

Chapter Nine

Innovation

The charter concept, as discussed in Chapter 1, is predicated on an autonomy-accountability bargain. An important question for policymakers involves what charter schools actually do with their autonomy. Act 22 states that one goal of the charter school law is to “encourage the use of different and innovative teaching methods” [24 P.S. §1702-A(3)]. In this chapter we attempt to assess the innovativeness of practices in Pennsylvania charter schools. In doing so, we address the evaluation question pertaining to innovative and promising practices.¹ We are careful to use the word “attempt” because, as we shall see, conceptual ambiguities and data limitations restrict our ability to develop a precise evaluation of innovativeness.

The chapter begins with a discussion of the concept of innovation and how we have applied it in this evaluation report. We also discuss the data and methods used and some important limitations associated with them. The remainder of the chapter contains a topic-by-topic discussion of innovations in a number of areas of charter school practice:

- ❑ mission and target population
- ❑ school organization
- ❑ curriculum and instruction
- ❑ use of computers and technology

We end this chapter with a discussion on how the charter schools’ innovations impact their host districts, and the factors that facilitate or impede these impacts.

9.1 Conceptualization and Methods

On its face, the concept of innovation is quite straightforward. The root of the word derives from the Latin *novus*, which means new. An innovative educational practice, therefore, is any such practice that is new. However, a little thought reveals that the concept is fraught with ambiguities (Miron & Nelson, 2002). Indeed, how new must the practice be to be considered innovative? Must it be truly unique, or may it build on other practices? Perhaps innovations can consist

¹ As noted in chapter 1, the specific question is, “What are promising practices in charter schools that could be included in district systemic reform?”

of combining existing program elements in new ways or in finding new ways to implement and deliver existing program ideas. Finally, what is the frame of reference for assessing a practice’s innovative character: all schools or schools in a particular district?

Whether a given practice is innovative depends, in part, on the purposes at hand. Charter school advocates variously propose a number of purposes or ultimate goals for charter schools, each of which has different implications for innovation. In one view, charter schools are to be public education’s “R&D.” This statement of charter schools’ goals is consistent with a fairly ambitious view of innovation—the creation of truly unique practices that can be shared and perhaps emulated by a large group of schools. A more modest view of innovation is that charter

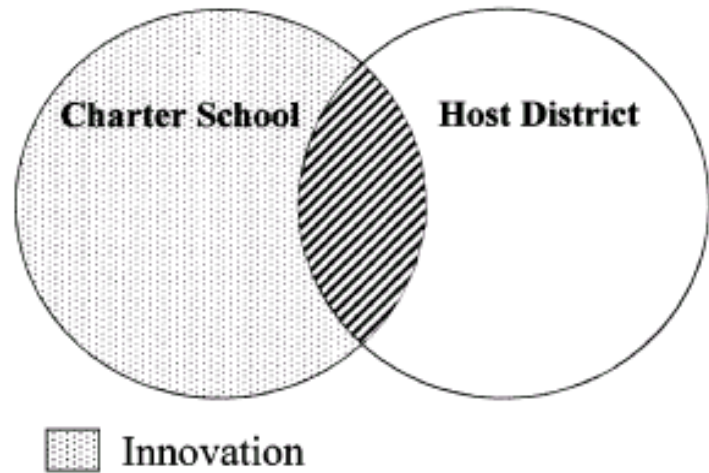


Figure 9:1 Charter Appeals Board Definition of Innovation

schools exist primarily to provide choice. If this is the case, then innovations must simply provide new options for students and parents in a particular geographic area. Hence, the bar is high on the former view and somewhat lower on the latter view. The Charter Appeals Board (see Chapter 4) has taken the narrower, second view of innovation. In a number of decisions,² the Board has stated that a charter school innovation is any practice or service not provided by the charter school’s host district. Figure 9:1 illustrates this definition of innovation using a Venn diagram. In the diagram, the range of programs offered by the host district is represented by the circle on the right, while the programs offered by the charter school are represented by the circle on the left. Innovation, in this diagram, consists in the part of the charter school circle that does not intersect with the host district circle. Moreover, the Board has ruled that whether a practice is innovative does not depend on how much overall overlap there is between host district and charter school practices (the intersection between the two sets). Neither is the extent of charter school offerings relevant in identifying innovations. In terms of the diagram, this means that the size of the charter school circle that does not

² See, e.g., Souderton Charter School Collaborative, CAB 1992-2; Phoenix Academy Charter School, CAB 1999-10; Sugar Valley Rural Charter School, CAB 1999-4; William Bradford Academy Charter School, CAB 1999-8; Vitalistic Therapeutic Center Charter School, CAB 1999-6; Hills Academy Charter School, CAB 1999-12; Phoenix Charter School CAB 2001-6.

overlap with the host district circle is irrelevant. The CAB's definition of innovation seems to clearly link the concept to the notion of school choice, as it focuses attention on the range of public school alternatives available in a given geographical area.

