assessment, and administration), rather than just

bookkeeping or the provision of school lunches. Some EMOs attempt to implement a uniform, whole-school design in each of their schools. Other EMOs offer a menu and price list for a range of specific services. In principle, EMOs could be non-profit organizations. In Michigan, however, for-profit EMOs are overwhelmingly the norm.

A few years ago, charter schools generally turned to EMOs once they were already in operation. Now charter school organizers typically partner with a private company from the initial planning stage before securing a charter. Indeed, the initiative for establishing new charter schools now often comes from EMOs, which then seek personnel to administer the school.

Chain management companies offer charter schools a number of potential benefits, including assistance in securing start-up funds, complying with state reporting requirements, and implementing an established curricular design. Horn and Miron (1999) surveyed many charter school principals to discover their schools' motivations for contracting with outside firms. They report that the most common reason was to enable schools to opt out of the state school employee retirement system. Public schools contribute about 15% of payroll to the MPSERS. If, however, the same school personnel are employees of an EMO, the firm may contribute a much lower percentage to a 401K plan.

How does contracting with an EMO affect charter school resource allocation? EMOs emphasize their ability to bring efficiency to administrative operations as one of their primary advantages. In principle, EMOs can deliver scale economies in the provision of administrative services that would be extremely costly on a per pupil basis for individual charter schools. This implies lower administrative spending in charter schools with EMO contracts than those without. An alternative hypothesis, however, is that administrative spending will increase as a result of the management fee paid to the EMO. In Michigan, the management fee that chain-EMOs charge charter schools is in the neighborhood of 10% of their state foundation grant. In order to cover this added administrative expense, the EMO must find a way to reduce costs elsewhere. There are three possibilities: (1) scale economies, (2) reduce teacher or support staff compensation, or (3) reduce or eliminate the provision of certain services.

Table 5 offers some evidence on this question. Self-managed charter schools spent somewhat more on instruction than EMO schools. Most of this additional spending, however, was devoted to "Added Needs" rather than basic K-12 instruction. On average, EMO-managed schools spent only \$116 per pupil on added needs instruction (special, vocational, and compensatory education). By comparison, the average added needs

Table 4. Michigan Charter School Resource Allocation by Chartering Organization, 1997-98

	<i>Mean \$ per Pupil</i>			<i>Share of Current Expenditures</i>		
	Schools Chartered by Universities	Local Districts	ISDs	Schools Chartered by Universities	Local Districts	ISDs
Number of Schools	89	6	8	89	6	8
Total	6131	6454	5576			
Instruction	3060	3106	3403	.50	.48	.61
Instructional Support	142	700	365	.02	.11	.06
Business & Administration	1765	1854	1248	.29	.29	.22
Operations & Maintenance	1050	739	456	.17	.11	.08
Transportation	114	54	103	.02	.00	.02

Source: Computed by author from Michigan Department of Education data.

Table 5. Michigan Charter School Resource Allocation By Management Status, 1997-98

	<i>Mean \$ per Pupil</i>		<i>Share of Current Expenditures</i>	
	Self-Managed Schools	Mgmt. Services Contracted	Self-Schools	Mgmt. Services Contracted
Number of Schools	53	52	53	52
Total	6536	5891		
Instruction	3344	2932	.51	.50
Basic				
Instruction	2976	2815	.45	.48
Added Needs	368	116	.06	.02
Instructional Support	271	116	.04	.02
Business & Administration	1692	1782	.26	.30
Operations & Maintenance	1137	938	.17	.16
Transportation	92	123	.01	.02

Source: Computed by author from Michigan Department of Education data.

spending among all traditional public school districts was \$943. Self-managed charter schools also spent significantly more on instructional support than EMO-managed schools. The main area in which EMO-managed school spending surpassed self-managed schools was business and administration.

Management companies are becoming a major feature of the charter school landscape in Michigan. The dynamics of competition in the EMO industry will have important consequences for charter schools. The industry is growing rapidly and market structure is changing. The density of EMO activity in some areas in Michigan is now forcing head-to-head competition among firms. Resource allocation patterns could change significantly in the future as this industry matures. Thus far, however, whatever scale economies EMOs can deliver, they have not been sufficient to reduce per pupil administrative expenditures in charter schools. EMO-managed charter schools spend more on administration than self-managed charters. EMOs appear to cover these administrative expenses by curtailing added needs instruction and instructional support.

Concluding Observations

In Michigan, where charter schools operate with a high degree of autonomy in a relatively 'permissive' policy setting, charter schools allocate their resources quite differently from traditional public schools. Michigan's charter schools spend substantially less on instruction and more on administration than the state's traditional public schools. Further research is needed to fully account for these spending differences, and also to ascertain whether observed differences in resource allocation are related in any way to educational outcomes. Resource allocation differences, however, do not appear to be related to exceptional start-up costs of charter schools, since the patterns persist in subsequent years after schools become established. Nor do they appear to be attributable to the cost of leasing buildings, since this expense falls under operations and maintenance, not administration. Finally, although EMO-management is associated with higher administrative spending, this can only account for a fraction of the difference between traditional public schools and

charters, because self-managed charters spend far more on administration than traditional districts.

Endnotes

1. One exception is Prince (1999). Prince's paper and an earlier version of this paper were independently prepared for the 1999 American Education Finance Association meeting. The findings of the two papers are complementary. The present paper updates the original empirical work to include expenditure data from the 1997-98 school year.
2. A fuller description of Michigan's charter schools and their impacts on traditional public schools can be found in Arsen, Plank, and Sykes (1999).
3. Form B follows the convention of reporting expenditures on "school administration" (e.g., building principals and clerical staff) under the "Instructional Support" function. Given my interest here in administrative expenditures, I have pulled out "School Administration" expenditures from "Instructional Support" and reported them along with other administrative expenditures under the "Business and Administration" function. The remaining components of "Instructional Support" are "Staff Support" (e.g., library, audio-visual, computer labs and instructional staff supervision) and "Pupil Support" (e.g., guidance, health, social work).
4. In Michigan, the trustees of the three major research universities—Michigan State University, the University of Michigan, and Wayne State University—are selected in statewide general elections. The trustees of the state's 15 other public universities are appointed by the governor. The governor of Michigan has been a strong advocate of charter schools. Thus far only universities at which the governor appoints trustees have chartered schools.

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