
LEVERAGING LOCAL INNOVATION

THE CASE OF MICHIGAN'S CHARTER SCHOOLS

Michael Mintrom
Michigan State University

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Michael Mintrom
Associate Professor
Department of Political Science
Michigan State University
East Lansing, MI 48824-1032

e-mail: mintrom@msu.edu
phone: (517) 355-7682
fax: (517) 432-1091

About the Author

Dr. Michael Mintrom is an associate professor of political science at Michigan State University where he teaches courses in public policy analysis and state government. His research considers the development and diffusion of policy innovations and the implications of policy design for citizen engagement and democratic practice. He has grounded this research within studies of the rise of school choice, charter schools, and the voucher movement. He is a co-author of *Public Entrepreneurs: Agents for Change in American Government* (Princeton University Press, 1995) and the author of *Policy Entrepreneurs and School Choice* (Georgetown University Press, 2000).

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Report Summary

Like other recent school choice initiatives, charter schools serve to break the relationship between students' residential location and the schools they can attend. According to proponents, giving parents and students choice is expected to spur competition among schools, leading to across-the-board improvements in the quality of education. But quality changes will occur only if schools alter their practices. Thus, for the charter school initiative to yield positive social returns, the schools themselves must experiment with aspects of pedagogy and school management to develop educational innovations. Further, effective means of communication across all schools -- charter and traditional -- must exist so that such innovations can be introduced to others, who can then assess their merits and relevance to their own situation.

This report presents findings from a study conducted in 1999 in which the principals of over 100 (i.e., 73%) of the 138 charter schools then operating in Michigan were asked a series of questions concerning various school practices, how they spend their time, who they interact with, and perceived barriers to change in their schools. Michigan's charter schools are located primarily within urban school districts. For purposes of comparison, a group of principals from over 100 traditional public schools matched to the charter schools by vicinity and grade level were then asked the same questions. To further compare what is happening in Michigan's charter schools with practices in traditional schools, the same questions were then posed to a smaller group of 66 principals from public schools located in suburban districts contiguous with the urban districts.

The results of this research show that Michigan's charter schools are different from traditional public schools, both in how they are organized and in their practices. But these differences are often minor, even in the eyes of the charter school principals themselves. More striking is the degree of similarity that we find across all schools, be they charter or traditional. In a second phase of the study, all the principals who participated in the original study were sent mail surveys. This time the principals were asked to judge the innovativeness of over 60 different practices that had originally been offered by principals in the first survey as examples of how their schools were distinctive with respect to administration and management, the

curriculum, instructional techniques, the use of technology, and efforts to boost parental involvement. The principals were not told the schools or the types of school (e.g., charter or traditional) that had originally reported each “distinctive” practice. This second phase of the study confirmed that, while some charter schools definitely are doing some innovative things, overall Michigan’s charter schools are no more remarkable than many traditional public schools in their practices. Further, even when some schools are experimenting in fascinating ways, information about such initiatives is not spreading.

For the most part, this report is affirming of Michigan’s charter school movement. However, applause is reserved primarily for the personnel in those schools who are doing innovative things, often under difficult circumstances. Also to be applauded are some of the representatives of authorizing agencies and management companies who have tried hard to facilitate exchange of best practices among charter schools. But criticism is also in order. First, advocates of charter schools have often been unnecessarily harsh in their disparagement of traditional public schools. In so doing, they have failed to recognize that traditional public schools can and do serve as rich sites for the development of innovative practices. Second, in pitting charter schools against traditional public schools, advocates have contributed to a climate of mutual suspicion between personnel in these schools. Such a climate erodes opportunities for schools to learn from one another. Third, no effort has been made to establish centralized mechanisms that facilitate the systematic collection and dissemination of information across schools concerning local innovations and the conditions under which they are likely to be successfully replicated. In Michigan, traditional public schools are not learning from charter schools and opportunities for broader discussion of what works with school management and pedagogy are limited even within the charter school community. Thus, right now some charter schools appear as willfully isolated backwaters of educational practice, organizations that serve neither the local nor the broader public good. More significantly, until efforts are made to seriously engage questions of information dissemination, credence cannot be given to the claim that charter schools hold the potential to transform the whole system of public schooling.

Policy Recommendations

Several steps could be taken to leverage local innovation in Michigan's charter schools, making them truly valuable and exciting additions to the landscape of public schooling in the state.

- Members of the charter school community should be given stronger incentives to devise, test, and document, innovative practices. Policymakers should think in system terms, looking beyond individual schools, to consider how a range of participants could help leverage local innovation in ways that promote better educational outcomes for all.
- State funds should be allocated to establish a central administrative unit capable of on-going monitoring of charter school practices, facilitation of learning across school sites, and provision of advice to local decision makers such as school boards and principals.
- Where possible, effort should be made to introduce these new functions in ways that build upon positive current practices and that avoid disruptions or the imposition of additional burdens on the school personnel concerned.
- Effort should be made to increase interactions and develop a sense of cooperation across the *whole* educational community in Michigan. Like members of the charter school community, members of the traditional public school community should be encouraged, through incentives, to devise, test, and document innovative practices.

LEVERAGING LOCAL INNOVATION

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Introduction

Among contemporary strategies to raise the performance of public schooling in the United States, the creation of charter schools has been accorded a great deal of attention and enthusiasm. Under pressure to meet the needs of their “customers” -- parents and students -- charter schools are expected to make good use of their “freedom from bureaucracy” and to experiment with aspects of school pedagogy and management, seeking to continuously improve the educational opportunities they provide. The focus of this report is educational innovation in Michigan’s charter schools. When a charter school law was adopted in Michigan in 1993, the expectation was that these new entities -- officially referred to as *Public School Academies* -- would contribute to the betterment of state-wide public education by inspiring local innovation.¹ Since then, the charter school community in Michigan has grown to include 173 schools, enrolling 50,000 students. Of the many states with charter school laws now in place, only Arizona and California have more charter schools in operation than Michigan, making this a key state in terms of the national charter school movement. Is innovation occurring in Michigan’s charter schools?

In 1999, several reports appeared that each provide information and analysis concerning Michigan’s charter schools and the effects they are having on the broader public school system. But those studies paid limited attention to the issue of innovation.² For the most part, evaluations made to date have concluded that charter schools are not especially innovative, although these conclusions have been based primarily upon anecdotal evidence. The question

of just how innovative charter schools are in terms of school management and pedagogy, crucial though it is, has largely gone unanswered.

This study shows that the most innovative policies and practices currently occurring in Michigan's public schools are indeed to be found in the state's charter schools. This finding holds true no matter whether the focus is school administration and management, the curriculum, instructional techniques, use of technology, or promoting parental involvement. That is the good news. The bad news is that, while some charter schools appear to be doing new and exciting things, many are not. In fact, Michigan's charter schools are typically acting a lot like traditional public schools. Even in the cases where significant innovation is occurring, the more innovative practices usually constitute a limited portion of the standard operating procedures of charter schools, many of which are mundane and identical to the standard operating procedures to be found in schools everywhere. Thus, those who have claimed that there is nothing much new going on in charter schools are largely correct. For those who want to find innovative practices in Michigan's public schools, there is little to get excited about right now. But where innovation is occurring, it is occurring primarily in charter schools.

Of course, many people have their particular opinions on whether or not any given school practices are innovative. As a result, any claims about what constitutes innovative practice are bound to be met with skepticism. But given a sufficiently careful research design, it is possible to work with a large number of subjective judgments in a manner that produces generalizable claims about the relative innovativeness of various practices. In this study, judgments of school innovativeness were left to the people who should have the best knowledge of school practices, namely, school principals themselves. To avoid bias in the study results, school principals from Michigan's charter schools and from a matched set of traditional public schools were invited to participate in the two-step survey-based study. The findings reported here thus exhibit a high degree of validity. As such, they provide important knowledge about what is currently happening in Michigan's charter schools compared with the state's traditional public schools.

This report is intended to highlight the importance of innovation at the school site and to suggest ways that state policymakers could adjust current policy settings to better promote the

development and diffusion of local educational innovation. Occasionally, observers of educational policy and practice in the United States argue that constant efforts to innovate only make things worse in the public schools. In that telling, the big need right now is not for change but for stability in school policies and practices.³ However, a broad range of social, economic, and educational indicators clearly underscore that we are far from attaining any sort of educational utopia just yet. Until we do, it is a safe bet that calls will continue to be made for experimentation with educational policy and practice. Potentially, charter schools offer excellent sites for educators to try out new ways of doing things and thus strike on innovations that might be of broad social value.

Policymakers need to seriously consider ways of prompting charter schools to become genuine sites for innovation in educational policy and practice. With the limited amount of innovation currently occurring in charter schools, critics are right to ask what, if anything, these schools are contributing to the broader system of public education. Without some hard thinking and new action on the part of policymakers, it is quite possible that in the coming years Michigan's charter schools will lose their novelty status and grow increasingly irrelevant both to the broader public school community and to discussions of future directions for education policy.

With a reasonable population of charter schools in operation, now is the time to think seriously about how to leverage local innovation. This serious thinking need not and should not consider charter schools to the exclusion of all other public schools. But since the stated purpose of charter schools is to stimulate educational change through competition and innovation, when thinking about innovation development and diffusion, focusing on charter schools is a good place to start.

The Charter Schools Movement

The idea of creating charter schools emerged within the United States during the late 1980s.⁴ By that time, many state and local public officials had shown interest in giving families some choice over the public schools that their children could attend.⁵ In particular, magnet schools and alternative schools had been established in many school districts, and -- through open-enrollment laws -- several states had begun to allow students to attend public schools beyond their local districts. Each of these efforts contribute to breaking down the tradition whereby children are required to attend a given public school based on residential location. But the charter schools idea takes school choice to a new level, freeing up the supply of public schooling. Charter schools are envisaged as entities operating within local school districts but un beholden to the elected school boards or their agents, district officials. To allow the establishment of charter schools, state legislatures across the United States have passed laws that, among other things have frequently withdrawn “the exclusive franchise” in public education from school districts.⁶ Charter schools operate using public funding, but they are not subject to the same forms of oversight and accountability under which traditional public schools are governed.

As originally conceived, charter schools are legally and fiscally autonomous organizations operating within the public school system under charters, or contracts. The charters are negotiated between organizers and authorizing agencies (sometimes referred to as sponsors). The organizers may be teachers, parents, or others from the public or private sectors. The authorizing agencies may be state school boards, local school boards, or other public authorities, such as universities. The organizers manage the schools and the authorizing agencies monitor compliance with the charter. The charters contain provisions regarding issues such as curriculum, performance measures, and management and financial plans.

In 1991, Minnesota adopted the first charter school law in the United States. By the end of 1999, 36 more states and Washington, DC had adopted laws authorizing a range of variations on the charter school idea. Some of these laws are quite permissive, allowing many charter schools to be established, designating multiple government entities as potential

authorizing agencies, providing reasonable funding to charter schools, and restricting the regulations with which charter schools must comply.⁷ Currently, there are approximately 1,700 charter schools in operation across the United States. Combined enrollments in these schools exceed 350,000.

Charter schools have been established primarily because they are seen as a means of introducing greater local control and a degree of competition into the delivery of public education. Channeling money directly to the schools (rather than through district offices) is seen as a way to give school personnel full responsibility for the choices they make with respect to the allocation of scarce resources. With money going directly to the school site with few strings attached, the expectation has been that charter school leaders will make decisions that are most appropriate, given their strategic goals and the local conditions they face.

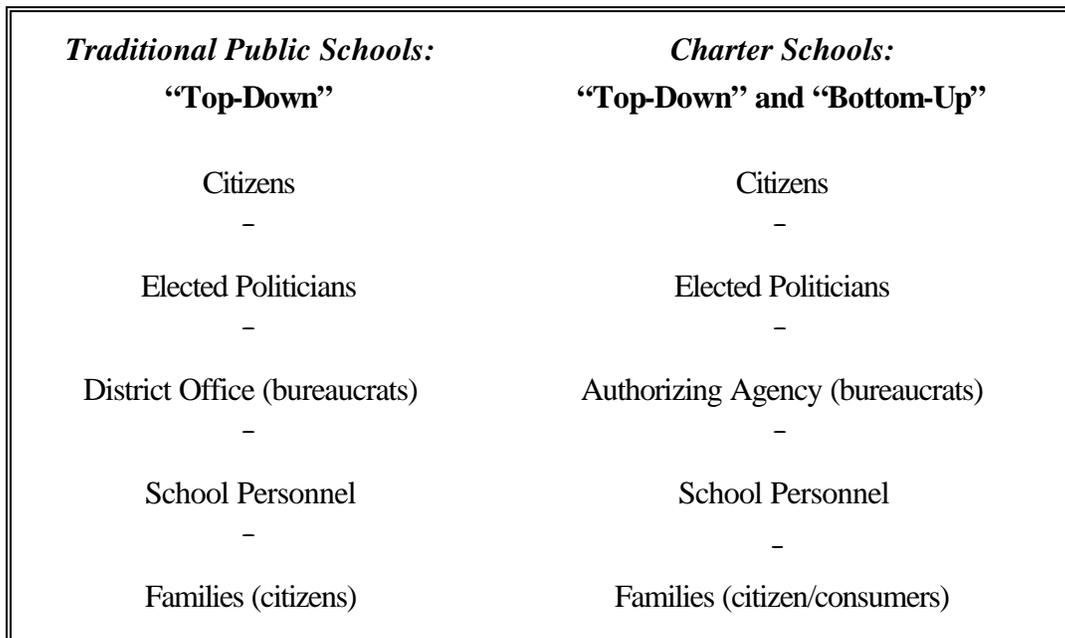
The creation of new, publicly-funded schools has been anticipated to broaden the range of schools from among which families can choose. To attract students, charter schools must offer educational opportunities that families find appealing. The expectation, then, has been that charter schools will be more responsive to the aspirations and needs of parents and students. Schools that are not responsive in this way will be unable to build and maintain a viable student population. Since funding is tied to enrollments, this means that charter schools will be unable to remain open unless they offer appealing educational experiences. Of course, because the entry of charter schools into local school districts gives families choices among public schools, the presence of charter schools is anticipated to have salutary effects upon the traditional public school system. Thus, veteran charter-school proponent Ted Kolderie has observed: “The purpose of ‘charter schools,’ of letting somebody else offer public education, is not just to create schools. For those who enact the laws it is to create dynamics that will cause the mainline district system to change and to improve” (1997: 2-3).

A potentially fruitful way of distinguishing charter schools from traditional public schools involves thinking in terms of accountability. Our various interactions in society are all governed by formal and informal understandings of mutual obligation.⁸ In the case of public schooling, accountability relationships have typically been organized in a “top-down” fashion. As such, while citizens have held ultimate formal power in the system, parents and children have had little

power to influence the school policies that affect them on a day-to-day basis. Families dissatisfied with the education being provided to their children have opportunities to “voice” within this system. Thus, they might express their concerns to particular teachers and, assuming they remain dissatisfied, they might work their way up the chain of command, expressing their concerns to school principals, to district officials or, eventually, to elected politicians, such as school board members. At every step, the families encounter actors with increasingly greater power to make and enforce change although, with every move up the chain, access to each of these actors also grows increasingly difficult. If all these efforts are made and no change occurs, under this system of accountability parents have no further recourse. They can escape the situation only at considerable expense; either by moving to reside in a new school district or by enrolling their children in private schools.

Charter schools do not eliminate “top-down” accountability. Crucially, however, they introduce an element of “bottom-up” accountability into the school system. In particular, the combination of site-based management and school choice embodied in the charter school idea ensures that families can begin to act like consumers in the marketplace and hold school personnel directly accountable for the education of their children. When charter schools are present in a school district, dissatisfied families can still express their concerns to school personnel (and, if they desire, to others further up the accountability chain). But when they believe that their concerns have not received a fair hearing, parents now have a relatively low-cost exit option. That is, they can move their children to other nearby schools. Figure 1 illustrates the difference between accountability relationships as exemplified by the traditional public school system on the one hand, and the establishment of charter schools, on the other.

Figure 1: Accountability Relationships



Charter Schools in Michigan

Following the lead of Minnesota, California, and Massachusetts, Michigan adopted a charter school law in 1993. In contrast to the previously-adopted charter school laws in other states, the Michigan law was quite permissive. In particular, the law made provision for a range of public organizations, including state universities, community colleges, intermediate school districts, and local school districts to serve as authorizers of charter schools. Michigan’s first eight charter schools opened their doors in the 1994/95 school year. However, none remained in operation under their original charters because the constitutionality of the charter law was challenged and state funding to them was blocked by a court injunction. But in the years since then, Michigan’s charter school movement has grown by leaps and bounds, as the figures in Table 1 clearly demonstrate.

Most public policy initiatives typically represent incremental additions to present policy settings, and for good reason.⁹ While the creation of charter schools could be viewed as just another incremental addition to Michigan's public school system, I believe we should view things differently. As a result of deliberate design decisions and political antagonisms, in Michigan we find the universe of charter schools superimposed upon the universe of Michigan's traditional public school system. While proximate, these universes operate in near-complete separation. This situation has some important implications for the system-level effects of Michigan's charter schools, and I will discuss these at some length later in this report.

Michigan's charter schools are relatively small. In the 1998/99 school year, the average enrollment was 230 students while traditional schools tend to have enrollments averaging above 500. Charter schools can be found in rural, urban, and suburban locations in Michigan. However, the majority of them are located in urban school districts, with over half to be found within the state's two largest metropolitan areas: Detroit and Grand Rapids. In 1998/99, the overall racial composition of all Michigan's public schools exhibited the following pattern: 75.7% white; 18.5% African-American; 3.0% Hispanic; 1.0% Native American; and 1.7% Asian or Pacific Island. Reflecting the demographics of the state's urban areas, the overall racial composition of charter schools tended to have different demographics: 49.4% white; 43.4% African-American; 4.0% Hispanic; 1.9% Native American; 1.3% Asian and Pacific Island.¹⁰

For the most part, Michigan's charter schools are authorized by state universities. Of these universities, Central Michigan University and Grand Valley State University have been the most active sponsors; as of Fall 1999, they served as the authorizers of 86 (49.7%) of the state's 173 charter schools. Six other state universities also serve as authorizers, together with seven intermediate school districts, five public school districts, and one community college. Currently, the legislatively-imposed limit of 150 on the number of charter schools to be authorized by state universities has been met, which means that few new charter schools are likely to be established in Michigan in the foreseeable future.

Michigan's charter schools operate on funds provided by the state government and disbursed through their authorizing agencies. The amount of funding per student is equal to

either the level of per student state aid provided to traditional schools in the relevant public school district, or \$5,962, whichever is less. Since this is a relatively low amount of money for schools to operate on, many charter schools have attempted to keep their personnel costs low by offering teachers lower salaries, and by offering benefit packages containing more limited contributions to retirement plans than state employee plans. Teachers in charter schools are typically non-unionized. They are also typically much less experienced than teachers in traditional public schools. In another effort to contain costs, Michigan's charter schools have tended to offer classes at the primary grades, avoiding more expensive-to-educate high school students.