Both definitions have strengths and weaknesses. The R&D definition leaves open such questions as whether innovative practices can include new ways of combining or implementing preexisting practices. Also, it is unclear what the appropriate context of comparison should be (Miron & Nelson, 2002). Few, if any, charter school practices are likely to be new when one considers all education systems in the world. However, these practices might be innovative when compared with the experience of a particular nation or region. The definition is silent on these issues. The CAB definition has the important virtue of precision. However, one perhaps unintended implication is that charter schools with large host districts are less likely to meet the innovation criterion, since large districts usually contain schools that experiment with a wider variety of practices.

We consider the CAB definition, having been enunciated in an official board decision, as the authoritative definition and give more weight to it. However, given that we have been charged with developing recommendations on Pennsylvania's charter school law, we believe it would be remiss not to consider alternative definitions.

Most of the data used in this chapter come from annual reports submitted by charter schools to the Office of Educational Initiatives (OEI) and from interviews conducted with charter school CAOs and administrators. The report template asks schools to "list the unique aspects, features, or innovations of your charter school." Thus, data from the annual reports are subjective, since they rely on individual definitions of "innovation." They are also selective in that they rely on school officials' decisions about whether to report certain practices. As a consequence, we have resisted the temptation to quantify responses from the annual reports.

Another limitation to the annual report data is evident when we consider the CAB's definition of innovation, which requires explicit comparisons between charter schools and host districts. The annual reports provided by OEI contain no information on noncharter schools, nor are we aware of similar reports provided by host districts. In some cases we have used data from the school profiles on course offerings and other practices (e.g., full day kindergarten). However, these data are limited to simple yes/no responses and provide little opportunity for evaluators to assess the manner in which they are actually implemented.

These important data limitations, along with the conceptual ambiguities, leave us wary of making any clear pronouncements on whether and to what extent Pennsylvania charter schools are innovative. However, we hope to provide information that will be useful in making such judgments.

9.2 Mission and Target Population

One commonly cited way in which charter schools might be innovative is in their educational missions and philosophies. Pennsylvania charter schools provide a

wide range of educational choices that reflect a variety of pedagogical approaches or models. Most school missions reference a commitment to community-based education. Likewise, these schools vary according to the groups of students to which they cater: at-risk students, college preparation students, adjudicated youth. A number of charter schools serving students at the high school level focus on vocational/career programs or science and technology. Some have a rather specific focus, such as aerospace and aviation, architecture and design, or performing arts. Schools serving lower elementary grades often have a profile that focuses on character education. A number of schools have unique cultural or bilingual programs that are reflected in the whole school program.

Many Pennsylvania charter schools are innovative in that they include nontraditional grade groupings. As Table 9:1 illustrates, most schools (67 percent) utilize grade groupings that mix the elementary, middle, and high school grades. Twenty-nine percent of the schools, for instance, mix both elementary and middle school grades, while 18 percent mix middle and high school grades. Another 20 percent mix elementary, middle, and high school grades.

Table 9:1 Nontraditional Grade Groupings in Charter Schools, 2001-02

<i>Grouping</i>	<i>Number of Charter Schools</i>	<i>Percent of Charter Schools (N=76)</i>
Elementary & middle school	22	28.9%
Middle school & high school	14	18.4
Elementary, middle, & high school	15	19.7
Total	51	67.1

Note: Elementary grades include kindergarten through grade 6; middle school grades include grades 7 through 9; high school grades include grades 10 through 12.

9.3 School Organization

As we saw in Chapter 3, Pennsylvania’s charter school law grants considerable autonomy to the schools in matters of organization. Thus, another way in which charter schools might be unique or innovative is in their structure and organization. First, charter schools are often characterized as smaller and more attuned to the individual student than noncharter public schools. Enrollment data do suggest that Pennsylvania charter schools are, on average, smaller than the Commonwealth’s noncharter public schools. As of the 2001-02 academic year, the median charter school enrolled 280 students, compared with approximately 540 for noncharter public schools. However, there is considerable variation among charter schools, with some schools reporting enrollments as low as 23 and as high as more than 2,000 students during the 2001-02 academic year. Interestingly, there appears to be a trend toward larger charter schools. While the schools opened during each year since the law’s inception have included both small and large enrollments, the median enrollment has increased. However, many charter schools start with only a few grades and then add a grade each year, thus

contributing to the trend of growing charter schools. Furthermore, it is interesting to note that the median charter school enrollment in Pennsylvania is considerably larger than the national median of 137 (RPP International, 2000).³ Thus, while charter schools may be distinguished from noncharter public schools in terms of size, the differences appear to be narrowing somewhat.