Perhaps one of the most distinctive features of Michigan's charter school movement is the extent to which the schools rely upon the provision of services by private, for-profit management companies. Mostly, this reliance has emerged as a consequence of the state government's choice to neither provide start-up money for charter schools nor provide any support services equivalent to those provided by local school district offices. Many management companies assist schools seeking loans to finance building renovation, purchase of equipment, and so on. In addition, management companies assist schools with developing their original charters, recruiting students, recruiting staff, educational planning, and the organization of contractual services such as building maintenance and transportation.¹¹

Table 1: The Growth of Michigan's Charter School Community

	1995/96	1996/97	1997/98	1998/99	1999/2000
Charter Schools in Operation	41	78	108	138	173
Students in Charter Schools	4,815	12,698	20,710	34,319	50,000
Active Authorizing Agencies	11	16	19	20	21
Schools Using Management Companies	7	19	54	82	117
Management Companies	4	10	18	23	31

Sources: Michigan Department of Education (1996,1997,1998), Michigan Association of Charter School Academies (1999). Compiled by author.

Innovation and Why it Matters

For some observers, the mere existence of charter schools might be considered cause for celebration. After all, these publicly-funded schools serve to break the monopoly that school districts have on the establishment and control of public schools. Charter schools empower parents and students, allowing them to exercise choice among schools where previously such choice could be achieved only at considerable cost.

If two critically important conditions can be met, then creating and expanding choices among public schools for families is a policy move worthy of applause. The first condition is that families must have access to appropriate information about the choices they face and the trade-offs associated with selecting one alternative over others. If this condition can be met, then allowing families to decide what publicly-authorized and publicly-funded schools their children will attend holds the potential for local knowledge to be used to good effect. To the extent that families are able to choose schools offering educational opportunities closely matching their educational preferences, then public resources can be more optimally allocated compared to when the matching of students to schools is determined by district attendance rules. While the information condition is one that must be addressed with the utmost seriousness, my concern here is with the schools themselves, rather than the ways that parents and students choose among them.

The second condition that must be met if introducing charter schools is to improve the fit between families' educational preferences and educational opportunities concerns school policies and practices. To provide families with meaningful educational choices, the schools they can choose among should be readily distinguishable from each other. Suppose this were *not* the case. If charter schools were to not adopt educational policies and practices serving to distinguish them from the schools around them, then their existence would represent little more than the introduction of school choice as choice for its own sake. This could lead to dissatisfied families churning their children through various schools, all of which would offer identically unsatisfying educational opportunities. The potential damage of this outcome would be significant. After all, to the extent that parents and students put their energies into moving from

school to school, they forego opportunities to put effort into contributing to what is positive in any one place. If school populations are subject to rapid turnover as families shop around for the illusive school that is “just right” for them, inevitably it becomes all the harder for committed school leaders to develop strong, stable organizational cultures supportive of educational excellence.

Given these observations, it seems reasonable to conclude that if charter schools are to make positive contributions to public education then their policies and practices must be readily distinguishable, in at least some respects, from those of the public schools around them. This means that charter schools should be engaging in various efforts to experiment with school organization and pedagogy, attempting as they do so to identify educational strategies that work best for their particular student populations. The whole purpose of freeing charter schools to make their own site-based managerial decisions is predicated on this expectation that, left to their own devices and under competitive pressure to attract students, they will engage in various forms of experimentation.¹² Advocates of charter schools and other forms of school choice argue that competition across schools will have a catalytic effect. Faced with competition for students, so the argument goes, all schools will attempt to raise the quality of the educational experiences that students receive. The schools will do this by engaging in experimentation with ideas of their own or through trying out educational innovations developed elsewhere. Since claims of this sort are part of the stock-in-trade of school choice advocates and others who decry the arrangements under which traditional public schools are governed, they deserve careful scrutiny.

The Innovation Process

The actions we take as individuals on a day-to-day basis invariably represent some combination of routines (either self-imposed or imposed from outside) and novel initiatives. The same can be said for organizations, ranging from families through voluntary groups, schools, factories, corporations, and government agencies. For both individuals and collectivities, a well-organized life is a routinized life, where predictable tasks are addressed in pre-determined ways.

Novel initiatives, which we might define as efforts to experiment with or try out new ideas, are conducted when we develop new concerns or when we are confronted by unfamiliar problems that do not lend themselves to decomposition into sets of previously-adopted, predictable tasks.

Scholars interested in how learning occurs in organizations have sometimes observed that novel problems are typically addressed through the application of standard operating procedures until the point where the ineffectiveness of these procedures becomes a serious liability.¹³ At that point, effort is expended in searching for new solutions. However, those searches will be limited in scope, essentially involving efforts to reflect upon the type of solutions that might have been applied in the past to address unfamiliar problems. The extensiveness of the search for new solutions will be influenced by factors such as: the motivation of the individuals involved, the existence of barriers to finding and applying new solutions, and the resources available for engaging in problem-directed search.¹⁴ Once a novel initiative is struck upon that appears to satisfactorily address an unfamiliar problem, it may be adopted as a standard operating procedure. Whether or not that occurs will depend upon the frequency with which the once-novel problem manifests itself in future.

Perhaps the most central claim made by advocates of charter schools is that the need to attract and keep students in a market-like institutional context will keenly motivate school leaders to be more responsive to the particular needs of their student body. In addition, site-based management is expected to remove barriers to finding and applying new solutions to educational problems. In combination, we should expect these characteristics of the charter school operating environment to lead to the development of at least some standard operating procedures that deviate in significant respects from those of traditional schools. Thus, we might say that the incentives faced by charter school leaders should prompt them to establish schools that are innovative and, hence, distinctive when compared with other nearby schools. When using the term “innovative” here, I mean being open to working with ideas and practices that are new within the context of the school.¹⁵

The term “innovative” typically has positive connotations, which can lead us to accept the dangerous belief that anything novel is good and thus should be adopted (i.e. change for change’s sake). Ultimately, the value of any given “innovation” lies in the eyes of the

beholder.¹⁶ Recognizing the positive connotations associated with the adoption of new things and the subjective valuations that we place upon them, we can begin to explain why many ideas for innovation have swept across school systems in a faddish manner, often to be abandoned or seriously altered (proponents would say “watered down”) at a later time. In a system where being “new,” “novel,” or “innovative” is valued and politicians and school district officials face incentives to appear on the cutting edge, it is easy for school leaders to end up “spinning wheels” on aspects of school management and pedagogy whose merits remain unclear.¹⁷

Since charter schools face pressure to maintain a viable student body, school leaders must of necessity think carefully about the relationship between ideas for innovation and the particular local problems and concerns they seek to address within their schools. While we might say that this is true for the leaders of all schools, the leaders of charter schools are not beholden to “top-down” pressures to innovate as leaders of traditional schools.¹⁸ Rather, in charter schools, the “bottom-up” component of the accountability structure holds the potential to force school leaders to be seekers of innovative solutions to local problems, and to be both creative and skeptical in how they work with ideas emanating from elsewhere. In a sense, charter school leaders can be seen as having the freedom to be inventive, to -- if they wish -- continually engage in “a process of disciplined attack upon one difficulty after another.”¹⁹

In the process of innovation development and adoption, information management plays a central role. This point is underscored by evidence from many aspects of human endeavor. Placing information issues at center stage, we see that the charter schools initiative is one that creates high-powered incentives for school leaders to pay close attention to information about their local operating environment. Thus, compared with the leaders of traditional schools, we should expect charter school leaders to be more attentive to information and feedback provided to them by teachers, students, and parents.²⁰ But interpretation and understanding of local issues and problems must be theory-driven. Like scientists seeking to understand particular aspects of the world, school leaders need a vision that is informed by much more than immediate, local challenges.²¹

The innovation process should be seen as one whereby local actors are continually reflecting upon their own unique circumstances in a manner that is closely informed by an

understanding of how others in similar circumstances have worked out what is to be done.²² Thus, while for legal and financial purposes charter schools exist as stand-alone organizational entities, for the purposes of innovation development and adoption, it is vital that formal and informal ties are established between personnel in those schools and members of the broader educational community. These ties can then serve as conduits for sharing information among people who have come to view similar problems from a variety of different perspectives. In a real sense, the information-sharing and information-generating interactions that occur within networks of interested, engaged actors represent the engines of innovative thinking.²³ Schools, while obviously the sites where the innovations are put into place, should not be expected to work like isolated backyard laboratories. Incentives problems and related problems of information management go a long way to explaining why, under present conditions in the broader system of public schooling in this country, interested parties have often been unable to leverage those few well-documented instances of innovative school policies and practices into system-wide school improvement.²⁴

Key Questions for Policymakers

The foregoing considerations regarding the policies and practices of charter schools and the nature of the innovation process serve to raise a number of questions for which satisfactory answers can only be provided by careful empirical investigation. The research to be reported here was undertaken with five key questions in mind. Answers to these questions should be of interest to a range of participants within and observers of public education. However, they should be of utmost interest to those policymakers in Michigan who introduced the charter school initiative in the hope of making positive differences for the whole public education system. The questions motivating this study are:

1. What pedagogical and managerial innovations have been introduced so far in Michigan's charter schools?

2. How do differences in school decisionmaking processes and information acquisition appear to support or stifle innovation in Michigan's charter schools?
3. What policy initiatives could support experimentation by design and greater innovation in Michigan's charter schools?
4. How is information about innovation in the state's charter schools currently transmitted across Michigan's education community?
5. What policy initiatives could encourage ongoing scrutiny, deliberation, and diffusion of the innovations introduced in Michigan's charter schools?

The Research Design

The research questions posed here suggest that the most appropriate units of analysis are the charter schools themselves. Thus, the research design involved building records of information pertaining to each charter school in Michigan. Through its on-going monitoring of the state's charter schools, the Michigan Department of Education routinely collects basic information about these schools, their grade levels, their size, who they have been authorized by, the management companies they use, and so on. In addition, through its broader efforts to monitor various aspects of the personnel, student populations, and financial arrangements of the state's public schools, and to provide citizens with organizational report cards on every school and school district in the state, the Michigan Department of Education has developed detailed and highly accessible databases. This centrally-collected information allows researchers to gain insights into a variety of issues to do with the establishment of charter schools in Michigan.²⁵ However, for present purposes, it was necessary to engage in independent research to acquire more specific information about various school policies and practices. I chose to acquire this information by conducting surveys of school principals.

Perceptions of school distinctiveness and innovativeness are, by definition, contextually mediated. That is to say, when we claim that something is distinctive or innovative, the immediate question that springs to mind is: *compared to what?* Charter schools are expected to be distinctive from traditional public schools, at least to some extent. The principals of the

schools were asked a range of questions designed to explore this matter. But to fully understand just how different charter schools are, and the factors that make them different, we need to develop a comparative institutional analysis. Thus, while the primary focus of this study is innovative practices and policies in charter schools and the factors that appear to support local innovation, for the purposes of comparative analysis, the study also examined distinctiveness and innovative practices in traditional public schools.

In the first step of the survey work, from March through May of 1999, the principals of all 138 charter schools then operating in Michigan were contacted and asked to complete a telephone survey. Of the principals contacted, 101 (i.e., 73%) agreed to participate. The principals were asked a series of questions concerning various school practices, how they spend their time, who they interact with, and perceived barriers to change in their schools. As noted earlier, Michigan's charter schools are located primarily within urban school districts. For purposes of comparison, a group of 105 principals from traditional public schools matched to the charter schools by vicinity and grade level were then asked the same questions. (The selection of schools involved stratified random sampling.)²⁶ To further compare what is happening in Michigan's charter schools with practices in traditional schools, the same questions were then posed to a smaller group of 66 principals from schools located in suburban districts contiguous with the urban districts.²⁷

In one section of the telephone survey, principals in all the schools (charter, matched urban traditional, and suburban) were asked to name, if any, a practice used in their school that they believed was distinctive from practices used in nearby schools. They were asked this question with respect to five different areas of school activity: administration and management, the curriculum, instructional techniques, use of technology, and the promotion of parental involvement. The questions were open-ended. In responding to these questions, school principals collectively mentioned over sixty different practices. These responses were then grouped in tables.

In the second step of the study, all 272 principals who participated in the original study were sent mail surveys. Five tables of "distinctive" school practices represented the central component of these mail surveys. The participants here were envisaged as a kind of "jury of

peers” charged with further reflecting upon and judging the innovativeness of school practices. In this survey, the principals were asked to report which of the listed practices were currently in place in their schools, and how long they had been in place. They were also asked to judge the innovativeness of the different practices. The principals were not told the schools or the types of school (e.g., charter or traditional) that had originally reported each practice. As anticipated, the response rate to this mail survey was lower than that for the telephone survey. A total of 90 replies were received (giving a response rate of 33 percent). Of these replies, 40 (44%) came from charter schools, 32 (36%) came from the matched traditional public schools, and 18 (20%) came from suburban schools. Overall, responses to these two surveys provided a wealth of insights regarding the practices now being used both in Michigan’s charter schools and in nearby traditional public schools.

Are Charter Schools Distinctive?

Several approaches were used to assess the distinctiveness of charter schools. As well as asking school principals open-ended questions about the practices in their schools, various questions were asked to find out how much use schools were making of practices that are sometimes claimed to be innovations.

The survey responses clearly demonstrate that most charter school principals believe their schools are distinctive, in at least some respects. Further, charter schools appear to have adopted many contemporary educational innovations. But when these results are placed alongside the responses obtained from the principals of traditional public schools, they no longer seem remarkable. Take for example efforts to encourage parental participation in school activities. A whopping 98 percent of charter schools allow parents to visit the school at any time during the day, and 90 percent of principals reported making use of parent volunteers in the school. But then 98 percent of the matched urban public schools and 91 percent of suburban public schools in the survey sample also reported allowing parents to visit the school at any time during the school day. In addition, reported use of parental volunteers (97 percent) was more

prevalent in both the matched urban public schools and the suburban schools than in the charter schools.²⁸

Only on three types of innovation did the charter school principals report a level of adoption significantly higher than that of both the matched traditional public schools and the suburban schools included in the study. Those three innovations were: non-traditional scheduling, such as all-day kindergarten (reported in 66 percent of charter schools), the requirement that students learn a foreign language (reported in 45 percent of charter schools), and the requirement that students wear school uniforms (reported in 43 percent of charter schools). The results for the closed-ended innovation questions are reported in Table 2.²⁹

Table 2: Schools Reporting the Use of Particular Innovations

Innovation	School Type		
	<i>Charter</i>	<i>Urban</i>	<i>Suburban</i>
Parents Can Visit the School at Any Time	98.0%	98.1%	90.9%
School Uses Parent Volunteers in Classrooms	90.0%	97.2%	97.0%
Non-traditional Scheduling, like all-day Kindergarten	66.0%	61.7%	47.0%
Students are Required to Learn a Foreign Language	45.5%	14.0%	20.3%
Students are Required to Wear Uniforms	43.4%	15.2%	3.1%
School Displays Mission Statement	91.1%	96.3%	95.4%
School Integrates Computer Use in Lessons	89.1%	94.3%	95.5%
School Sets Aside Time Each Month for Teacher Dev	81.8%	70.1%	81.8%
Parent-Teacher Teams Help Devise Policy	80.0%	85.7%	92.3%

When principals were asked to name what they saw as distinctive about their schools, clearer differences among charter schools and traditional schools began to emerge.³⁰ As I will discuss later, there do appear to be some major differences in what principals of charter schools and principals of traditional schools believe make their schools distinctive. It is also clear that principals of charter schools are much more likely than their peers (especially their peers in suburban public schools) to report distinctions with respect to school administration and management, the curriculum, and instructional techniques. But it is noteworthy that within each of the five categories typically about half of the charter school principals could not name any practice in their school that they considered to be distinctive. (See Tables 3 and 4). The survey results show that, in the eyes of their own principals, most charter schools are distinctive in no more than three out of the five categories of school practice mentioned. Principals of traditional public schools report much the same thing.

**Table 3: Principals Claiming Their Schools Are Distinctive
in Five Categories of School Practices**

Distinctions	School Type		
	<i>Charter</i>	<i>Traditional</i>	<i>Suburban</i>
Administration & Management	49.5%	42.1%	24.5%
The Curriculum	54.5%	42.1%	28.3%
Instructional Techniques	51.5%	42.1%	39.6%
Use of Technology	55.5%	57.0%	60.4%
Boosting Parental Involvement	42.6%	42.1%	39.6%
None	2.0%	6.5%	9.4%

Table 4: Number of Sub-Categories in Which Principals Claimed Their Schools Are Distinctive

Categories	School Type		
	<i>Charter</i>	<i>Traditional</i>	<i>Suburban</i>
0	2.0%	6.5%	9.4%
1	22.8%	25.2%	30.2%
2	23.8%	22.4%	24.5%
3	28.7%	28.0%	30.2%
4	16.8%	17.8%	5.7%
5	5.9%	0.0%	0.0%

Tables 2, 3, and 4 present some important and useful summary information about what is happening in Michigan’s charter schools and the extent to which these schools seem different from traditional public schools. However, it is also possible that this information masks other critical issues. For example, it might be the case that while some principals believe their schools to be distinctive, other people would view those apparent distinctions as somewhat trivial. Conversely, a school might be doing relatively few things that are considered distinctive, but others would judge them as significant departures from traditional school practices. An additional, more methodologically-oriented concern can also be raised here. That is, asking principals without any prompting to name the one thing that is most distinctive about their school curriculum, or instruction, and so on puts them on the spot. Had they been given more time to think about this, or more opportunities to list points of distinction they might have come up with more and different responses. These concerns were anticipated in the research design for this study. By creating a second survey where apparently “distinctive” aspects of school practice were listed on the page for school principals to see, it was possible to gain more insight into variations across schools in their practices, and how innovative these items are considered to be. From here, innovation scores could be developed for each practice. Mapping these scores back to the schools reporting use of each practice, it is then possible to determine the extent to which schools differ as sites of local innovation.

Innovative School Practices

Presented with a list of items that particular principals believe are distinctive about their schools, all of us could no doubt come to our own judgments about the innovativeness of those items. But to judge the relative innovativeness of a broad range of practices, we need a straight-forward and valid rating system. A range of possible approaches could be used. For the purposes of this report, I developed an innovation ratings method that takes into account two features of any given practice.

First, I considered the extent to which the practice is “new” or “novel” to the whole system of public schools. To do this, I rated the item based on the percentage of principals of traditional schools (i.e., both urban and suburban) who reported that the practice is currently in use in their schools. This rating can range from 1 to 100. The higher the percentage of principals reporting use of the practice, the lower its rating. Thinking in system terms, if all but a few schools have adopted a particular practice then it can no longer be said to be an innovation to the system, even though at the school level it would still constitute an innovation if adopted by one of the last “hold-outs.”

Second, switching attention to the school level, I considered the extent to which the practice is judged as “very innovative” (as opposed to “somewhat innovative” or “not at all innovative”) by the principals of schools where the item is currently in use. (The judgments of principals in urban, suburban, and charter schools were considered here.) The higher the percentage of principals judging the item to be very innovative, the higher its rating. This rating can range from 1 to 100.

Third, for each practice I calculated the average of the system-level and school-level ratings to produce an aggregate innovation score, that can range from 1 to 100.³¹ A score of 1 would result if 100 percent of schools had adopted the practice and 1 percent of principals or fewer judged it to be very innovative. In contrast, a score of 100 would result if just 1 percent of schools or fewer had adopted the practice and fully 100 percent of those who had adopted it judged it to be very innovative. Of course, the scores for most actual practices lie in a range between somewhere above 1 and somewhere below 100. This innovation rating method

ensures that a practice with a score of 80 can be thought of as twice as innovative as one with a score of 40 and four times as innovative as one with a score of 20. In addition, it allows for comparisons among types of practices, so that it can be determined, for example, if more innovative things are happening in the area of curriculum than in the area of parental involvement.³² The information used to create the innovation ratings was gathered in the second step of the survey work, involving responses from 90 school principals (40 from charter schools, 32 from the matched traditional public schools, and 18 from suburban schools).

The innovation rating method presented here incorporates the understanding that all judgments about innovativeness are necessarily inter-subjective. That is to say, by first asking principals to report what they consider to be distinctive about their school compared with nearby schools, I obtained a large group of subjective judgments. A list of “distinctive” items was thereby generated. This list was then returned to the principals, who were asked to evaluate their own and others responses by, among other things, stating how innovative they believe those items to be. In addition, the second time around, principals were asked whether those practices were currently in use in their schools.

The ratings produced in this way are not intended to give some sort of final pronouncement on what is innovative and what is not. Any search for unquestionable pronouncements with respect to innovativeness will inevitably prove illusory. But by asking the research subjects themselves to evaluate their own and others judgments, it is possible to discern shared understandings of what constitutes innovative practice. At a minimum, use of an inter-subjective ratings method like this can be helpful for isolating those practices deserving further scrutiny.

To provide more details of the practices currently in use in charter schools and to discuss the extent to which these represent innovations, next I discuss the five categories of practices in turn: administration and management, the curriculum, instructional techniques, use of technology, and promoting parental involvement.

Administration and Management

If anything is to mark charter schools out as distinctive from traditional public schools it should be how the schools are administered and managed. By definition, the whole charter school concept represents a kind of innovation in the delivery of public education, where schools are given greater autonomy in return for more direct accountability to the families they serve. Given this, asking the principals of charter schools to name policies or practices that most distinguish their schools from others with respect to administration and management might seem somewhat naive. Of course the schools should be distinctive. Nonetheless, this question was asked and the responses turn out to be quite revealing.

Half the principals of charter schools said that they could think of *nothing* that distinguished their schools from others with respect to administration and management. (See Table 3). Perhaps this response reflects how a lot of charter school principals perceive their position and the work they do within it. In a series of other questions asked in the survey, principals were required to estimate how much time they spent each week on a range of activities (instructional issues, strategic thinking, student discipline, talking with parents, filling forms and records, and so on). From the responses to these questions, a remarkably similar patterns of time management emerge across both charter schools and traditional public schools.³³ But coming back to the question of distinctiveness, from the responses received, a list was constructed containing 12 items that together exhaust the responses given. Of the charter school principals who said their schools were distinctive in administrative and management practices, well over half said the schools were distinctive because all important financial and management decisions are made at the school site, or a management company takes care of financial, employment, legal and technical issues, or the principal focuses on academic issues and a business manager focuses on administrative issues. For the traditional public schools, the most common response was that the school is distinctive because teachers have a say in all major decisions, including the budget and curriculum. A considerable proportion of the principals of the matched urban public schools also said that their schools were distinctive because all important financial and management decisions are made at the school site. (See Table 5.)

When presented with the list of twelve “distinctive” administrative and management practices in the second survey, the principals typically claimed that six of them were in use in their schools. However, there are differences between (and among) the charter schools and traditional schools in the combination of practices that have been adopted. Based on the use of these practices and the extent to which principals where they are in use consider them to be “very innovative,” innovation ratings were assigned to each practice. The practice receiving the highest score was that of having a management company take care of financial, employment, legal, and technical issues, with a score of 74. This practice is overwhelmingly used within charter schools, although some traditional public schools report using it as well. Close behind this item, with a score of 73, was a less prevalent practice, whereby the position of principal is rotated among the teachers every few years. This practice is used by a small number of both charter and traditional public schools, and it is rated as “very innovative” by a high proportion of those who have adopted it. In contrast to these two practices, the other ten on the list received relatively low innovation scores. Use of a business manager, which is a more common practice in charter schools but is also used in a reasonable proportion of traditional public schools, received a score of 47. Parents having a say in all major decisions, including budget and curriculum, received a score of 46. This practice was reported to be used most frequently in the matched urban public schools (39.3%), and its use in suburban public schools and charter schools was about the same for both (17.7% and 17.1% respectively).

By assigning innovation scores to each of the practices reported as in use in a school, it is possible to calculate an average innovation score for that school, in terms of its administrative and management practices. Taking this approach, the overall average innovation score for charter schools was 35 compared with 28 for the matched urban schools and 27 for the suburban schools. Further, the highest of these average scores was 51, and the school receiving it was a charter school. This finding is not surprising given the high innovation score assigned to using a management company, which is a common practice among Michigan’s charter schools.

A question uppermost in the minds of some observers of the introduction of charter schools concerns the “ripple effects” they are having on traditional public schools.

To test for these effects, the timing of adoption of these various administrative and management innovations was also considered. The use of management companies has been popularized within the charter school movement, although there have so far been few ripple effects to other schools. The ripple effect shows up much more clearly in the use of site-based management. While this is most prevalent among charter schools, a fair number of principals in the matched urban public schools reported its use. More importantly, in over two-thirds of the cases, the principals of these schools said that site-based management had been adopted after 1994, the year when charter schools began to emerge in Michigan. As further evidence of this loosening of central control in traditional public schools as a response to charter schools, well over half of the principals reporting that teachers have a major say in all major decisions said that this practice has been adopted after 1994. Ripple effects also show up with respect to efforts to promote a family-like environment in the school, and in efforts to involve students in school decision-making and planning. In both cases, over 40% of the principals in the matched urban public schools reported that adoption of these practices had taken place after 1994.

Overall it seems that charter schools have introduced some innovation into school administration and management. The use of management companies is principally a charter school phenomenon. The other practices listed in Table 5 were in use in at least some traditional public schools long before charter schools emerged on the scene. However, charter schools appear to have given prominence to and popularized these practices in important ways. The growing presence of charter schools in Michigan appears to have prompted efforts to decentralize decision-making within the traditional school system. These efforts range from greater use of school-based management, to giving teachers, parents, and students more say in how their schools are run.

Administrative and management practices in any organization serve to shape on-going decision-making processes. For this reason, adoption of practices like those discussed here hold the potential to influence all other school policies and practices, sometimes in significant and obvious ways, sometimes more subtly. The range of relationships that have emerged between charter schools and their management companies demonstrate this point. In some cases, management companies like the Edison Project and National Heritage Academies have

essentially created “blue prints” of what they consider will be successful schools. The management plans provided by these companies can cover details right down to the design of classrooms, play equipment, and so on. In many ways, then, such management companies fill the gap for the charter schools that in the traditional public school system is filled by the school district office. The relationship between the schools and the management companies here is equivalent to that between local franchise-holders (franchisees) and a parent company (the franchiser).³⁴ Other charter schools have quite different relations with their management companies, where local organizers develop school priorities and then contract with outside entities to perform specific tasks. Switching the focus from administrative and management practices, I will next discuss a variety of other, micro-level school policies and practices, starting with those pertaining to the curriculum, followed by instructional techniques, use of technology, and, finally, efforts to promote parental involvement.

Table 5: Administration and Management

Policy or Practice:	Innovation Rating: <i>Max = 100</i>	Reported As:	School Type:		
			<i>Charter</i>	<i>Urban</i>	<i>Suburban</i>
A management company takes care of financial, employment, legal, and technical issues	74	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	65.8% 52.0% 9.9%	3.6% 0.0% 0.0%	0.0% -- 0.0%
The position of principal is rotated among the teachers every few years	73	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	5.6% 100.0% 1.0%	6.7% 0.0% 0.0%	0.0% -- 0.0%
The principal focuses on academic issues and a business manager focuses on administrative issues	47	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	39.5% 20.0% 9.9%	20.7% 0.0% 0.0%	16.7% 0.0% 0.0%
Parents have a say in all major decisions, including budget and curriculum	46	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	17.1% 28.6% 2.0%	39.3% 22.2% 1.9%	17.7% 0.0% 3.8%
All important financial and management decisions are made at the school site	41	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	75.0% 20.0% 10.9%	50.0% 23.1% 15.9%	27.8% 40.0% 0.0%
Students are involved in school decision-making and planning	39	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	48.7% 21.1% 1.0%	40.0% 11.1% 0.0%	38.9% 14.3% 0.0%
Teachers have a say in all major decisions, including budget and curriculum	33	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	60.0% 41.7% 7.9%	81.5% 35.0% 12.2%	55.6% 20.0% 16.9%
The school shares resources (including teaching staff) with other nearby schools	30	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	15.4% 33.3% 1.0%	53.6% 14.3% 0.9%	61.1% 9.1% 0.0%
The school is deliberately designed to promote a family-like atmosphere	28	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	92.7% 44.7% 2.0%	82.8% 33.3% 2.8%	82.4% 28.6% 0.0%
Many important decisions regarding the running of the school are delegated to the faculty	27	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	67.5% 42.3% 0.0%	75.0% 36.8% 3.7%	94.4% 23.5% 1.9%
The school has developed partnerships with local business groups	20	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	47.5% 22.2% 1.0%	83.3% 16.7% 1.0%	70.6% 8.3% 0.0%
The school has an improvement team which		<i>In Use:</i>	85.4%	96.7%	94.4%

includes teachers and parents	13	<i>Innovative:</i>	17.1%	28.6%	17.7%
		<i>Distinctive:</i>	3.0%	3.8%	1.9%

The Curriculum

As in all Michigan public schools, students in charter schools must take the state's annual standardized achievement tests.³⁵ Combined with the popular obsession with test scores among pundits and parents alike, this requirement obviously places some constraints on the subject matter that schools can choose to cover. However, the Michigan curriculum guidelines that set the parameters of the topics covered in the achievement tests have not been designed to nail down every aspect of the school curriculum. There is room for flexibility and many public schools in Michigan are taking advantage of that. But charter schools appear to be engaging in more innovation in the area of curriculum than the public schools around them.

When the 272 principals in this study were asked what was distinctive about their schools with respect to the curriculum, 118 (43%) provided responses that, upon subsequent analysis, were found to make up ten different items. Of the charter school principals, 13.9% said that their schools are distinguished by the emphasis placed on a particular field of human activity. Use of the Core Knowledge Curriculum was reported as the most distinctive feature of curriculum policy and practice in 8.9% of charter schools. This curriculum has been devised by E.D. Hirsch of the University of Virginia, author of *Cultural Literacy: What Every American Needs to Know* (1987). Development of the Core Knowledge Curriculum has been guided by the contention that children are better able to understand abstract concepts and develop a thirst for learning if they have initially been introduced to a large amount of basic factual information about the world they live in. Close behind use of the Core Knowledge Curriculum in terms of curriculum practices claimed as distinctive was mastery of the basics (such as reading, phonics, writing, and mathematics). Of the charter school principals surveyed, 7.9% claimed this as marking their school out as distinctive from those around it.

When the ten items that principals reported as distinctive about their schools were given innovation ratings, three received significantly higher scores than the rest. These were: use of the Core Knowledge Curriculum; the requirement that students take classes in foreign languages; and that curriculum decision-making is guided by on-going advice from professors at nearby universities or colleges. The respective scores, out of 100, for these items were: 67, 65, and 63. (See Table 6.) These relatively high scores reflect the limited adoption of these practices

among traditional public schools and the relatively high number of principals in those schools that have adopted them who consider them “highly innovative.” Each of these three curriculum innovations are much more likely to be in use in Michigan’s charter schools than in traditional public schools. The survey results indicate that over one quarter of charter schools follow the Core Knowledge Curriculum, nearly half require students to take classes in foreign languages, and close to one third have been guiding curriculum decision-making with help from academics in the vicinity. Aside from these three things, charter schools typically appear little different from other public schools with respect to the curriculum. Of the ten “distinctive” items, charter schools typically incorporate five into their curricula offerings, while traditional public schools typically incorporate four. Taking the average of the innovation scores of the curriculum practices reported in use in each school, the highest scoring school was found to be a charter school with a score of 54. Overall, charter schools attained an average score of 39, while the matched urban schools attained an average score of 34 and the score for suburban schools was 33. Clearly, where innovative practices are being incorporated into the curriculum, they are typically being accompanied by other less innovative ones.

With respect to the curriculum, charter schools mainly appear to be doing things that can already be found in traditional public schools. If they are innovating at all in their curricula offerings, charter schools are essentially working to create localized variations of practices that are already common within the broader public school community. Consider the examples of promoting a particular cultural perspective (such as African-American) or emphasizing a particular field of human activity (such as the arts). Such approaches are often used in traditional public schools, but perhaps not as thoroughly or self-consciously as in some charter schools. This explains why principals from charter schools might consider that such practices set their schools out as distinctive even when -- from the standpoint of the school system as a whole -- these practices are not especially distinctive. This point is made even more dramatically with the case of school principals reporting that their schools are distinctive because they emphasize mastery of the basics. In fact, well over 80 percent of all school principals report that they follow this practice and they typically do not consider it very innovative. The use of these approaches by charter schools does not constitute an innovation within the broader

public school community. Much the same point can be made for the practice of having students take compulsory lessons in citizenship, moral values, or conflict resolution. Charter school principals were more likely than their counterparts to claim this as distinctive to their schools and a highly innovative practice. However, close to two-thirds of all the principals surveyed -- whether from traditional or charter schools -- reported that compulsory lessons of this sort are included in the curriculum.

Have curriculum practices in Michigan's charter schools prompted changes in curriculum practices in the traditional public schools around them? The survey results provide some reasonable evidence pointing to ripple effects with respect to one curriculum practice. To the statement that "the curriculum is unique to this school and is continually being reviewed and discussed by faculty members," 86.5% of charter school principals and 64.3% of urban school principals reported this to be the case in their schools. Importantly, however, asked when the practice had been adopted, over half the urban school principals reported that adoption occurred after 1995, that is, *after* charter schools had begun to establish a presence in the state. In contrast, over three quarters of suburban schools using this practice had adopted it *before* 1995.

Adoption patterns for two other curriculum practices also suggest that ripple effects might have occurred. However, in these cases, because the patterns of adoption timing are similar for both urban schools (subject to competition with charter schools) and suburban schools (not subject to such immediate competition), it is possible that things other than the rising presence of charter schools prompted the observed changes. With respect to the practice of introducing several themes throughout the year, 64.9% of charter school principals and 44.4% of urban school principals reported its use. In this case, one third of the urban school principals reported adoption after 1994, but a similar proportion of suburban school principals said the same thing. Finally, for the practice of students taking compulsory lessons in citizenship, moral values, or conflict resolution, 69.4% of charter school principals and 62.% of urban school principals reported its use. Over half of the urban school principals reported adoption after 1994, but so too did principals in suburban schools that have adopted this practice. Aside from whether or not the "ripple effect" has recently been at work, the observed patterns of

adoption noted here underscore that each of these frequently used and apparently “distinctive” charter school practices were all in use in a substantial proportion of traditional public schools *before* charter schools emerged on the scene in Michigan.

Overall, the evidence is clear regarding innovation in the area of the curriculum. When new things are being tried out, right now they are primarily being tried out in charter schools. However, most charter schools appear to have adopted curriculum content that is not dramatically different from that found in traditional public schools. Where the innovation is occurring, it is very much of a “back to basics” type and many educationalists would probably argue that adoption of E.D. Hirsch’s Core Knowledge Curriculum hardly represents a progressive step. By definition, adopting this sort of curriculum represents a retreat from “newness,” “exploration,” and “invention,” and the embracing of older, familiar things. It represents an innovation only in the sense that the introduction of the new, retro-designed Volkswagen Beetle is innovative. Countering that tendency within the charter school movement, it is important to note that many more charter schools are seeking to develop unique curricula, and many are seeking expert assistance with this. Maybe this sort of effort is resulting in more variation across schools in their curriculum content. It is worthwhile noting, however, that these efforts to devise unique curricula are frequently occurring in traditional public schools. Thus, it is not at all clear from these findings that schools need “freedom” to “experiment” with what they teach. Those schools that are apparently the most free are not necessarily the most experimental right now.

Table 6: The Curriculum

Policy or Practice:	Innovation Rating: <i>Max = 100</i>	Reported As:	School Type:		
			<i>Charter</i>	<i>Urban</i>	<i>Suburban</i>
The Hirsch Core Knowledge Curriculum is followed	67	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	26.5% 44.0% 8.9%	8.7% 0.0% 0.0%	0.0% -- 0.0%
Students take compulsory classes in foreign languages	65	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	47.2% 40.0% 5.0%	7.1% 0.0% 0.0%	11.8% 50.0% 0.0%
Curriculum decision-making is guided by on-going advice from professors at nearby universities or colleges	63	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	31.4% 63.6% 1.0%	22.2% 33.3% 0.9%	18.8% 0.0% 0.0%
A particular cultural perspective is promoted (e.g., African American, Hispanic, American Indian)	45	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	23.7% 33.3% 5.0%	46.4% 25% 1.9%	25% 25% 0.0%
A particular field of human activity is emphasized across all instruction (e.g., the arts, languages, the sciences, or technology)	44	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	55.6% 30.0% 13.9%	57.1% 30.8% 16.8%	22.2% 25.0% 9.4%
The curriculum is unique to this school and is continually being reviewed and discussed by faculty members	42	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	86.5% 50.0% 3.0%	64.3% 26.7% 10.3%	50.0% 44.4% 15.1%
Several themes are introduced throughout the year and teachers relate their subjects to those themes	39	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	64.9% 30.4% 5.9%	44.4% 20.0% 5.6%	52.9% 11.1% 1.9%
Students take compulsory lessons in citizenship, moral values, or conflict resolution	31	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	69.4% 33.3% 2.0%	62.1% 18.8% 0.0%	61.1% 9.1% 0.0%
Opportunities are provided for advanced placement and college preparation	26	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	36.7% 18.2% 2.0%	66.7% 13.3% 3.7%	60.0% 11.1% 1.9%
Mastery of the basics (e.g., reading, phonics, writing, and mathematics) is emphasized	18	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	89.5% 21.9% 7.9%	89.3% 22.7% 2.8%	83.3% 20.0% 0.0%

Instructional Techniques

When asked to mention what was distinctive about their schools with respect to instructional techniques, 45% of principals in this study provided responses which were found to make up 15 different items. Among charter school principals, the most frequently mentioned practice (mentioned by 12.9% of them) was that an emphasis is placed on learning through experience. Other practices mentioned relatively frequently by the charter school principals were: use of small classes (9.9%); multi-age grouping of students in classes (9.9%); and the use of individualized instruction or learning programs for every student (6.9%). Such clustering around a relatively small group of “distinctive” practices was less common among the principals of traditional schools. However, the most-mentioned items for principals in the matched urban schools were similar to those mentioned by their charter school peers. Emphasis on learning through experience received the most mentions (7.5%); followed by team-teaching of classes (6.5%); use of cooperative learning strategies (4.7%); and then use of small classes, multi-age groupings of students in classes, and the use of individualized instruction (3.7% each). Among the principals of suburban schools, learning through experience was again a frequently mentioned “distinctive” practice, but otherwise the suburban principals mentioned a somewhat different group of practices than their peers in charter schools or the matched urban schools. (See Table 7.)

When scored for innovativeness, the frequently-mentioned emphasis on learning through experience did not do particularly well among instructional techniques. While a reasonable number of those who use this approach believe it to be very innovative (approximately one third of principals of charter schools and the matched urban schools, somewhat fewer principals of suburban schools), it turns out to be used in about 90% of schools and is thus not at all innovative in terms of the school system as a whole. With its score of 19 out of 100 for innovation, learning through experience can hardly be considered a particularly innovative instructional technique. Considered in terms of the timing of its adoption, it appears that learning through experience has been a common instructional practice in traditional public schools for many years. While charter schools might be using this technique in new ways -- perhaps by

linking it with distinctive curricula content -- their use of it is unlikely to prompt changes in traditional public schools.