Another way in which charter school organization might be unique is in class size. Surveys administered during the 2001-02 academic year indicated that small class sizes were an important factor leading teachers to seek employment at a charter school. Figure 9:2 demonstrates that this expectation is largely borne out in the schools, since charter schools typically have more small classes and fewer large classes than noncharter public schools. Specifically, 62 percent of all charter school classes during the 1999-2000 academic year had 20 or fewer students, compared with 35 percent in noncharter public schools, a statistically significant difference ($p < 0.01$). As before, there is considerable variation among charter schools, with several schools reporting no classes with 20 or fewer students and others reporting that all of their classes are small. Most charter schools did not report class size information for the 2000-01 and 2001-02 academic years.

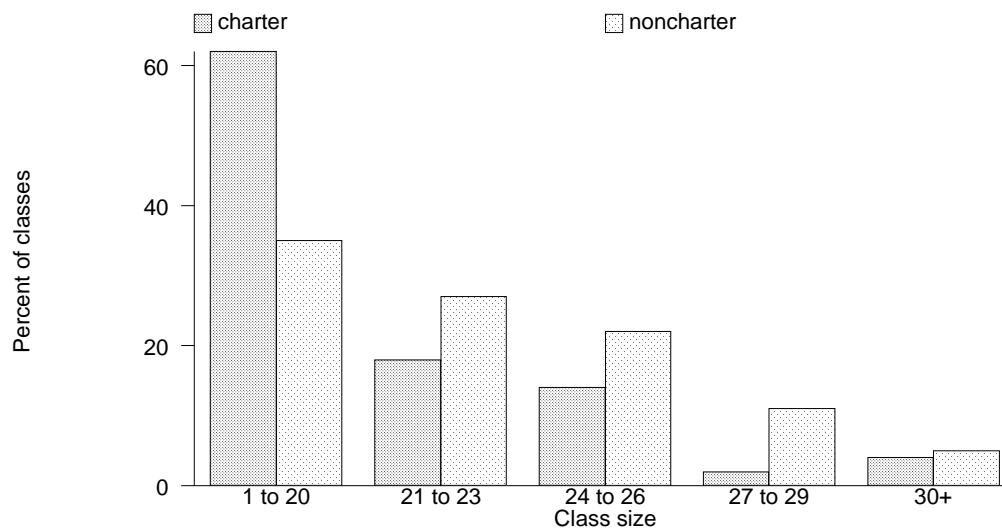


Figure 9:2 Average Class Size in Charter and Noncharter Schools, 1999-00

Charter schools also may differ in the way they structure the school calendar. While the average charter school offered 185 days of instruction during 2001-02⁴

³ This figure was taken from 1998-99 data, the most recent year for which national data are available.

⁴ For charter and noncharter public schools, Pennsylvania requires a minimum school year of 180 days and minimum of 900 hours of instruction at the elementary level and 990 hours of instruction at the secondary level (24 P. S. §§ 15-1501 and 15-1504).

7 charter schools reported offering 200 or more days of instruction that academic year. The highest number of instructional days reported was 230.

We also examined the number of hours of instruction offered each day. Unfortunately, large quantities of missing data in the charter school annual reports leave us reluctant to report quantitative evidence. A number of schools did, however, offer anecdotal evidence of extended school days. Readers should bear in mind, however, that we were unable to determine the extent to which these practices are employed in noncharter public schools.

One school reported that its day goes from 11:00 a.m. until 5:00 p.m. to accommodate students' schedules. Another school claims that "the school day and academic calendar will be extended resulting in more than three additional years of instruction over the K-8 sequence." In addition, many schools reported offering after-school or Saturday programs. Most of these programs are designed to provide extra help for at-risk students, for students who have fallen behind in their classes, or for those who need a little extra tutoring in a specific subject. Other programs provide extra academic enrichment for selected scholars. One school sends all twelfth graders to a 10-week Saturday research methods program at a local university. Another school offers Saturday SAT preparation classes for eleventh graders.

9.4 Curriculum and Instruction

Unlike many educational reforms, the charter school concept is largely silent on particular curricula, assessment, and instructional methods—except to say that many methods used in traditional public schools are insufficient. Instead of prescribing a specific reform package, charter laws carve out an opportunity space in which charter schools may exercise autonomy over such matters. The theory is that such autonomy will leave the schools better able to address the specific needs of the students who choose to enroll in them.

Curriculum. Charter schools' annual reports contain a number of references to curricular practices that school officials regard as innovative. Some reports mention specific courses, such as a school that offers courses on entrepreneurship. Other schools report offering instruction in morals and character. At least one school advertises a focus on the "whole child," including emotional, intellectual, and social development.

In many instances, charter schools' curricula grow out of their particular missions and target populations. At least one school, for instance, attempts to operationalize its vocational focus by offering courses on construction in addition to the "basics"—and has links to the federal Americorps program. Another school with a vocational emphasis offers intensive instruction in computers. Still another has architecture and design as well as writing integrated into its entire curriculum. At the school with aerospace and aviation technology as part of its mission, there is a full-time aerospace teacher, and specialists in this area visit regularly to provide instruction. Schools with more traditional academic foci tend to emphasize courses in math, literacy, and science.

A number of schools emphasize particular ethnic and cultural traditions, in keeping with their missions. For example, at least four schools employ an Afrocentric focus; three of these schools collaborate with one another. Other charter schools have a bilingual focus. One charter school includes the goal of students emerging as bilingual by grade 6. It offers Spanish immersion classes starting in kindergarten, with of the major subjects are taught in Spanish. These goals and processes fit with the school's mission of an international focus.

Some schools have curricula that extend beyond the students and encompass the families and/or communities. One school which partners with other social agencies provides social services to families. Another school which had a strong emphasis on inclusively serving students with special needs employed three school-family coordinators. Other schools have an intergenerational approach. One school focuses on educating both children and their parents. Another has a partnership with a senior center where students regularly visit.

Finally, a few Pennsylvania charter schools offer special services that, in some cases, are related to the academic curriculum. For instance, one school with a vocational focus pays its students a stipend, administers drug tests, provides drug intervention strategies, finds them employment after graduation, and follows up on their postgraduation progress.

Teaching methods. Most charter schools included in their annual reports teaching methods that they considered innovative. Interviews with charter school CAOs also addressed teaching innovations. Some mentioned mixed-grade classrooms, while other mentioned theme-based, project-based, and multidisciplinary learning. A number of schools note that they employ various types of hands-on, experiential, and constructivist approaches that emphasize individualized learning strategies. One school reports using dance and music to develop critical thinking and problem-solving skills. Another involves a multi-disciplinary "micro-society program", where students build a mini-society, complete with its own laws, currency, and various other features. At least one school has individualized education plans for all students, not just those who qualify for special education services under the federal IDEA.

Again, we emphasize that we were unable to determine the extent to which noncharter public schools employ any of these practices. Also, the structure of the annual report leaves little room for schools to provide detail on these practices—though some include such documentation as appendices. As discussed below, future evaluation activities will include case studies that provide more detailed information on promising practices.

9.5 Technology and Computers

Many proposed school reforms involve computers and other learning technologies. A number of the charter schools CAO's mentioned the use of computers as one of their innovations. Thus, it seems appropriate to explore this issue in some detail. Administrative data available through the School Profiles provides a convenient way to compare the prevalence of computers and Internet connectivity in charter and noncharter schools.

Table 9:2 shows the prevalence of Internet access in various locations of the schools. For all locations, the percentage of charter schools with Internet access is lower than that in all noncharter public schools and host district schools. The gap between charter schools and noncharter public schools is higher than that between charter schools and host district schools. Examination of the data indicated no obvious sources of selection bias.

Table 9:2 Comparison of Internet Access in Charter and Noncharter Public Schools, 2000-01

<i>Location of Internet access</i>	<i>Percent of Charter Schools (N=65)</i>	<i>Percent of Host District Schools (N=757)</i>	<i>Percent of Noncharter Public Schools (N=3,332)</i>
Teacher workrooms	22%	44%	51%
Classrooms	25	65	71
Computer labs	34	65	69
Library	34	70	77
All locations	42	73	83

The charter school annual reports provided by the Office of Educational Initiatives provides a limited number of specific instances of technology use in the schools. One school utilizes a university collaboration for videoconferencing to enhance learning. Another offers technology courses, including a graphics arts and computer design program and, in “2002,” a computer networking certification curriculum. Still another school provides each student with a computer to take home and offers computer training to parents as well as students.