As with their policies and practices regarding the school curriculum, in terms of their use of instructional techniques, Michigan's charter schools are doing little that is new or novel. Further, when they are doing new things, they tend to combine them with a number of other practices that are not at all new in the sense that they have been in use in traditional public schools for many years. Among the fifteen instructional techniques mentioned as "distinctive," charter school principals typically reported making use of nine of them in their schools. The principals of traditional public schools reported much the same thing; typically traditional schools make use of eight of these techniques and suburban schools make use of nine. In determining the average innovation score for the instructional techniques reported to be in use in each school, I found that charter schools had an overall average score of 33, while the urban matched schools and the suburban schools had overall average scores of 30 and 27 respectively. The school obtaining the highest average score was a charter school, coming in with a score of 39. Thus, a reasonable conclusion to draw here is that there is limited innovation occurring in Michigan's schools with respect to instructional techniques. But some innovative practices are to be found and charter schools have been leading the way with them.

The most innovative instructional technique mentioned by school principals in this study was small classes (i.e., classes containing 15 or fewer students). This practice was closely followed by individualized instruction or learning programs for every student, all-day kindergarten programs, and a longer school day and school year than mandated by the state. The respective innovation scores for these items were 60, 58, 55, and 52. In every case, these practices are much more likely to be in use in charter schools than in traditional public schools. In addition, adoption of these instructional techniques within the matched urban schools has overwhelmingly occurred in the years since charter schools began to emerge in Michigan. Although each of these practices had been in use in some traditional public schools in the state before they were adopted by charter schools, the increasing use of these instructional techniques within traditional public schools seems to have been catalyzed through their adoption by charter schools.

Table 7: Instructional Techniques

Policy or Practice:	Innovation Rating: <i>Max = 100</i>	Reported As:	School Type:		
			<i>Charter</i>	<i>Urban</i>	<i>Suburban</i>
Small classes (i.e., 15 students or less)	60	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	36.8% 25.0% 9.9%	22.6% 50.0% 3.7%	0.0% -- 0.0%
Individualized instruction or learning programs are designed for every student	58	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	48.7% 50.0% 6.9%	35.5% 11.1% 3.7%	5.9% 100.0% 5.7%
All-day kindergarten program	55	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	48.6% 43.7% 0.0%	31.0% 28.6% 0.9%	37.5% 50.0% 0.0%
A longer school day and school year than mandated by the state	52	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	65.0% 25.0% 1.0%	22.6% 57.1% 0.0%	50.0% 44.4% 0.0%
Students can choose what to study from a range of subjects (i.e., block scheduling)	49	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	32.5% 20.0% 0.0%	31.0% 25.0% 2.8%	27.8% 40.0% 5.7%
Students work with the same teacher or group of teachers for several years (i.e., looping)	47	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	55.3% 45.0% 1.0%	41.9% 30.8% 0.9%	52.9% 33.3% 1.9%
Students are promoted based on subject mastery, not age	45	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	84.6% 50.0% 2.0%	55.2% 20.0% 1.9%	38.9% 28.6% 3.8%
Multi-age grouping of students in classroom	39	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	72.5% 31.0% 9.9%	53.3% 28.6% 3.7%	55.6% 40.0% 1.9%
The school often uses mentors, tutors, and experts from <i>outside</i> the school	35	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	65.8% 33.3% 1.0%	74.2% 38.1% 0.0%	50.0% 22.2% 0.0%

Table 7 (continued): Instructional Techniques

Policy or Practice:	Innovation Rating: <i>Max = 100</i>	Reported As:	School Type:		
			<i>Charter</i>	<i>Urban</i>	<i>Suburban</i>
Teachers often team-teach classes	24	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	47.5% 33.3% 2.0%	76.7% 14.3% 6.5%	70.6% 16.7% 7.6%
After-school and summer-school programs are provided for students who need extra instruction	21	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	66.7% 25.0% 0.0%	87.1% 25.0% 1.9%	94.4% 47.1% 1.9%
Teachers are required to participate in regular staff development programs	21	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	97.6% 27.0% 0.0%	87.1% 33.3% 2.8%	88.9% 25.0% 5.7%
Emphasis on learning through experience (i.e., hands-on learning)	19	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	87.8% 36.4% 12.9%	93.6% 34.6% 7.5%	94.4% 11.8% 5.7%
Para-professionals are used in the classrooms to assist in instruction	16	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	68.3% 16.0% 0.0%	74.2% 9.5% 0.9%	100.0% 16.7% 0.0%
Cooperative learning strategies are used in classrooms	13	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	89.7% 27.3% 5.0%	96.8% 25.9% 4.7%	100.0% 11.1% 0.0%

Use of Technology

The past decade has witnessed astonishing changes in both the capabilities and the cost of many items of technical equipment, personal computers providing the most prominent example. Thus, while most schools had at least some personal computers available for use by staff and students in 1990, their prevalence and their integration into day-to-day practices was nothing like it is today. In any context characterized by both rapid across-the-board change and limited information sharing among those affected, the curious spectacle arises whereby many people believe their situation to be distinctive when that is far from the truth. The

accelerated use of technology in schools has produced such a phenomenon. When the 272 principals included in this study were asked to mention a policy or practice distinguishing their schools from those around them with respect to use of technology, 156 (57%) did so, producing a higher response rate than when the same open-ended question was asked about policies and practices in curriculum, instructional technique, parental involvement, and administration and management. Upon subsequent analysis, the responses regarding “distinctive” uses of technology fell into twelve items. (See Table 8.)

Predictably, the items most commonly claimed as making a school distinctive in its use of technology were not especially distinctive when viewed in broader, system-level terms. For example, 27.7% of the responses from charter school principals mentioned the location of computers in every classroom as being what distinguishes their schools from those around them. But an overwhelming majority of the principals in the study subsequently reported this to be a practice in their schools. The use rates are 80% for charter schools, 70% for the matched urban schools, and 94% for the suburban schools. Similarly, internet access in every classroom and the use of instructional computer software in mathematics, science, or language classes received frequent mention by the principals as being distinctive practices, although these are also typically to be found in use now in over two-thirds of schools, whether charter or traditional. Differences in access to resources rather than any other differences might well be driving differences across schools in their use of technology. Out of the twelve items that were mentioned as distinctive, on average, charter schools had adopted six, urban schools had adopted seven, and suburban schools had adopted eight.

In terms of innovation scores, many of the uses of technology mentioned as distinctive by school principals did not appear remarkable. Taking into account the innovation score for each item in use, the overall average scores for charter schools and for urban schools was 29, while that for suburban schools was 28. As with the findings concerning curriculum and instructional techniques, the highest average score went to a charter school, coming in at 44.

The most innovative practice by far with respect to the use of technology involves making computer access available at both school and home for every student beyond the early grades. The innovation score for this item was 80 out of 100, while the scores for all but one of

the other eleven items were below 40. Making computer access available at both school and home is a practice pioneered by the Edison Project, a school management company. In all Edison Project schools, which include both charter and traditional schools, students receive personal computers for use at home. However, in Michigan, this practice is no longer confined to Edison Project schools. Of the charter school principals in this study, 19% reported this practice to be in use in their schools, compared with 7% of principals in the matched urban schools and none of the principals in the suburban schools. The recency of adoptions of technology in all schools makes it difficult to discern ripple effects from charter schools to traditional schools. But the evidence provided in Table 8 suggests that this is an instance of technology use where charter schools have taken the lead -- in terms of timing of adoptions and numbers of adopters -- with respect to the twelve items of technology use considered here.

Table 8: Use of Technology

Policy or Practice:	Innovation Rating: <i>Max = 100</i>	Reported As:	School Type:		
			<i>Charter</i>	<i>Urban</i>	<i>Suburban</i>
Beyond the early grades, every student has access to a computer for use at both school and home	80	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	18.9% 57.1% 1.0%	6.9% 100.0% 0.0%	0.0% -- 0.0%
The school incorporates distance learning technologies	50	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	20.5% 62.5% 0.0%	50.0% 30.8% 0.9%	25.0% 25.0% 0.0%
Some students and teachers have their own web sites	39	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	45.0% 43.8% 1.0%	53.3% 26.7% 0.0%	50.0% 11.1% 0.0%
Report cards, attendance records, and student progress are computerized for easy review	36	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	43.6% 37.5% 1.0%	62.1% 23.5% 0.9%	58.8% 40.0% 1.9%
Every classroom has internet access	34	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	65.0% 52.2% 6.9%	69.0% 33.3% 10.3%	77.8% 28.6% 3.8%
Every teacher has a personal computer in their classroom	33	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	57.9% 21.1% 1.0%	53.3% 26.7% 0.9%	77.8% 35.7% 1.9%
The school has its own computer instructor or media director	30	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	57.9% 30.0% 0.0%	76.7% 36.4% 4.7%	72.2% 33.3% 11.3%
Every classroom has a television or television/VCR for instructional use (i.e., Educational TV, videos)	27	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	48.7% 5.6% 2.0%	63.3% 29.4% 2.8%	72.2% 23.1% 13.2%
Computers are located in every classroom	23	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	80.0% 26.7% 27.7%	70.0% 21.1% 9.4%	94.4% 23.5% 11.3%
The school has at least one fully-equipped computer lab with up-to-date computers	22	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	67.5% 26.1% 5.9%	79.3% 25.0% 19.7%	88.9% 25.0% 9.4%
Students are taught how to use various software applications (e.g., Microsoft Word, Power-point, e-mail programs)	20	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	75.0% 25.0% 1.0%	86.7% 26.1% 0.0%	82.4% 21.4% 0.0%
Instructional computer software is integrated		<i>In Use:</i>	59.0%	83.3%	77.8%

into teaching mathematics, science, or language	20	<i>Innovative:</i> 27.2%	18.2%	14.3%
		<i>Distinctive:</i> 7.9%	8.4%	7.6%

Parental Involvement

The quality of the relationship established between a school and the parents of the students attending it can often be important for shaping the students' educational experiences. As discussed earlier and as summarized in Figure 1, the creation of charter schools allows parents to make choices among publicly-funded schools. Given this, we should expect the introduction of school choice to alter the nature of the interactions between school personnel and parents. For their part, parents who recognize that they have a choice among schools are more likely to feel empowered when they interact with teachers and principals. They know that if they do not receive what they consider to be a fair hearing from school personnel then they can place their children elsewhere. The costs of switching from school to school are not trivial, especially when non-monetary costs such as social adjustment and so on are taken into account, but this clearly features as an option of last resort that is not available to most parents in a non-choice environment.

Under school choice, teachers and principals know that the loss of a sufficiently large number of students can spell financial trouble for their school. Furthermore, the damage done to a school's reputation by the steady outward flow of dissatisfied parents can have long-term consequences that extend beyond financial issues to encapsulate school morale and other social psychological phenomena that affect the quality of the educational opportunities that the school can provide. Strong incentives emerge in a school choice setting for school personnel to work to enhance the quality of the relations that they have with parents. All schools in a given vicinity will be affected to a greater or lesser extent in this way by the establishment of a charter school. However, the novelty of charter schools and their need to attract and maintain viable student bodies raise the expectation that personnel in them will work especially hard at developing good relations with parents.

In the first survey conducted for this study, principals were asked a variety of questions regarding parental involvement in their schools. When asked what percentage of parents regularly attend parent-teacher conferences, the average figure reported by charter school principals was 76.0%; for principals of the matched urban schools the average figure was 70.0%; for principals of the suburban schools it was 78.3%. When asked what percentage of

parents volunteer at the school on a regular basis, the average figure reported by charter school principals was 26.1%, for the matched urban schools it was 20.0%, and for the suburban schools it was 21.6%. Finally, principals were presented with the following scenario:

Suppose you wanted to begin the school year by gathering parents together to tell them about your hopes and expectations for the coming months. Suppose you scheduled these meetings to ensure that at least one of the times would work for every parent. Suppose further that you sent two notices to parents alerting them to these meetings.

Principals were then asked to estimate what percentage of parents would come to the school for these meetings. On average, the principals of the charter schools estimated 63.6%, those in the urban matched schools estimated 48.0% and those in the suburban schools estimated 55.1%. A striking pattern in this set of responses to the three parental involvement questions is that charter schools enjoy higher involvement rates than the matched urban public schools. In two out of three of the questions, the charter schools also appear to do better than suburban public schools, and in the case of attendance at parent-teacher conferences the charter schools do almost as well as the suburban schools. Do these differences in reported levels of parental involvement reflect differences in school policies and practices with respect to bringing the parents in, or do they reflect differences in the groups of parents that the schools encounter? The argument could be made that, in actively choosing to send their children to charter schools, charter school parents reveal an inherently greater level of concern for or involvement in their children's education than parents who do not make such a choice. It could also be argued that charter school parents and parents who send their children to suburban schools also have more time or more resources which allow them to more readily get involved in the life of the school than parents in the matched urban schools. Taking schools rather than parents as the unit of analysis, this study focused primarily upon school policies and practices and data was not collected concerning the expectations, motivations, or resources of parents. This was a deliberate choice in the research design. So while it can be acknowledged that differences in parental involvement across charter schools and various traditional public schools are surely

affected to some extent by differences in the agency of parents, my contention is that there is value in assessing if these different types of school also take different approaches to promoting parental involvement. Is it possible that innovations adopted by school personnel also help account for the greater level of parental involvement enjoyed by charter schools? The survey results and analysis presented next suggest that the answer to this question is yes.

When asked if there was any policy or practice concerning parental involvement that distinguished their school from others nearby, 113 (42%) of the 272 principals in the study mentioned something. Upon analysis, these responses yielded twelve distinct items. Of these items, the most commonly-mentioned across all types of school was the practice of allowing parents to visit the school at any time during the day. Another common response was that parents are strongly encouraged to volunteer in classrooms or elsewhere in the school. Among the responses from charter school principals, the most commonly mentioned distinguishing practice was that of requiring parents to sign contracts obliging their involvement in school activities. The practice accounted for 14.9% of the responses from charter school principals. For the principals of the matched urban schools, the most commonly mentioned distinguishing practice -- accounting for 12.2% of their responses -- was that after-school and evening events are regularly held for the whole family. This practice was also mentioned relatively frequently by suburban school principals and less often by charter school principals. A practice also quite commonly mentioned by principals of suburban schools -- accounting for 9.4% of their responses -- was that incentives (such as child care, meals, and language training) are offered to attract parents to school functions. (See Table 9.)

When principals were asked to report the use of these practices to promote parental involvement and to assess the innovativeness of each, some of the apparent differences across types of school were diminished. Of the twelve different practices listed, each school typically uses seven of them, whether it is a charter school or a traditional public school. Taking the averages of the innovation scores for each of the practices in use in each school, little difference was again observed across types of school. The overall average innovation score for charter schools was 29 out of 100, while for the matched urban schools it was 27 and for the suburban schools it was 26. A charter school achieved the highest average innovation score, coming in at

48. In contrast, the urban school with the highest average score came in at 35, while the suburban school with the highest average score came in at 48. Some charter schools appear to be making more of an effort than traditional public schools to use innovative practices to boost parental involvement. But as the information summarized in Table 9 shows, none of the practices used in charter schools to promote parental involvement are distinctive to the charter school community. Rather, what distinguishes some of the charter schools is that they are making more use of relatively uncommon although not unheard of approaches to encouraging parental involvement and less use of those “tried-and-true” practices that are almost universally used in traditional schools.

The practice to promote parental involvement that received the highest innovation ratings were the requirement that teachers make home visits to meet parents and to discuss children’s progress, which received a score of 74. This practice was reported to be in use in 15.0% of charter schools, 13.8% of the matched urban schools, and 17.7% of the suburban schools. Another relatively innovative practice was the requirement that parents sign contracts obliging their involvement in school activities, which received a score of 67. While this practice was reported to be in use most frequently by charter school principals (38.5%), it is not uncommon among traditional public schools (23.3% of the matched urban schools and 12.5% of the suburban schools). Three additional practices also received relatively high innovation scores. These were the provision of a parent room or parent resource center in the school, the requirement that parents meet with teachers at least every six weeks to review the performance of their children, and the requirement that parents and students must have an interview with school officials before the student can be enrolled in the school. The respective innovation scores for these practices were 59, 56, and 51. While two of them were more frequently reported as in use within charter schools, all three were reported to be in use in traditional public schools.

The survey responses regarding the timing of adoptions of these various ways of promoting parental involvement reveal modest evidence of some ripple effects from charter schools to traditional public schools. Most notably, the practice of having parents sign contracts obliging their involvement in school activities is more prevalent in charter schools and over 40%

of the matched urban schools that have adopted the practice did so after 1995, when charter schools began to emerge. In addition, of the matched urban schools that regularly hold after-school and evening events for the whole family, over 40% have adopted this practice after 1994. Likewise, among these schools, of those making use of surveys to determine parent expectations, over a third started to use this practice in the period after 1994. As with practices in other areas, it seems fair to say that charter schools, while certainly not being the first schools to use them, have tended to popularize their use. So important questions emerge here about the direction of ripple effects. A fairly convincing argument could be made that innovation transfer with respect to parental involvement has flowed principally from traditional schools to charter schools. This appears to have been the case with several of the practices that charter school principals considered “distinctive” about their schools, such as encouraging parents to volunteer and allowing parents to visit the school at any time. The provision of parent rooms and resource centers first occurred in traditional public schools and the practice is most prevalent in those schools now, even though charter school principals who have adopted this practice are more likely than their counterparts in the traditional schools to consider it “very innovative.” The same can be said for the practice that received the highest innovation score. Requiring teachers to make regular home visits to meet parents and discuss their children’s progress has been a practice in some traditional schools for many years and while some of the principals of those school see this practice as “very innovative,” they do not share the same enthusiasm for it that is found among their counterparts in charter schools.

Over all, it appears that charter schools are making somewhat more effort than traditional public schools to bring parents in. However, none of the approaches used by charter schools in this regard constitute new practices to the broader public school system. At best, we can credit some charter schools with having popularized or having given more prominence to practices that were previously used by only a few traditional public schools. Typically, the efforts made by charter schools to bring the parents in are little different from what many traditional public schools have been doing for a long time. In many cases it would seem that the greater levels of parental involvement that these schools report are more a function of the

motivation of the parents themselves than of anything special about school policies and practices.

Table 9: Parental Involvement

Policy or Practice:	Innovation Rating: <i>Max = 100</i>	Reported As:	School Type:		
			<i>Charter</i>	<i>Urban</i>	<i>Suburban</i>
Teachers make regular home visits to meet parents and to discuss children's progress	74	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	15.0% 100.0% 1.0%	13.8% 25.0% 0.9%	17.7% 33.3% 0.0%
Parents sign contracts obliging their involvement in school activities	67	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	38.5% 66.7% 14.9%	23.3% 16.7% 0.9%	12.5% 50.0% 1.9%
The school has a parent room or parent resource center	59	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	22.5% 88.9% 1.0%	40.0% 36.4% 0.9%	27.8% 20.0% 1.9%
Parents must meet with teachers at least every six weeks to review the performance of their children	56	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	22.5% 33.3% 0.0%	20.7% 20.0% 0.9%	16.7% 33.3% 0.0%
Parents and students must have an interview with school officials before students can be enrolled in the school	51	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	70.0% 37.0% 1.0%	35.5% 45.5% 0.0%	44.4% 37.5% 0.0%
Incentives are offered (e.g., child care, meals, and/or language training) to attract parents to school functions	28	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	46.2% 11.1% 0.0%	70.0% 33.3% 2.8%	66.7% 25.0% 9.4%
After-school and evening events are regularly held for the whole family	27	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	68.4% 20.0% 3.0%	64.5% 27.8% 12.2%	76.5% 15.4% 5.7%
Surveys are used to determine parent expectations	24	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	80.5% 35.5% 1.0%	72.4% 20.0% 0.9%	83.3% 0.0% 1.9%

Table 9 (continued): Parental Involvement

Policy or Practice:	Innovation Rating: <i>Max = 100</i>	Reported As:	School Type:		
			<i>Charter</i>	<i>Urban</i>	<i>Suburban</i>
Training in parenting skills is offered by the school	22	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	34.2% 23.1% 1.0%	80.7% 29.2% 3.7%	77.8% 14.3% 1.9%
Teachers and the principal frequently communicate with parents by phone or e-mail	18	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	90.0% 32.4% 1.0%	90.0% 25.0% 1.0%	94.4% 17.7% 0.0%
Parents are strongly encouraged to volunteer in classrooms or elsewhere in the school	17	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	85.4% 30.3% 6.9%	93.6% 22.2% 7.5%	94.4% 23.5% 5.7%
Parents can visit the school at any time during the school day	16	<i>In Use:</i> <i>Innovative:</i> <i>Distinctive:</i>	95.0% 37.1% 11.9%	96.8% 18.5% 10.3%	94.4% 17.7% 11.3%

Summary

Thinking in terms of the whole system of public schools in Michigan, the findings presented here show only modest evidence of charter schools generating innovations in school practices. While the principals of charter schools often see particular practices as being innovative, from the point of view of the school system as a whole, these practices are not objectively innovative. That is to say, *they are not new to the system*. At best we can say that charter schools are “using old stuff in new ways.”³⁶ More often, however, it seems that these schools are actually using old stuff in *old ways*. Educational historians David Tyack and Larry Cuban (1995: 7) have observed that: “Over long periods of time schools have remained basically similar in their core operation, so much so that these regularities have imprinted themselves on students, educators, and the public as the essential features of a ‘real school.’” Charter schools have been established with the expectation that they will serve as spaces for talented educators to experiment and try to find new ways to promote learning. Right now,

while some innovative things are happening in Michigan's charter schools, they do not appear to be the incubators of innovation that many would like them to be.

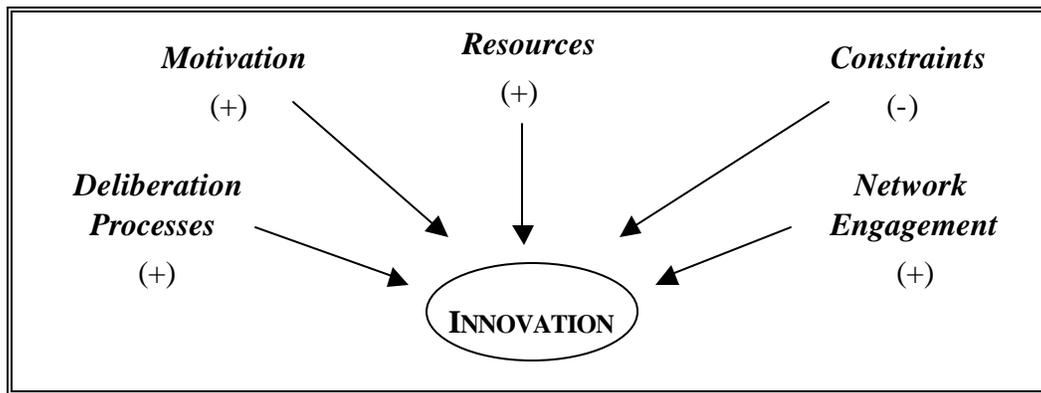
Viewed from the perspective of charter school opponents, these finding could be seen as casting serious doubt on the claim that these schools will serve to goad the broader school system to change. Since most of the schools are doing little that is distinctive from traditional public schools, what can anyone learn from them about best practice for school management and pedagogy that could not be learned from innovators within the traditional school system? This question deserves to be taken very seriously. But I also believe that a more positive response is called for at this time. That is to say, I think we should use the evidence presented in this study as a starting point for asking a broader question: What policy changes are needed to leverage charter schools and make them a truly valuable and exciting addition to the landscape of public schooling in Michigan? In answering this question, I continue to work within a comparative institutional framework, looking to assess the levers of innovation in all public schools, not just the charter schools.

The Levers of Innovation in Schools

Innovation within various types of organization has been the subject of a great deal of previous research. Over the years, scholars have identified a number of regularities across organizations that tend either to support or to stifle innovation.³⁷ These regularities can be summarized within five general categories, as presented in Figure 2. In considering the levers of innovation in Michigan's charter schools and traditional public schools, I sought to examine a set of specific factors that individually correspond to one of these five general categories and that collectively cover them all. Using information from the two surveys conducted for this study as well as information on school enrollments, finances, and average student performance on standardized tests, I considered the relationship between these factors and levels of innovation in the group of 40 charter schools, 32 urban public schools, and 18 suburban schools whose principals participated in the second survey for this study. Initially, I considered just the relationship between type of school and innovation across the five areas of school practice

(administration and management, use of technology, the promotion of parental involvement, curriculum, and instructional techniques). Following that, I focused more closely upon the relationship between the broader group of anticipated determinants of innovation and innovative practice with respect to the curriculum and instruction. Details of the regression analyses are presented in the Appendix to this report. Here, I discuss the main findings.

Figure 2: Determinants of Local Innovation



Each school was given an average scores for the “portfolio” of innovative practices it had adopted. Thus, a school that had adopted four curriculum innovations, with respective scores of 67, 65, 39, and 18 would receive an average curriculum innovation score of 47.3. Such scores were calculated for each area of policy and practice: administration and management, curriculum, instructional techniques, use of technology, and efforts to promote parental involvement.

Motivation All other things being equal, an organization that must compete with others to maintain a loyal client base is likely to be motivated to continually improve the quality of the services that it provides.³⁸ In the case of schools, charter schools are expected to be more motivated to innovate because they face pressure to attract and maintain a viable body of students. However, the presence of charter schools is also expected to motivate traditional public schools to improve their performance, given that they now must compete for students.

As a group, charter schools received higher average innovation scores than traditional public schools. This finding held across four of the five categories of practices examined. The

exception was use of technology, where changes have been occurring at about the same level across all schools. But while charter schools received higher average innovation scores than traditional public schools, the differences across school types were relatively modest. (The differences were never more than 8 points.) Thus, it could not be said, for example, that charter schools are twice as innovative as traditional public schools. Such a claim would imply that while most traditional schools received average innovation scores of around 30, charter schools received average scores of about 60. In this study, no matter the category of practice, the average score for traditional schools was indeed around 30. The average score for charter schools was around 35.

The presence of charter schools has not produced generally discernible ripple effects in the practices of the schools around them. For the most part, the matched urban public schools in the sample -- which are supposedly subject to direct competition for students from charter schools -- are not systematically changing their practices to respond to the competitive threat. There is one exception. The urban public schools appear to be more innovative than their suburban counterparts in their efforts to innovate in their instructional practices. Typically, however, the urban public schools in the sample do not receive higher average innovation scores than the suburban public schools in the sample. (The suburban schools in the sample are not subject to direct competition from charter schools, because none have charter schools within their school districts.)

While the close analysis of individual policies and practices presented earlier provide evidence of traditional public schools seeming to adopt a handful of innovative policies in response to the presence of charter schools, the overall evidence is that there have been few, if any, significant ripple effects from charter schools.

Aside from the motivations to innovate that are faced by different types of schools, there are other potential motivations that affect all schools in similar ways. One is performance on standardized tests. I found that poor performance on standardized tests is associated with greater effort to innovate in curriculum and instruction but the effect is not especially strong. For example, schools where the average performance deficit is 60% (i.e., only 40% of students

typically pass the tests) typically have innovation scores about 1.5 points higher than schools where the deficit is 20% (i.e., where 80% of students typically pass the tests).

These findings regarding motivation suggest that when schools are made explicitly aware of “the bottom line” in what they do, they will respond appropriately. Perhaps this is a key for thinking about future ways to encourage schools to try new approaches to improving the educational opportunities they provide to students and their families.

Resources A common finding in the literature on organizational innovation is that large organizations tend to be more innovative. In a period when small start-up firms have been gaining a great deal of popular attention as engines of innovation in the realm of software design and internet commerce, this finding might appear odd. It seems almost conventional wisdom at present that large organizations are stogy, and poorly equipped to innovate.³⁹ But what large organizations have in their favor is the availability of resources that, at least at the margin, can be rapidly redeployed for use in developing and adopting innovations. I considered the effects of school operating budgets and student enrollments on innovation in curriculum and instruction. The model results consistently show that resources do not have any significant effect on innovation in these areas of school practice. Of course, greater access to resources could support innovation in many instances of educational practice. But in the limited set of instances considered here, resources were not found to matter. Any positive relationship between resources and innovation that might otherwise have been apparent is likely to have been canceled out in this study because Michigan’s charter schools often operate on less funding than traditional public schools in the state yet they are doing more innovative things right now.

Constraints The centralization associated with the traditional system of managing public schools through a district office is often seen as curtailing opportunities for personnel at the school site to make policy changes and improvise with practice in ways that better suit the local conditions. Given this argument, I wanted to assess whether centralized management serves to constrain innovation in schools, expecting that it probably does. As well as claiming that centralized management serves to stifle innovation, proponents of charter schools also often express the view that school-level decision-makers are constrained by other barriers. Frequently mentioned barriers to change include teacher unions and various state and local

regulations. In testing for the effects of these constraints, I found that they do not seem to have a bearing on propensity to innovate with the curriculum. However, instructional innovation is more likely to occur when schools are freed from centralized financial and management control. This makes sense given that many innovations in instructional technique would require the reallocation of resources at the school site. (For details concerning the types of practices I am referring to, see Table 7.) While intransigence on the part of school district officials, union leaders, and teachers, or intrusive regulations and “red tape” are often claimed to serve as barriers to change in schools, in this study their presence or absence was not found to make a difference to the propensity of schools to innovate.

Deliberation Processes In many situations, such as the workplace and various social organizations, participants often have a range of views about what could be done to make the place better.⁴⁰ However, not all stakeholders typically get to express their views on desirable directions for organizational policy and practice. In the case of schools, it seems plausible that the more inclusive the decision-making process, the greater the likelihood that ideas will emerge that prompt the development and adoption of innovative policies. In this study, I found that higher levels of curriculum innovation occur when schools make use of inclusive processes of deliberation. To see the relative importance of this factor, it is useful to bear in mind that, other things equal, the difference between charter schools and traditional public schools produces a difference of 3.9 points in average curriculum innovation scores. Under quite plausible conditions, it is possible to find deliberative inclusiveness producing an increase in the innovation score of 6.7. The implication of this finding is that encouraging school leaders to become more consultative in their decision-making could have effects on the introduction of curricular innovation that are larger than the effects associated with the creation of charter schools.

Network Engagement Just as I expected that inclusiveness in deliberation processes would increase the likelihood of a school developing and adopting innovative practices, I also expected that propensity to innovate would be influenced by the nature of the external contacts that school personnel have. Various studies have found evidence of strong relationships between the network engagement of individuals and innovation within the organizations they are associated with.⁴¹ Given this, I expected that interactions with others engaging in local

experimentation and the pursuit of innovation would lead school personnel to be more inclined to innovate themselves. However, network engagement with charter schools was not found to have an effect on innovation with respect to the curriculum or instructional techniques. With respect to curriculum innovation, network engagement with traditional public schools is found to have a negative effect on innovation. The effect is not especially strong. Typical levels of network engagement between a school and other traditional public schools is expected to reduce the average innovation score by about 1.5 points. However, the implication is that the conventional wisdom among members of the traditional public school community serves as a brake on innovation. Meanwhile, perhaps because there is not much networking going on among charter schools or between charter schools and traditional public schools at present, no equivalent network supportive of innovation presently exists. I will discuss this issue further in a subsequent section.

From the regression findings, it appears that the factors that support the propensity of a school to innovate differ across areas of school policy and practice. To the extent that different factors are more or less important for different kinds of innovation, attempts to make general claims about the precise factors shaping innovation become all the harder. This does not invalidate the contention that innovation will be affected by motivation, resources, constraints, deliberative processes, and network engagement. But it does suggest that each of these factors will be more or less important in any particular instance. For now, we might conclude that the levers of innovation in Michigan's schools include motivation, lack of constraints, and deliberation processes. Network engagement currently does not appear to be supporting innovation.

Policy Initiatives for Experimentation by Design

While Michigan's charter schools are currently engaging in some innovation, given all the hoopla and high expectations associated with their emergence, what they are actually doing is somewhat disappointing. A need exists for policy changes that will prompt charter schools to become truly valuable and exciting additions to the landscape of public schooling in Michigan. The analysis presented above provides some hints of the sort of policy changes that might be most effective in this regard. At present, it does not appear that charter schools are being unduly constrained by aspects of their organizational environment. Also it does not appear that lack of resources is inhibiting innovation. (Of course everyone would like more resources and certainly if more resources were made available they could probably be well employed to promote greater innovation in schools.) For these reasons, my suggested policy initiatives focus upon three levers of innovation: motivation, deliberative processes, and network engagement.

Motivation The modest degree to which charter schools are currently more innovative than traditional public schools can be explained by their need to attract and maintain a viable student body and by the need to improve student test scores. In each case, the charter schools have been made well aware of "the bottom line" and how they will be judged. When faced with clear goals and given strong incentives to meet them, people and organizations typically respond in appropriate ways. For this reason, it seems reasonable to expect that if charter schools were given more encouragement to develop and adopt innovative practices then they would do so.

Rather than impose requirements upon schools that often already feel beleaguered by official oversight and public scrutiny, I believe that an incentives-based approach to promoting local innovation would be appropriate. Over recent years, Michigan's charter schools have been encouraged to write grant proposals to the Michigan Department of Education to receive categorized, federal funding for such things as the purchase of computers. This system does not appear to have been too burdensome on schools, and most have applied for funding in this way. Using this model, it would be possible in the future for the Michigan Department of Education to make "innovation grants" available through competitive applications.

Innovation grants could be supported by “innovation awards” for organizations that succeed in developing smart solutions to various problems in management and pedagogy. A useful model for awards of this sort is provided by the Ford Foundation’s annual Innovation in American Government awards. Part of the design of that awards program entails making funds available for the dissemination of information on the winning programs and projects.⁴² At present, the Michigan Association of Public School Academies makes annual awards to charter schools for their achievements. This is a step in the right direction. The system I am proposing would augment that. It would be a very good thing if more private and public prizes and grants were made available to schools to support and to recognize excellence in student achievement and innovation in their practices.

Since innovation typically is not the product of isolated, backyard experiments, a program of innovation grants and awards would have to be carefully devised to encourage applications not only from individual schools but also from teams of schools, or from authorizing agencies, and management companies. In theory, a program of this sort could be used to encourage collaborative activities among and between charter schools and traditional public schools. Many possibilities for exciting programs could be devised. However, the most important point to remember is that in the absence of the right incentives structure, it is unreasonable to expect people to engage in experimentation by design.

Deliberative Processes My analysis of the determinants of innovation in schools provides some evidence to support the notion that higher levels of deliberation among stakeholders in schools increase the amount of innovation occurring within them. This finding is consistent with a large amount of literature concerning the merits of deliberation.⁴³ It is difficult to find ways to cajole people into becoming more inclusive in their decision-making processes if this is not something that they are used to. However, leadership training programs for school personnel could be used as sites for encouraging greater participation in decision-making. It is also possible that efforts to teach through example could be made by charter school authorizing agencies. As I will discuss below, some evidence of the positive facilitation role played by authorizing agencies and management companies is already available in Michigan.

Network Engagement Strengthening the ties among school leaders interested in innovation could prove extremely helpful for leveraging innovation in Michigan's charter schools. As I will discuss below, there is a serious need for greater encouragement of networking among schools at present. Since the charter schools that have adopted innovative practices have often learned of them from traditional public schools, it would seem appropriate to think of ways of constructing networks for innovation that bring in many members of the state's educational community, not just the leaders of charter schools.

Recommendation

Members of the charter school community should be given stronger incentives to devise, test, and document, innovative practices. Policymakers should think in system terms, looking beyond individual schools, to consider how a range of participants could help leverage local innovation in ways that promote better educational outcomes for all.

Current Opportunities for Innovation Diffusion

Among charter school proponents, the claim is often made that the presence of these schools will have salutary effects for the whole public school system. The argument is straightforward. Pressure to attract students combined with freedom from school district control and oversight is claimed to provide the incentives and the opportunities for charter schools to experiment with management and pedagogy to create enhanced educational opportunities for students. Of course, the presence in their backyard of these new up-start competitors is expected to goad traditional public schools to change their policies and practices, too. In short, establishing market-like conditions in the delivery of public schooling has been touted as a powerful means of addressing many apparently intractable problems in contemporary public schooling.

In Michigan, charter schools are indeed doing some new things. Further, there is modest evidence that some nearby traditional public schools have altered their practices in response to their presence. In this study the "ripple effects" due to competition among the

charter schools and the traditional public schools were found to be strongest with respect to changes in instructional techniques. But while some evidence has been found of changes in other areas of school policy and practice, that evidence is weak. It therefore seems reasonable to conclude that innovation diffusion is not happening in any systematic way at present. In fact, a quite convincing argument could be made that the flow of innovations has gone from traditional public schools to the charter schools. For supporters of charter schools, this situation should be viewed as problematic. It seriously undercuts the argument that these schools, and market-like competition, will improve the general state of public education.

To gain more understanding of the nature of the interactions that currently exist among members of the educational community in Michigan, in the first survey for this study the 272 school principals who participated were asked who they talk with about school policy and practice. In a series of questions, the principals were asked to estimate the number of face-to-face and telephone conversations about school policies and practices that they have each semester with a range of actors in the educational community. The responses are summarized in Table 10. The evidence in this table clearly shows that the principals of charter schools and the principals of traditional public schools do not believe they have much to talk about. This lack of communication between the charter schools and the traditional public schools supports my earlier claim that, while proximate, these different types of school operate in near-separate universes.

In many ways, the separation between charter schools and traditional public schools in Michigan can be attributed to the kind of mutual suspicions and jealousies that often arise among competitors. This separation also underscores the point that market-like competition among providers of human services need not always have positive consequences. Competition may well serve to motivate efforts to innovate (although the evidence for that in the case of Michigan's charter schools is rather thin.) But such positive consequences must be weighed against the negative ones. In situations where cooperative effort is needed to address critical problems, petty competition for resources will often be counter-productive. Studies of how innovation has occurred across a range of industries provides compelling evidence that

motivation to succeed is a necessary but definitely not a sufficient condition for promoting invention and innovation.⁴⁴

Aside from showing that there is little communication between charter schools and traditional public schools in Michigan, the evidence in Table 10 also reveals that, relatively speaking, charter school principals do not engage each other much as a community. On average, principals of traditional public schools talk among themselves a lot more than do principals of charter schools. This evidence suggests that right now some charter schools are willfully isolated backwaters of educational practice. While such schools are “free” to be isolated in this way, it would be a cause of serious concern if all schools acted like this. By definition, education requires continual learning from and engagement with the outside world. Schools engaging in willed isolation serve neither the local nor the broader public good. Thus, to the extent that charter schools can engage in such activity, they serve to undermine any potential good that this approach to educational delivery could produce.

It is important to recognize the problem of isolated schools as having system-level antecedents, and hence that it is a problem of policy design. The evidence presented in Table 10 confirms that there currently exists little in the way of professional networks within the charter school community that can serve as conduits for the sharing of ideas and discussion of innovative practices. Given the considerable evidence from the literature on the diffusion of innovation that adoption typically occurs after personal contacts between previous adopters and would-be adopters, this lack of communication should be cause for concern. But evidence in the table as well as evidence derived from further analysis of who talks to who does suggest ways that this concern might be addressed.

Table 10: Talking About School Policies and Practices

Average Number of Conversations Principals Have Each Semester With:	School Type		
	<i>Charter</i> <i>n = 101</i>	<i>Traditional</i> <i>n = 105</i>	<i>Suburban</i> <i>n = 66</i>
Principals of Charter Schools	11.1	1.4	0.3
Principals of Public Schools	6.0	23.9	23.8
Principals of Private Schools	3.2	1.7	1.2
Local School District Representatives	11.2	37.0	39.6
Intermediate School District Representatives	19.4	9.6	8.2
Authorizing Agency Representatives	17.8	--	--
Michigan Department of Education Officials	12.6	2.7	2.2
Specialists/Consultants	14.9	4.4	1.8
Academics	8.6	8.5	5.9

Policy Initiatives for Leveraging Local Innovation

The problem of how to prompt charter schools to experiment more with pedagogy and management and the problem of how to engender broad, system-wide improvement in educational quality are closely related. When schools lack information on what is occurring elsewhere, and when no formal mechanisms exist to support discussion of ideas and innovative practices, inevitably any efforts to engage in innovative practice will be isolated and somewhat random occurrences. Within such a system, schools that innovate in their practices might indeed prompt other schools to innovate. But there is simply no guarantee that this will happen. In the top section of Figure 3, I present a way of characterizing the current situation with regard to innovation in Michigan’s schools. In this figure, School B and School C are shown to interact with each other. Therefore, if the decision-makers in School B decide to develop or adopt a variety of innovative practices, it is possible that through their interactions with School B, those in School C will also decide to become more innovative. But even if Schools B and C ended up both being more innovative than they once were, other schools would not learn of this. In particular, in the figure, if School A happens to be a backwater of educational practice, nothing about the system is likely to change that. The impetus for change would have to come from the

school leaders themselves. If they were not interested in changing their practices, however, nothing would happen.

With the introduction of market-like competition among schools, communication from school to school might well decline rather than increase. While centralized management of schools through district offices might impose a degree of conformity upon schools (although this need not necessarily be the case), such centralization does ensure that schools cannot become too isolated from the broader educational community. My contention is that Michigan's charter schools could become more valuable additions to the whole public school system if a centralized mechanism were established to facilitate the exchange of information across schools. Such a mechanism would ensure that schools do not become isolated from the broader system. More importantly, it is likely that a formal mechanism of this sort would encourage greater levels of informal exchange among schools.

Some low-key but important efforts have been made in Michigan to establish mechanisms for supporting information exchange across charter schools. For example, as an authorizer of charter schools, Grand Valley State University requires that the principals of all of the schools it sponsors must attend monthly meetings at the university campus to discuss general issues and common problems. As well as this, National Heritage Academies, a management company with a fast-expanding group of schools in the state, also calls regular meetings of school principals. From conversations with principals who have attended these meetings, I have gained the impression that the principals find them to be very helpful. Evidence from the survey responses further indicates that meetings of this sort have a catalytic effect, leading the principals concerned to have conversations among themselves to a much higher degree than is found when such formal mechanisms are not present. On average, principals from charter schools authorized by Grand Valley State University reported having about 50% more conversations with other principals each semester than their counterparts who were authorized by Central Michigan University. Even more impressively, principals from the National Heritage Academy schools reported having well over twice as many conversations with other principals each semester than principals whose schools either do not use management companies or use management companies that do not organize regular meetings of principals.

Evidence is also available showing that interactions between the principals of charter schools and principals of traditional public schools can be encouraged by design. While most charter schools in Michigan are authorized by universities, an increasing number have come to be authorized by school districts and intermediate school districts (ISDs). Responses to the survey questions regarding conversations about school policies and practices indicate that when charter schools are authorized by school districts or ISDs, their principals typically have over 60% more conversations with principals of traditional public schools than their counterparts in schools authorized by public universities.

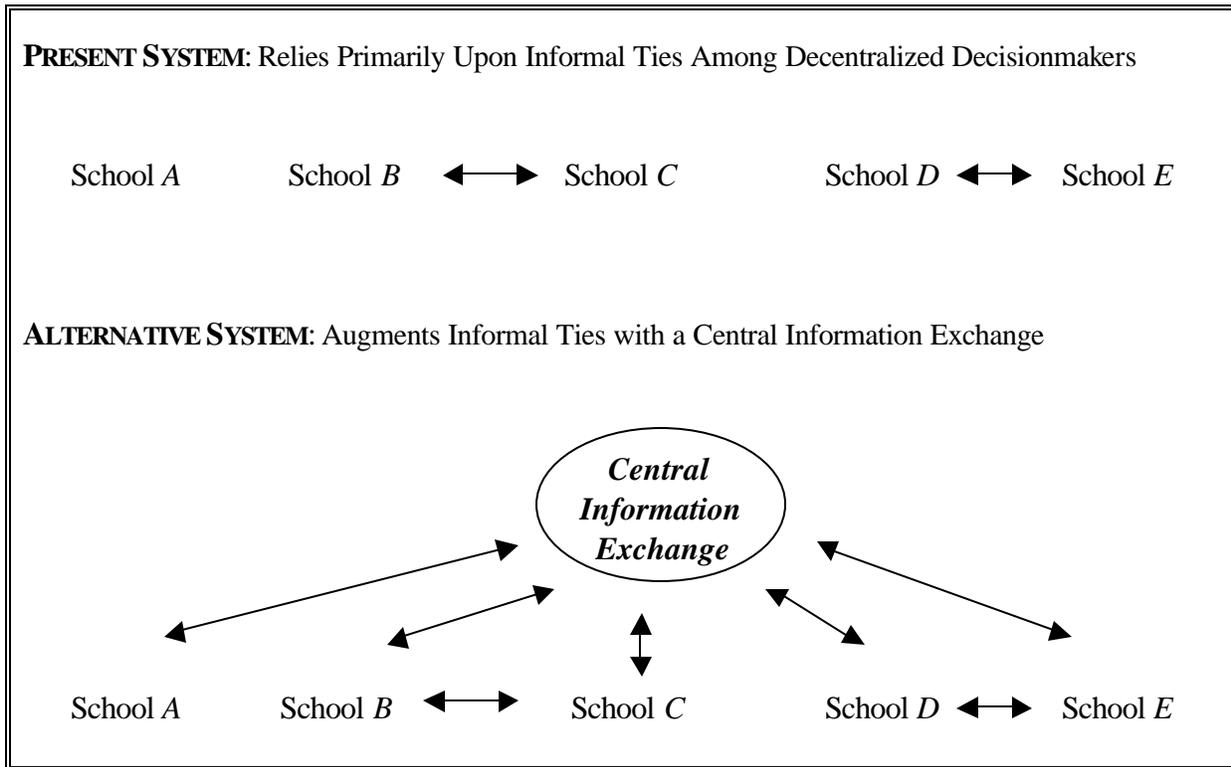
The information presented here suggests that the currently low levels of communication among charter school principals and the even lower levels between the principals of charter schools and traditional public schools are not inevitable. It is entirely possible to promote greater levels of communication and, indeed, this is happening in some instances. For this reason, I contend that policy changes should be made to support greater levels of discussion about school policies and practices among charter school leaders and between the personnel in charter schools and those in traditional public schools. This would involve creating some kind of central information exchange to facilitate greater discussion about educational innovation. The idea is summarized visually in the bottom section of Figure 3. The exchange could be established to link both charter schools and traditional public schools. The purpose of such a mechanism -- or set of mechanisms -- is not simply to promote talk for talk's sake. Rather, it would be designed to encourage the development of a greater number of strong and weak network ties among schools. These ties could then become the conduits for transfer of ideas and knowledge about local innovations. Information could also be introduced to the system from the top down, as efforts are made to raise awareness within Michigan of emerging best practices in schools in other places both in the United States and other countries.

The key to the success of a system to promote greater information exchange is the incentives under which both the central actors and the local actors (the schools) operate. This is a lesson that was learned long ago by pioneers in the use of business franchises. One of the organizational innovations introduced by Ray Kroc in the early days of McDonald's restaurants involved setting up the franchise agreements so that both the local restaurant owners (the

franchisees) and the central company (the franchiser) faced strong incentives to share information for the benefit of everyone concerned. As George Ritzer (1996: 31) has observed: “McDonald’s achieved a balance between centralized control and the independence of franchisees. Though Kroc imposed and enforced a uniform system, he encouraged the franchisees to come up with innovations that could enhance not only their operations but also those of the system as a whole.” Of course, I do not mean to imply that education and fast food are equivalent “commodities” or that the “innovations” at McDonald’s have done wonders for American cuisine. The point is that where innovation within a broader system is desired, figuring out a balance between the incentives faced by all the actors involved is critical.

In Michigan at present, by default the introduction of charter schools seems to be encouraging those with good ideas for innovation to act like misers, keeping the ideas to themselves. The challenge for policymakers involves adjusting the rules of the system so that ideas for innovation are quickly made available for broader discussion and critical scrutiny within the public school community.⁴⁵

Figure 3: Augmenting Inter-school Information Flows with a Formal Mechanism



Recommendations

State funds should be allocated to establish a central administrative unit capable of on-going monitoring of charter school practices, facilitation of learning across school sites, and provision of advice to local decision makers such as school boards and principals.

Where possible, effort should be made to introduce these new functions in ways that build upon positive current practices and that avoid disruptions or the imposition of additional burdens on the school personnel concerned.

Effort should be made to increase interactions and develop a sense of cooperation across the *whole* educational community in Michigan. Like members of the charter school community, members of the traditional public school community should be encouraged, through incentives, to devise, test, and document innovative practices.

Conclusion: The Great Leap Forward

The introduction of charter schools in Michigan and elsewhere has created opportunities for educators in publicly-funded schools to experiment with management and pedagogy, “customizing” what they do to fit the specific needs of their students. In this way, charter schools hold the promise of developing innovative practices that could potentially be adopted by others in the broader public school community. This report presented evidence on what is happening in Michigan’s charter schools and the effects that charter schools are having on the traditional public schools around them. From this evidence, two conclusions can be drawn.

- First, Michigan’s charter schools are doing slightly better than traditional public schools in their efforts to adopt innovative practices. But, with a few exceptions, the innovations adopted to date are fairly unremarkable. Most have been known of and in practice for quite a while in at least some of the state’s traditional public schools.
- Second, even where charter schools appear to be leading the way in the adoption of innovative practices, principals in Michigan’s traditional public schools have shown little interest in changing what they do in response.

Given these findings, critics of charter schools might well ask whether their introduction has been worthwhile. Since the “innovations” that have been adopted in charter schools have typically been already known of within the broader public school system, it seems fairly obvious that “competition” and “freedom from bureaucracy” have been over-blown as mechanisms for improving the general quality of public education. The conclusions I draw are somewhat different. In my view, Michigan’s charter schools are doing as well as they could be expected to, given the design of the system in which they operate.

A big part of the story of why Michigan’s charter schools are not especially innovative and why they are not producing much in the way of “ripple effects” has to do with the anti-government sentiments of charter school advocates.⁴⁶ A common belief among many advocates of market-like reform is that decentralization of decision-making, competition among suppliers, and government in abeyance are the ingredients of more effective delivery of public services. But all markets are facilitated by carefully-designed government actions and the task for policy-

makers is to find ways to get that balance right. Ignoring that point can have disastrous consequences.

Many instances can be found in world history of policy design being guided by ideological nostrums rather than relevant knowledge of what approaches work best, given available resources. In China during the 1950s and 1960s, Chairman Mao Zedong, who was an advocate of decentralization, had a wonderful plan. As part of the Great Leap Forward, Mao insisted that communities make use of backyard steel furnaces. The logic was: Why spend millions building modern steel plants when steel could be produced for almost nothing in courtyards and fields? It soon became clear that the steel produced from backyard furnaces was of very poor quality and, to meet production quotas, many rural peasants went to extreme lengths, like melting down pots and pans and knives and forks. Nonetheless, to keep up the impression that Mao's ideas were sound, figures on steel production were routinely fudged and when Mao went on tours throughout the country the rough ingots he was shown, apparently the products of the backyard furnaces, had in fact been delivered from a modern factory.

I suggest that we treat this policy disaster as a parable. Among some policymakers in Michigan, the view is quite entrenched that centralized coordination has been the source of current problems in public schooling. I contend that this view is based on ideological dogma and ignores the many benefits that can come from combining appropriate forms of central coordination with appropriate forms of decentralized decision-making. More importantly, rather than energizing the charter school movement in productive ways, this view has in fact been detrimental to the charter school movement. It has resulted in missed opportunities to leverage charter schools to the advantage of the broader school system.

Having visited many charter schools in Michigan and analyzed a large amount of information about them, I believe further effort is needed to make these schools exciting additions to the landscape of public education. The effort I am suggesting would not require much in the way of additional resources. But it would require a recognition that greater centralized coordination is often useful for adjusting and fine-tuning systems that mainly rely on decentralized decision-making. To ensure that charter schools in Michigan reach their potential as truly innovative organizations, they must be given incentives to engage in experimentation by

design. If these schools are to contribute to system-level improvement of public schooling across the state, then serious effort must be made to facilitate more discussion across all schools about what does and doesn't work in public education. Establishing carefully-designed mechanisms to leverage local innovation would support such discussion.

Appendix: Regression Analyses

Introduction

In the section of the main text dealing with innovative school practices, I used simple descriptive statistics to show that the practices receiving the highest innovation scores tend more often to be found in Michigan's charter schools than in the state's traditional public schools. This appendix documents how I used regression analysis to further explore differences across types of school in their use of innovative practices. Taking this approach, I show how much more, on average, charter schools tend to use innovative practices compared with traditional public schools. This approach also allows me to perform a simple, analytically sound, test of the extent to which the presence of charter schools engaging in innovative practices has had "ripple effects" on the traditional public schools around them (the matched urban schools in the sample). Finally, the regression analyses presented here allow me to test how much factors other than competition among schools might influence their likelihood of adopting innovative practices. The other factors considered here each fall within one of the five general determinants of innovation represented in Figure 2 in the main text (i.e., motivation, resources, constraints, deliberative processes, and network engagement).

The key findings can be readily summarized.

- When schools are given average scores for the "portfolio" of innovative practices they have adopted, as a group charter schools receive higher average scores than traditional public schools. This finding holds across four of the five categories of practices examined: administration and management, parental involvement, curriculum, and instructional technique.
- While charter schools do receive higher average innovation scores than traditional public schools, the differences across school types are relatively modest. It could not be said, for example, that charter schools are twice as innovative as traditional public schools. Such a claim would imply that while most traditional schools receive average innovation scores of around 30, charter schools receive average scores of about 60. The results presented here suggest that, no matter the category of practice, the average score for traditional schools is indeed around 30. The average score for charter schools is around 35.
- The presence of charter schools has not produced generally discernible ripple effects in the practices of the schools around them. For the most part, the matched urban public schools in the sample -- which are supposedly subject to direct competition for students from charter schools -- are not changing their practices to respond to the competitive threat. There is one exception. The urban public schools appear to be more innovative than their suburban counterparts in their efforts to innovate in their instructional practices. Typically, however, the urban public schools in the sample do not receive higher average innovation scores than the suburban public schools in the sample. (The suburban schools in the sample

are not subject to direct competition from charter schools, because none have charter schools within their school districts.)

- A closer examination of the determinants of innovation with respect to curriculum and instructional techniques raises new issues concerning how innovation might be encouraged. Not surprisingly, the need to attract and maintain students does seem to motivate innovation. So too do deficits in overall school performance on test scores. These findings suggest that when schools are made explicitly aware of “the bottom line” in what they do, they will respond appropriately. Support is given for the claim that deliberative processes matter in supporting the adoption of innovations. Support is also given for the claim that network engagement matters. Resources do not seem to be the lever of innovation, at least in the case of the schools and the innovations considered in this study. Removal of constraints through, for example, the introduction of school-based management, appears to support efforts to innovate. But some of the often-claimed barriers to change, such as intransigence on the part of school district officials, union leaders, and teachers, or intrusive regulations and “red tape” do not seem to make a difference to the propensity of schools to innovate.

Average Innovation Scores

In the second survey administered for this study, school principals were asked both to judge the innovativeness of a range of policies and practices and to report which of those were currently in use in their schools. Typically, the principals reported that their schools had adopted a significant number of the innovations listed. Having calculated the innovation score for each practice, it is then possible to determine an average innovation score for a school in each area of practice. A school that was reported to be using six of the administrative practices listed would receive an innovation score for administrative practice that is simply the average of the individual scores for each practice. These average innovation scores for each of the 90 schools included in this part of the study were used as the variables to be explained in the regression analyses. Each average innovation score has a possible range lying between 0 and 100.

Administration and Management

The average scores in this category ranged from 13.0 to 50.5. The overall mean was 31.0. The mean for charter schools was 34.9; for the matched urban public schools the mean was 28.4; for the suburban public schools it was 26.9.

The Curriculum

The average scores in this category ranged from 18.0 to 53.5. The overall mean was 36.2. The mean for charter schools was 39.4; for the matched urban public schools the mean was 33.8; for the suburban public schools it was 33.2.

Instructional Techniques

The average scores in this category ranged from 17.3 to 39.4. The overall mean was 30.6. The mean for charter schools was 33.0; for the matched urban public schools the mean was 29.5; for the suburban public schools it was 27.2.

Use of Technology

The average scores in this category ranged from 21.0 to 44.0. The overall mean was 29.0. The mean for charter schools was 29.1; for the matched urban public schools the mean was 29.3; for the suburban public schools it was 28.1.

Parental Involvement

The average scores in this category ranged from 17.0 to 47.5. The overall mean was 28.0. The mean for charter schools was 29.6; for the matched urban public schools the mean was 27.0; for the suburban public schools it was 26.2.

School Type as Explanation of Innovation

Because they must compete to attract and maintain a student population, it was expected that charter schools would be more motivated to innovate in their policies and practices than traditional schools that are not subject to such pressures. In addition, starting out from scratch gives the people associated with charter schools the rare opportunity to “break the mold” of the past and make concerted efforts to adopt policies and practices that closely accord with their collective vision of how a school might offer rich educational opportunities for students. Because charter schools are anticipated to impose competitive pressures upon surrounding traditional public schools, it was also expected that urban public schools would be more motivated to innovate in their policies and practices than those public schools not subject to such pressures. The charter schools variable is dichotomous, where 1= charter school and 0 = not a charter school. The urban schools variable is likewise dichotomous, where 1 = urban public school and 0 = otherwise. Given this coding scheme, the comparative base group of schools is the suburban traditional public schools included in the sample. These schools are assumed not to be subject to competitive pressures like the charter schools and the matched urban public schools. Forty charter schools and 32 matched urban schools were included in the study, leaving 18 suburban public schools in the base comparison group.

Effects of School Type on Average Innovation Scores

Table A1 contains the results of six regression analyses that each employ just two explanatory variables: the dichotomous charter school and urban school variables. In Model 1, charter schools are shown to have average innovation scores for administrative and management practices that are typically 7.9 points higher than those for suburban public schools. In Model 2, charter schools are shown to have average innovation scores for parental involvement that are typically 3.4 points higher than those for suburban public schools. In Model 3, charter schools are shown to have average innovation scores for use of technology that are just 1 point higher than those for suburban public schools. Not surprisingly, since it is such a small difference, this finding is not statistically significant, meaning that the difference between school types here is probably zero. In all three models, the urban public schools are found to have average innovation scores that are substantively little different (i.e., 1.5 points or less) from those of suburban schools, and none of these differences are statistically significant.

In Model 4, charter schools are shown to have average innovation scores for curriculum practices that are typically 6.2 points higher than those for suburban public schools. In Model 5, charter schools are shown to have average innovation scores for instructional techniques that are typically 5.8 points higher than those for suburban public schools. In this model, urban public schools are shown to have average innovation scores that are typically 2.3 points higher than those for suburban public schools. This difference is small, but it is statistically significant. It is the only indicator of a systematic ripple effect in the practices of traditional public schools as a response to the presence of charter schools and the competitive pressures they are supposed to create. (For details, see Table A1.)

Two main conclusions can be drawn from these regression results. First, while the close analysis of individual policies and practices presented in the main text of this report provide evidence of traditional public schools seeming to adopt innovative policies in response to the presence of charter schools, the overall evidence is that there have been few, if any, significant ripple effects from charter schools. Second, while charter schools typically receive higher average innovation scores than traditional public schools, the differences across school types are small. The possible range of the innovation scores goes up to 100, but none of the schools in the sample reach much above 50 in their average innovation scores. Clearly, there is little innovation going on in Michigan's schools. Charter schools have the distinction of being somewhat more innovative than their traditional counterparts, but not greatly so. This raises the question of just how charter schools can be prompted to try out more innovative approaches to pedagogy and school management. The regression analyses reported in the next section were developed to help to address this concern.

Modeling the Innovation Process

The decision of a given organization to engage in innovative practices could be prompted and supported by a variety of factors. In the past, motivation, resources, and constraints have been identified as the main determinants of innovation (see, e.g., Mohr 1969).

However, use of information is also often critical for supporting the development and adoption of innovations. Therefore, I contend that we should also consider the deliberation processes at work within organizations and the nature of the network ties that link local decision-makers to others elsewhere faced with similar problems and issues. To explore the determinants of curricular and instructional innovation in schools, I continued to use the dependent variables and the school type variables introduced above. But I augmented these with a range of variables designed to capture differences across schools in the factors plausibly expected to affect innovation.

Motivation

Aside from the motivations to innovate that are faced by different types of schools, there are other potential motivations that affect all schools in similar ways. One is performance on standardized tests.

Test Scores Deficit For better or worse, how well the students in a school perform on standardized tests has become a major means by which the effectiveness of schools is judged. In Michigan, annual standardized testing is conducted by the state for students in a select group of grades and subjects. The percentages of students who performed satisfactorily on these tests are then reported for each school. Given that no effort is made to control for cohort effects (i.e., the students entering a particular school are just getting brighter every year) or general differences in student aptitude across subject areas, comparing these percentages across schools and from year to year is a rather imprecise way to judge the comparative quality of the educational opportunities that schools are offering. But pundits, politicians, and parents do this. To model how this judgment of schools might occur, given available information, I used a simple technique. Looking at the web site report cards produced for each school by the Michigan Department of Education, I took the average across all reported levels of satisfactory performance across all relevant grades across three years: 1996/97, 1997/98, and 1998/99. The resulting number gives a general sense of the overall performance of students in a school. I then determined how far this score was from the ideal of 100% satisfactory, to produce the test scores deficit number. For the 90 schools in this analysis, the variable has a mean of 49.8 and ranges from 10.9 to 91.4. I expected that the higher the deficit, the more motivated a school would be to engage in curricular and instructional innovations, with the goal of improving the quality of student learning and, in turn, average test scores. Source: Michigan Department of Education, Michigan School Report 1999.

Resources

Operating Budget It was expected that the larger the operating budget of a school the larger the amount of resources that, at the margin, could be allocated to the development and/or adoption of innovative policies and practices. This is measured using the Current Operating Expenditures (COE) per pupil, for the 1998/99 school year. The measure is of thousands of dollars per pupil. For comparability purposes, the COE do not include capital outlay or

community service expenditures which vary greatly from year to year. The Michigan Department of Education include these figures in their annually up-dated school report, which is designed to allow those who are interested to make comparisons across schools. For the 90 schools in this analysis, the variable has a mean of 4.15 (i.e., \$4,150 per pupil) and ranges from 0.627 to 7.882. Source: Michigan Department of Education, Michigan School Report 1999.

School Size Using the logic applied to considering school operating budgets, it was expected that the larger the student population of a school the larger the amount of resources that, at the margin, could be allocated to the development and/or adoption of innovative policies and practices. This is measured by student enrollments in Fall 1998. For the 90 schools in this analysis, the variable has a mean of 383 and ranges from 6 to 1,638. Source: Michigan Department of Education, Michigan K-12 Database, Pupil Headcount Data for 1999 (School Enrollments Fall 1998).

Constraints

Centralized Management A major claim made by proponents of charter schools and any other market-based approach to school reform is that schools need to be “freed” from centralized management. The centralization associated with the traditional system of managing public schools through a district office is often seen as curtailing opportunities for personnel at the school site to make policy changes and improvise with practice in ways that better suit the local conditions. Given this argument, I wanted to assess whether centralized management serves to constrain innovation in schools, expecting that it probably does. The second survey in this study included an item asking the principals if all important financial and management decisions are made at the school site. Based on responses to this question, a variable for centralized management was constructed. The variable is dichotomous, with a score of 1 meaning the school is beholden to centralized management and a score of 0 meaning that site-based management is in use. Of the 40 charter schools in the sample, 30 (75%) said they were using site-based management; of the 32 urban public schools, 15 (50%) said they were using site-based management; and of the 18 suburban public schools, 5 (28%) said they were using it. Consistent with these numbers, the variable has a mean of 0.45.

Perceived Barriers As well as claiming that centralized management serves to stifle innovation, proponents of charter schools also often express the view that school-level decision-makers are constrained by other barriers. Frequently mentioned barriers to change include teacher unions and various state and local regulations. The first survey in this study included a group of questions for school principals concerning barriers to change. The question asked: “In the past two years, when you have either proposed or implemented changes in policies, practices, or curriculum, how often were each of the following barriers to change?” To develop a variable capturing perceived barriers to change, I gave each school a score of 1 every time each of the following items was claimed to have been a barrier about half of the time or more: school district officials, union representatives, teachers, and parents. The variable could thus theoretically range from 0 through 4. I expected that the higher the score the lower the

likelihood that a school would adopt innovative practices. The variable's actual range was from 0 through 3 and the mean score was 0.7.

Deliberative Processes

Inclusive Board In many situations, such as the workplace and various social organizations, participants often have a range of views about what could be done to make the place better. However, not all stakeholders typically get to express their views on desirable directions for organizational policy and practice. In the case of schools, it seems likely that the more inclusive the decision-making process, the greater the likelihood that ideas will emerge that prompt the development and adoption of innovative policies. To test this expectation, I created a variable based on responses to a series of questions concerning school board decision-making processes that were included in the first survey for this study. Specifically, principals were asked: "When the school board is deciding school policy, typically how often is advice and input sought from the following individuals or group?" To develop a variable capturing board inclusiveness, I gave each school a score of 1 every time each of the following were claimed to always be consulted: the school principal, the teaching staff, parents, and students. The theoretical range of the variable was from 0 through 4. All else remaining equal, I expected that the higher the score the higher the likelihood that a school would adopt innovative practices. The variable's actual range was from 0 through 4 and the mean score was 0.92.

Inclusive Principal To get a further sense of the inclusiveness of deliberation processes in each school, in the first survey I asked principals how much they agreed with the following statements. (1) "Before making important decisions about school policies and practices, I always consult teachers and ask for their suggestions and comments." (2) High levels of parental and community involvement in deliberation and decision-making are important to the success of any school." (3) "I am strongly committed to shared decision-making in this school." (4) "Before making important decisions about school policies and practices, I consult parents and ask for their suggestions and comments." To develop a variable capturing each principal's views towards deliberative inclusiveness, I gave each school a score of 1 every time the principal responded that he or she strongly agreed with the statements. The theoretical range of the variable was from 0 through 4. I expected that the higher the score the higher the likelihood that a school would adopted innovative practices. The variable's actual range was from 0 through 4 and the mean score was 2.9.

Network Engagement

Just as I expected that inclusiveness in deliberation processes would increase the likelihood of a school developing and adopting innovative practices, I also expected that propensity to innovate would be influenced by the nature of the external contacts that school personnel have. The more that school personnel interact with others who are engaging in local experimentation and the pursuit of innovation, the more I expected that they themselves would seek to be innovators. The range of contacts that all the personnel in a school can have with the

outside world can quickly become vast. Given this, any variables designed to capture network engagement will necessarily provide fairly slim approximations to actual networking processes. In the first survey for this study, principals were asked to estimate the number of relevant conversations they have each semester with various different individuals. The question was: “In a typical semester, about how many telephone conversations or face-to-face conversations about school practices and policies do you have with... principals from nearby public schools... principals from nearby charter schools... etc.” Immediately after each estimate was given, the principals were asked the frequency with which they initiated those conversations.

Based on this information, I constructed two variables designed to reflect the nature of the ties that the school principals had to principals in public schools and principals in charter schools. Because there are probably diminishing marginal returns to the information obtained through endless conversations of this sort, I transformed the estimated number of conversations by taking the square root of the number of each sort of conversation. In addition, I gave more weight to ties based on reciprocity than those where, for example, the principals were always the receivers or always the initiators of conversations. Suppose that a principal claimed to have 16 conversations per semester with principals from nearby public schools. This would be transformed to 4 for the variable being constructed. If the principal said that he always initiated or never initiated, then the number 4 would be multiplied by 0.3 to produce a value of 1.2. If the principal said he initiated less than half the time or more than half the time, then the number 4 would be multiplied by 0.6 to produce a value of 2.4. If the principal said he initiated about half the time, then the value would remain at 4.

Networking with Principals of Charter Schools The variable ranges from 0 through 7.1 with a mean of 1.3. Because I knew that Michigan’s charter schools tend to be more innovative than traditional public schools in the state, I expected that, other things being equal, the higher the number of conversations with principals of charter schools, the greater the likelihood that the school would engage in innovative practices.

Networking with Principals of Traditional Schools The variable ranges from 0 through 7.1 with a mean of 3.1. Because I knew that traditional public schools tend to be less innovative in their policies and practices than charter schools, I expected that, other things being equal, the higher the number of conversations with principals of traditional public schools, the lower the likelihood that the school would engage in innovative practices.

Determinants of Curricular and Instructional Innovation

Table A2 contains the results of three regression analyses that each employ the full set of explanatory variables introduced above. Model 6 explores the determinants of curricular innovation. Model 7 explores instructional innovation. Thus, these models are simply expanded versions of Models 4 and 5 presented in Table A1. Several general points can be made regarding the results for these two models.

First, consistent with the results of Models 4 and 5, Models 6 and 7 each show charter schools as more innovative compared to traditional public schools. However, in these models, the differences between charter schools and their traditional counterparts are smaller than previously found. This change demonstrates that other factors besides motivation due to competition do affect the likelihood that a school will innovate. Second, poor performance on standardized tests is consistently found to be a motivation for innovation. The effect is not especially strong. For example, schools where the average performance deficit is 60% (i.e., only 40% of students typically pass the tests) are expected to have innovation scores about 1.5 points higher than schools where the deficit is 20% (i.e., where 80% of students typically pass the tests).

Third, the model results consistently show that resources do not have any significant effect on innovation with respect to the curriculum and instructional techniques. Of course, greater access to resources could support innovation in many instances of educational practice. But in the limited set of instances considered in this study, resources are not found to be a factor influencing innovation. Any positive relationship between resources and innovation that might otherwise have been apparent is likely to have been canceled out in this study because Michigan's charter schools often operate on less funding than traditional public schools in the state yet they are doing more innovative things right now.

Finally, network engagement with charter schools is not found to have an effect on innovation with respect to the curriculum or instructional techniques. In contrast, with respect to curriculum innovation, network engagement with traditional public schools is found to have a negative effect on innovation. The effect is not especially strong. Typical levels of network engagement with traditional public schools is expected to reduce the innovation score by about 1.5 points. However, the implication is that the conventional wisdom among members of the traditional public school community serves as a brake on innovation. Meanwhile, perhaps because there is not much networking going on among charter schools or between charter schools and traditional public schools, no equivalent network supportive of innovation presently exists. (For details, see Table A2.)

Model 6 shows that curriculum innovation is most likely to occur when schools make use of inclusive processes of deliberation. To see the relative importance of this factor, it is useful to bear in mind that, other things equal, the difference between charter schools and traditional public schools is found to make a difference in the average curriculum innovation score of 3.9 points. Consider a school where the board occasionally, but not always, consults with the principal, teachers, and parents regarding school policies. Such a school would receive a score of 0 for deliberation in the model. A school where the board always consults with the principal, teachers, parents, and students would receive a score of 4. This translates into a change of 3.3 points in the innovation score. Next, consider a school where the principal puts some value on decision-making inclusiveness, but is not strongly committed to it. Such a school would receive a score of 0 for this. In contrast, a school where the principal expresses very strong commitment to inclusiveness in deliberations would receive a score of 4. This translates into a difference of 3.4 points in the innovation score. Adding together these two scores for deliberative inclusiveness produces an increase in the innovation score of 6.7. The implication of this finding is that encouraging school leaders to become more consultative in their decision-

making would have larger effects on the introduction of curricular innovation than converting schools to give them charter school status.

Model 7 shows that instructional innovation is more likely to occur when schools are freed from the constraint of centralized financial and management control. This makes sense given that many innovations in instructional technique would require the reallocation of resources at the school site. (For details, see Table 7 in the main text.) While the level of absolute resources available does not have a statistically significant impact on adoption of instructional innovations, the coefficient for the school operating budget is positive. In the case of this kind of innovation, deliberation processes do not have any effect, while the network engagement variables have coefficients with the hypothesized signs, but they are not statistically significant.

Overall, the results of these expanded regression analyses show that the need to attract and maintain students seems to motivate innovation. So too do deficits in overall school performance on test scores. In combination, these findings suggest that when schools are made explicitly aware of “the bottom line” in what they do, they will respond appropriately. Support is given for the claim that deliberative processes matter in supporting the adoption of innovations. Support is also given for the claim that network engagement matters. Resources do not seem to be the lever of innovation, at least in the case of the schools and the innovations considered in this study. Removal of constraints through, for example, the introduction of school-based management, appears to support efforts to innovate. The coefficients of the variable designed to model perceived barriers (such as intransigence on the part of school district officials, union leaders, and teachers, or intrusive regulations and “red tape”) do have the hypothesized negative sign in each regression, but the effects are neither substantively nor statistically significant.

Models 6 and 7 produce contrary results with respect to the importance of deliberation processes. In Model 7, the effect is found to be in the negative direction, but the magnitudes are relatively small and the effects are not statistically significant. This finding serves to raise two issues.

First, it seems that the factors that support the propensity of a school to innovate differ across areas of school policy and practice. This conclusion can be drawn by comparing across the regression results presented in both Table A1 and Table A2. To the extent that different factors are more or less important for different kinds of innovation, attempts to make general claims about the precise factors shaping innovation become all the harder. This does not invalidate the contention that innovation will be affected by motivation, resources, constraints, deliberative processes, and network engagement. But it does suggest that each of these factors will be more or less important in any particular instance.

Second, the statistical results presented here are useful for highlighting tendencies across schools. Technically, none of the seven models presented here explain more than a modest amount of the variation across schools in their use of innovative practices. This weakness plagues much quantitative empirical work in the social sciences and is not unique to this study. For that reason, such work does not provide a basis for making strong claims about the nature of particular phenomena or how policies might be changed to improve matters. In the present study, a reasonable amount of clustering towards modal levels can be found both in the innovation variables and in several of the explanatory variables, such as the deliberation and

network variables. Such clustering makes it inherently more difficult to confidently estimate relationships among variables. Sometimes, the solution is to examine more cases, or to augment the quantitative empirical work with process tracing and other forms of detailed analysis using a small number of carefully chosen cases. Such efforts could be made in the future. The work presented here represents a good starting point for further efforts to refine research designs and work to improve our knowledge of the determinants of innovation in schools.

Summary

The regression results reported here provide some additional insights into what is happening with respect to innovations in policy and practice in Michigan's charter schools. As is the case throughout the report, the regression analyses are explicitly comparative in orientation, guided by the view that assessing charter schools can be meaningful only if done in tandem with the assessment of their traditional public counterparts. The results confirm that charter schools are somewhat more innovative in their practices than traditional public schools, but the differences are fairly modest. Thus, questions emerge concerning how charter schools can be prompted to be more adventurous in the kinds of policies and practices they adopt. The analysis of the determinants of innovation with respect to the curriculum and instructional techniques suggests that innovative practice could be supported by the development of stronger networks among experimenting schools and greater efforts to use local deliberation among stakeholders concerning school problems and potential solutions.

Table A1: Effects of School Type on Average Innovation Scores

Model:	<i>1. Administration</i>	<i>2. Use of Tech.</i>	<i>3. Parental Involve.</i>
Explanatory Variables:	Coefficients (Standard Errors)		
<u>School Type:</u> (Base = <i>Suburban</i>)			
<i>Charter</i>	7.92*** (1.11)	1.02 (1.00)	3.36** (1.58)
<i>Matched Urban</i>	1.46 (1.16)	1.28 (1.04)	0.83 (1.64)
<u>Constant</u>	26.93*** (0.93)	28.06*** (0.83)	26.2*** (1.32)
Summary Statistics:			
Observations, <i>n</i>	90	90	90
<i>F</i> (df = 2,87)	35.71	0.79	2.98
Pr > <i>F</i>	0.0000	0.4551	0.0560
Adjusted R ²	0.44	0.02	0.04

Model:	<i>4. Curriculum</i>	<i>5. Instruction</i>
Explanatory Variables:	Coefficients (Standard Errors)	
<u>School Type:</u> (Base = <i>Suburban</i>)		
<i>Charter</i>	6.23*** (1.47)	5.79*** (1.12)
<i>Matched Urban</i>	0.60 (1.52)	2.30** (1.16)
<u>Constant</u>	33.21*** (1.22)	27.22*** (0.93)
Summary Statistics:		
Observations, <i>n</i>	90	90
<i>F</i> (df = 2,87)	14.35	15.26
Pr > <i>F</i>	0.000	0.0000
Adjusted R ²	0.23	0.24

One-tailed test Pr(Coefficient = 0): ***<0.01, ** < 0.05, * < 0.10

Table A2: Determinants of Curricular and Instructional Innovation

Model:	<i>6. Curriculum</i>	<i>7. Instruction</i>
Explanatory Variables:	Coefficients (Standard Errors)	
<u>Motivation</u>		
<i>Competition:</i> (Base = <i>suburban</i>)		
-- <i>Charter Schools</i>	3.91** (2.16)	3.31** (1.64)
-- <i>Matched Urban</i>	0.17 (1.58)	1.83* (1.20)
<i>Test Scores Deficit</i>	0.04* (0.03)	0.04** (0.03)
<u>Resources</u>		
<i>Operating Budget</i>	0.01 (0.62)	0.30 (0.47)
<i>School Size</i>	0.00 (0.00)	0.00 (0.00)
<u>Constraints</u>		
<i>Centralized Management</i>	-0.33 (1.27)	-2.12** (0.96)
<i>Perceived Barriers</i>	-0.13 (0.73)	-0.27 (0.55)
<u>Deliberation Processes</u>		
<i>Inclusive Board</i>	0.82* (0.60)	-0.17 (0.46)
<i>Inclusive Principal</i>	0.85* (0.60)	-0.37 (0.46)
<u>Network Engagement</u>		
<i>With Charter Schools</i>	-0.05 (0.36)	0.14 (0.27)
<i>With Traditional Schools</i>	-0.47* (0.29)	-0.15 (0.22)
<u>Constant</u>	30.45*** (4.37)	27.8*** (3.32)
Summary Statistics:		
Observations, <i>n</i>	90	90
<i>F</i> (df = 11,78)	3.59	3.92
Pr > <i>F</i>	0.0004	0.0002
Adjusted R ²	0.24	0.27

One-tailed test Pr(Coefficient = 0): ***<0.01, ** < 0.05, * < 0.10

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End Notes

¹ Michigan's charter school law has been significantly altered over the years since 1993. However, the intent of the legislators who adopted the first charter school law was very clear. In Part B of the (now repealed) original law, P.A. 362 of 1993, the purposes of charter schools were listed as follows:

(1) To improve the public elementary and secondary schools of this state, public school academies may be established within this state's system of public schools, as provided under this part, as a means of achieving the following purposes:

(a) To improve pupil achievement for all pupils, including, but not limited to, educationally disadvantaged pupils, by improving the learning environment.

(b) To stimulate innovative teaching methods.

(c) To create new professional opportunities for teachers in a new type of public school in which the school structure and educational program can be innovatively designed and managed by teachers at the school site level.

(d) To achieve school accountability for pupil educational performance by placing full responsibility for performance at the school site level.

(e) To provide parents and pupils with greater choices among public schools, both within and outside their existing school districts.

(f) To determine whether state educational funds can be more effectively, efficiently, and equitably utilized by allocating funds on a per pupil basis directly to the school rather than through school district administration.

² See, e.g., Arsen, Plank, and Sykes (1999), Horn and Miron (1999), and Public Sector Consultants and Maximus (1999).

³ Hess (1999) provides a very thoughtful commentary along these lines. However, it should be noted that efforts to innovate are also endemic to private market organizations. It is not just public organizations that end up "spinning wheels." For a discussion of successful and unsuccessful efforts at "innovation" by competitors in the fast food industry, see Lubow (1998).

⁴ For more background, see Bierlein (1997), Hassel (1999), and Nathan (1996).

⁵ Throughout this report, I often refer to families as choice-making units. In so doing, I recognize that in contemporary political discourse the term "family" is loaded in a variety of ways. Decisionmaking arrangements differ across families/households and it would be unwise to assume that the choices emerging out of them necessarily reflect thoughtful and informed judgments concerning what is best for the children concerned, or that those choices will always better serve the interests of those children than choices that professional educators might recommend. For further discussion of this topic, see, e.g., Gutmann (1987), Lawrence-Lightfoot (1978), and Shapiro (1999).

⁶ Kolderie (1990, 1993) uses the term “exclusive franchise” as a way to emphasize that local school districts have been able to control the supply of public schooling, and thus act as local monopolists.

⁷ For comparisons of charter school laws across the United states, see Bierlein (1997) and Vergari and Mintrom (1998). The Center for Education Reform in Washington, DC, provides a frequently-updated and comprehensive website concerning charter school laws and their provisions. See: <http://www.edreform.com>.

⁸ For insightful discussions of accountability, see Donahue (1989) and Gormley and Weimer (1999). Hirschman (1970) provides an excellent overview of the issues associated with seeking accountability through exit and through voice.

⁹ Lindblom (1968) argues that, in combination, the clash of political wills over policy directions and the desire to reduce uncertainty about policy effects results in policy changes being made in incremental steps. Tyack and Cuban (1995) argue that as members of society are we beholden to a “cultural template” that shapes our definition of what a “real school” is like (p.9). In light of this, they argue that successful reforms are typically “structural add-ons” that do not disturb the standard operating procedures of schools (p.57).

¹⁰ The demographic figures in this paragraph were calculated by the author, based upon information contained in the Michigan Department of Education’s Michigan K-12 Database, Pupil Headcount Data for 1999 (State Enrollment Fall 1998, District Enrollments Fall 1998). The school size figures were calculated by the author based upon information contained in the Michigan Department of Education’s 1999 Michigan School Report. All these sources are available at the Michigan Department of Education’s website: <http://www.mde.state.mi.us/>

¹¹ More thorough information on Michigan’s charter schools can be found in several recent reports. For an excellent overview of charter school and school choice policy issues, the location of charter schools, and the effects of these schools on local districts, see Arsen, Plank, and Sykes (1999). This study is available on the Worldwide Web at: <http://ed-web3.educ.msu.edu/publications/>. For background on the politics of Michigan’s charter school movement, see Mintrom (1999). To date, the most thorough evaluation work on charter schools has been produced by third parties under contract to the Michigan Department of Education. See Horn and Miron (1999) and Public Sector Consultants and Maximus (1999). These studies are available on the Worldwide Web at: <http://www.mde.state.mi.us/>.

¹² This purpose is consistent with a claim made long ago by Milton Friedman in *Capitalism and Freedom* (1962). There, in a broadside against government informed by a strong belief in the merits of decentralized or individual decisionmaking and market competition, Friedman observed:

Government can never duplicate the variety and diversity of individual action. At any moment in time, by imposing uniform standards ... in schooling, road construction, or sanitation, central government could undoubtedly improve the level of performance in many local areas and perhaps even on the average of all communities. But in the process, government would replace progress by

stagnation, it would substitute uniform mediocrity for the variety essential for that experimentation which can bring tomorrow's laggards above today's mean (4).

¹³ See, for example, Cyert and March (1963), Ellison and Fudenberg (1995), and March and Olsen (1989).

¹⁴ Mohr (1969) presents an analysis of the determinants of innovation in organizations that suggests innovation to be a function of an interaction among the motivation to innovate, the strength of the obstacles against innovation, and the availability of resources for overcoming such obstacles.

¹⁵ I here follow Rogers' ([1962] 1995:11) definition of innovation.

An *innovation* is an idea, practice or object that is perceived as new by an individual or other unit of adoption. It matters little, so far as human behavior is concerned, whether or not an idea is objectively new as measured by the lapse of time since its first use or discovery. The perceived newness of the idea for the individual determines his or her reaction to it. If the idea is new to the individual, it is an innovation. ... "Newness" of an innovation may be expressed in terms of knowledge, persuasion, or a decision to adopt.

¹⁶ On these matters, see Tyack and Cuban (1995: 4).

¹⁷ For an excellent extended treatment of this topic, see Hess (1998).

¹⁸ This is precisely why, in *Politics, Markets, and America's Schools*, Chubb and Moe (1990) argue that too much democratic oversight can be deleterious for schools. Their proposed solution can be thought of as equivalent to having a system under which all schools are charter schools. Hill, Pierce, and Guthrie (1997) propose a similar solution to current problems, calling for "contract schools."

¹⁹ The quote is from Alfred North Whitehead (1925: 98). The longer passage from which this statement is drawn is also of relevance:

The greatest invention of the 19th century was the invention of the method of invention. It is a great mistake to think that the bare scientific idea is the required invention, so that it has only to be picked up and used. An intense period of imaginative design lies between. One element of the new method is just the discovery of how to set about bridging the gap between the scientific ideas, and the ultimate product. It is a process of disciplined attack upon one difficulty after another.

²⁰ Peters and Waterman (1982: 14) suggest that, among other things, excellent companies are "close to their customers." They continue: "These companies learn from the people they serve. Many of the innovative companies got their best product ideas from customers. That comes from listening, intently and regularly." In terms of relations between school leaders and teaching staff, Peters and Waterman also provide some insights from the corporate world: "The excellent

companies treat the rank and file as the root source of quality and productivity gain. They do not foster we/they labor attitudes....”

²¹ Popper (1961: 106) observed that “[a] science needs points of view, and theoretical problems.”

²² My comments here are closely informed by Hayek (1945).

²³ In discussing the general conditions under which technological breakthroughs occur, Castells (1996: 37) observes:

...[T]echnological innovation is not an isolated instance. It reflects a given state of knowledge, a certain availability of skills... an economic mentality to make ... application cost-efficient, and a network of producers and users who can communicate their experiences cumulatively, learning by using and by doing.... The interactivity of systems of technological innovation and their dependence on certain “milieux” of exchange of ideas, problems, and solutions are critical features.... [Emphasis in the original.]

²⁴ Hill, Pierce, and Guthrie (1997) contend that establishing a broad system of “contract schools” (operating much like charter schools) would allow promising innovative practices developed at the school level to rapidly spread across all schools. These authors assume that competition among schools will be sufficient to ensure diffusion. While some sort of decentralized control and a structure of incentives supporting experimentation to develop best practices is probably necessary for leveraging local innovation, I am not convinced that market-like competition alone is sufficient to ensure the diffusion of innovation. Some form of centralized coordination is probably also useful. I discuss this issue in more depth in a later section of this report.

²⁵ The primary access point to all this information is the Michigan Department of Education’s website: <http://www.mde.state.mi.us/>.

²⁶ Given that 101 charter school principals participated in the study, for the purposes of exact matching, the number of public school principals should also have added up to 101. In fact, 105 interviews were conducted because the surveying organization was told to interview traditional schools only after they had received agreement to participate from the principals in the matched charter schools. In four cases, the original agreement to participate did not eventuate in the completion of an interview. The response rate among matched traditional schools was somewhat higher than for charter schools. Where the principal of the originally-selected traditional school refused to participate, another school was selected using the same sampling method. The result is a dataset with 91 close-to-exact matches of charter and traditional schools by vicinity and grade level. In ten instances, the districts within which the schools lie match up but the grade levels are not exact matched. This reduction in cases for analysis is relevant only when the desire is to explore charter-to-traditional or traditional-to-charter lines of influence in changes in school policies.

²⁷ The smaller number reflects both the lower priority given to studying traditional schools in districts where charter schools are not present, and budgetary considerations.

²⁸ The results of the second survey provide very similar results. See the table in the following note. To the statement, “Parents can visit the school any time,” this was reported as current practice by principals in 95% of charter schools, 97% of urban schools, and 94% of suburban schools. To the statement “Parents are strongly encouraged to volunteer in classrooms or elsewhere in the school,” this was reported as current practice by principals in 85% of charter schools, 94% of urban schools, and 94% of suburban schools.

²⁹ The results of the second survey provide very similar results, as the table below reveals:

Innovation	School Type		
	<i>Charter</i>	<i>Traditional</i>	<i>Suburban</i>
Parents Can Visit the School at Any Time	95.0%	96.8%	94.4%
School Uses Parent Volunteers in Classrooms	85.3%	93.6%	94.4%
All-day Kindergarten	48.6%	31.0%	37.5%
Longer than mandated school day and school year	65.0%	22.6%	50.0%
Students Required to Learn a Foreign Language	47.2%	7.1%	11.8%
School Integrates Computer Use in Lessons	58.9%	83.3%	77.8%
Teachers required to participate in regular staff development programs	97.6%	87.1%	88.9%
The school has an improvement team which includes teachers and parents	85.4%	96.7%	94.4%
Teachers and the Principal frequently communicate with parents by phone or e-mail	90.0%	90.0%	94.4%

³⁰ In the survey, as it was administered, the open-ended questions about school distinctiveness preceded the closed-ended questions where particular innovations were read out and the principals were asked if they had adopted them in their schools.

³¹ The coefficient of correlation between the two ratings of the 61 practices included in the analysis (Pearson’s *r*) is 0.58, indicating a reasonably strong positive relationship between the system-level and school-level ratings and confirming that averaging these ratings to achieve an aggregate score for each policy and practice is appropriate. The coefficients of correlation between the 61 aggregate scores and the system-level and school-level ratings are 0.95 and 0.80 respectively.

³² The following table sets out the method of calculating the innovation score. The upper-most and lower-most rows of figures in the body of the table are used as anchors that ensure the innovation scores will lie at relative intervals between 1 and 100. (While the range from 0 to 100 could be used, conceptually this would make no sense because it would imply that something is judged innovative by its users but no one is using it.) Note that Column 4 inverts Column 3 but maintains the relative difference between the percentages in Column 3. Column 4 takes the sum of Columns 2 and 4. Column 6 divides Column 5 by 2 to ensure the final

innovation score is the average of the numbers in Columns 2 and 4 and it lies in the range from 1 (no innovation) to 100 (significant innovation).

	1	2	3	4	5	6
Item	Innovative (%)	In Use (%)	Use Rank	Score	Final	
<i>High Innovation Anchor</i>	<i>100</i>	<i>1</i>	<i>100</i>	<i>200</i>	<i>100</i>	
Practice A	70	5	96	166	83	
Practice B	50	15	86	136	68	
Practice C	30	25	76	106	53	
<i>Low Innovation Anchor</i>	<i>1</i>	<i>100</i>	<i>1</i>	<i>2</i>	<i>1</i>	

³³ Taken as a whole, the group of 272 school principals included in the study reported spending an average of around 50 hours per week attending to the six different types of tasks that they were questioned on. Charter school principals appear to spend slightly more time per week engaged in strategic thinking and talking with parents, but they spend a little less time on average dealing with instructional issues. In terms of dealing with routine administration and filling forms and records, their time use does not seem much different from that of their peers in traditional public schools, as the following table reveals.

How Principals Spend Their Time

Average Hours Per Week Principals Spend Attending To:	School Type		
	<i>Charter</i>	<i>Traditional</i>	<i>Suburban</i>
Routine Administration	13.0	13.2	16.8
Instructional Issues	8.7	11.3	9.4
Student Discipline	8.1	9.8	6.4
Strategic Thinking	7.5	5.7	5.7
Talking with Parents	6.1	5.4	5.4
Filling Forms and Records	5.6	7.7	5.5
Total Time:	49.0	53.1	49.2

When charter schools were divided into those that make use of management companies and those that do not, this apparent management innovation is seen to make *hardly any difference* to how charter school principals use their time. When a management company is used, principals spend slightly more time talking with parents and slightly less time is spent filling in forms and records. But these differences are minimal. The claim that using management companies allows charter school principals to spend more time on the real business of education while others take care of basic administration holds much appeal. However, these time-use

reports suggest that the use of management companies has done little so far in Michigan to revolutionize the day-to-day activities of charter school principals. (See the table below.)

Average Hours Per Week Principals Spend Attending To:	Type of Charter School	
	<i>Uses a Management Company</i> n=42	<i>Does Not Use a Management Company</i> n=58
Routine Administration	12.5	13.6
Instructional Issues	8.6	8.8
Student Discipline	7.9	8.4
Strategic Thinking	7.4	7.7
Talking with Parents	6.7	5.3
Filling Forms and Records	4.6	7.0
Total Time:	47.7	50.8

³⁴ The classic example is provided by McDonald’s restaurants, but in fact, franchising was pioneered in the late 1800s by the Singer Sewing Machine Company and has subsequently spread to become an organizational norm across a vast range of product and service industries. See Ritzer (1996).

³⁵ The Michigan Educational Assessment Program (MEAP) involves annual tests of 4th and 7th graders in mathematics and reading and 5th and 8th graders in science, writing, and social studies. The MEAP High School Test (HST) is administered annually to 11th graders for mathematics, science, reading, writing, and social studies.

³⁶ For a discussion of “using old stuff in new ways” as an approach to innovation, see Levin and Sanger (1994).

³⁷ For a review, see Rogers (1995, Chapter 10).

³⁸ Mowery and Rosenberg (1998) discuss the institutionalization of innovation in the United States during the twentieth century. Much of what they have to say about the development of the internal combustion engine, the chemical industry, electric power, and the electronics revolution supports the view that motivation (often prompted by war and the many problems it generates), resources, and lack of constraints are critical determinants of innovation. Hughes (1992, 1998) has employed the military notion of “reverse salients” as a metaphor for considering how organizations come to realize weaknesses in their activities, assess where the “critical problems” lie, and then put resources into solving them.

³⁹ For a recent discussion, see *The Economist* (1999).

⁴⁰ Ashford, Rothbard, Piderit, and Dutton (1998) discuss how a climate of openness and dialogue in organization provides encouragement for those with innovative ideas to speak up,

knowing they will receive a fair hearing. In a similar vein, March and Sevón (1988) argue that well-established informal lines of communication in organizations can be quickly activated in times of crisis to support dialogue concerning ways to address critical problems. Howell and Higgins (1990) discuss the strategies of “champions of technological innovation” in organizations, arguing that much of the effort to introduce innovation involves utilizing highly-developed interpersonal skills. Sutton and Hargadon (1998) discuss how efforts to institutionalize brainstorming groups can be supportive of idea generation and creative problem solving within organizations.

⁴¹ Rogers (1995, Chapter 8) provides a thorough overview of the literature on diffusion networks. Geletkanycz and Hambrick (1997) discuss how top executives improve organizational effectiveness by using their external ties to acquire relevant information. Granovetter (1973) provides a classic discussion of “the strength of weak ties” in helping actors acquire information concerning opportunities of possible value to them. Aldrich and Zimmer (1986) discuss the merits of network involvement for supporting entrepreneurship. Powell, Koput, and Smith-Doerr (1996) discuss the question of where exactly the locus of innovation lies in a period when a large amount of product development emerges through inter-organizational collaboration.

⁴² Since 1986, the Ford Foundation, through Harvard University’s John F. Kennedy School of Government, has made awards to select local, state, and federal programs that offer smart solutions to public policy problems. These highly-prized awards give prominence to the best innovations in government. Over 85% of the award-winning programs have subsequently been used as models by other government agencies.

⁴³ Especially relevant contributions include Forester (1999) and Mansbridge (1999).

⁴⁴ See, for example, Castells (1996: 37), Hughes (1992, 1998), Mowery and Rosenberg (1998), and Rogers (1995).

⁴⁵ Dorf and Sabel provide an extended discussion of what they term “A Constitution of Democratic Experimentation.” Their starting point for discussion is a review of the ways that firms have used teams of workers to combine general knowledge with their own local knowledge of problems, to come up with unique solutions. In the view of these authors, the model that ties local problem solving with the systematic reporting and pooling of findings could be transformative of politics and policy-making at the local level. They state:

These transposed problem-solving institutions... render public officials in each locale and the service providers they supervise accountable to the citizens, while affording the latter the chance to participate directly in practical deliberations concerning the matters that affect them. These same institutions, moreover, allow local jurisdictions to learn from one another. Arguments in any one jurisdiction, and the performance to which they lead, become considerations in the deliberation of similar jurisdictions (pp. 314-315).

Dorf and Sabel argue that community policing and some instances of environmental clean-up represent prefigurative forms of the sort of democratic experimentalism of which they write. I

believe that the charter schools movement, and public education in general, could be greatly served by the adoption of a carefully-designed system of democratic experimentalism.

⁴⁶ These sentiments are hardly idiosyncratic to policy-makers in Michigan. As Wills (1999) observes, the view that government is “a necessary evil” has been a constant theme within political dialogue in the United States since before the Declaration of Independence.