We emphasize that neither the quantitative school profiles data nor the qualitative data from the annual reports allows us to assess the degree to which technology is actually being integrated into the curriculum.

9.6 Cyber Schools

The most innovative development in Pennsylvania charter schools is the emergence of cyber charter schools. While the first cyber charter in Pennsylvania, SusQ-Cyber, opened in 1998, the 2001-02 academic year saw a huge expansion in both the number of these schools and the number of students enrolled in them. Perhaps because of the novelty of these schools, disputes over funding and other issues prompted several lawsuits against the cyber charter schools. In October 2002 one cyber charter, Einstein Academy, had its charter revoked by its host district (the school remains open pending appeal to the CAB). The General Assembly reacted to these disputes by reforming the way cyber schools’ charters are granted (see Chapter 3) and recognizing them as different from “bricks and mortar” charter schools.

Though the concept of cyber charter schools is innovative, the individual schools’ methods are not necessarily so. Cyber charters that depend on written

texts and other materials sent through the mail are not much different from traditional correspondence courses. However, other methods of instruction employed by cyber charters are innovative. Cyber charter school students can receive instruction any time of the day. While a few classes “meet” at specified times, typically students can set their own schedule. Most classes use a mix of written materials (such as textbooks) and material delivered through a computer.

Following are other areas of cyber charter school innovation:

- ❑ Providing an innovative way to reach at-risk students who have dropped out of traditional schools.
- ❑ Offering a wider range of classes to their students. Students can be offered different (often advanced) instruction compared with courses that may be available in their local district’s schools.
- ❑ Providing structure and assistance to parents who were previously home-schooling their children. Enrolling formerly home-schooled students in cyber schools increases the amount of public oversight and guidance.
- ❑ Enabling students with health/medical/social problems that preclude attendance at a traditional school to continue their education from home or from a hospital or rehabilitation center.

Finally, one goal of the charter school law is to provide choice to Pennsylvania parents and students. Simple geography necessarily limits a student’s school choices, but cyber charter schools can create choices where none previously existed. Though this choice is limited to students who have a parent or other adult available to supervise instruction, cyber charter schools present choices to many Pennsylvania families who do not live near a bricks and mortar charter school.

9.7 Impacts of Charter Schools on Local Districts

Charter schools were provided lessened regulations and hence, more opportunity space for educational innovations. Ideally, these would not only provide alternative educational programs to families, but would spur the traditional public schools to collaborate and/or compete with these innovative new schools. Thus, theoretically, charter schools could improve the entire public school system. On the other hand, critics feared that charter schools would drain per-pupil funds from the traditional school system. The expectations regarding the impact of the charter school on the district influence the relationships between the two school systems. Conversely, the quality of relationships between the district and the charter school—cooperative, hostile, or indifferent—affects the potential for the types of impact that the charter schools can have on the districts.

It is quite difficult to systematically measure the impact of the charter schools on the respective school districts. We interviewed charter school administrators about their relations with the district and the impact of the charter schools on the district schools. The following paragraphs reflect these anecdotes of impacts as reported by the school administrators.

Indifference characterizes some charter-district relations. A number of the charter school staff stated that there is little communication between them and the district. The CAO of one charter high school stated that there was a large public high school “just about next door” whose students and staff probably didn’t even know that the charter school existed. Given that only a tiny proportion of most districts’ students attend charter schools, the attrition into charter schools may not have been substantial enough to spur interest, let alone competition for students. These apathetic relations do not bode well for diffusion of innovation.

Relations were generally good in districts where the local schools referred students to the charter schools. This was often the case where charter schools were designed for at-risk or delinquent students; thus they were not seen as competition. On the other hand, the frequent referrals of difficult-to-educate students into charter schools for general populations was sometimes problematic. One charter school director complained about troubled students from the district getting “dumped” into his school; a phenomenon also observed in other states (Sullins & Miron, 2002). A parent from another Pennsylvania charter school expressed, “I feel that quite a few of the children in my son’s class have been referred to the school because the public school has thrown its hands in the air. The public school didn’t have the resources for these kids so they pushed them on the charter schools.” However, such concerns were not widespread.

Some of the districts had negative attitudes towards the charter schools, especially regarding the perceived threat to their enrollment and hence, funds. In one district, relations between the LEA and the charter school were particularly hostile because the charter was granted by the CAB on appeal, against the wishes of the district. This resulted in an ongoing, contentious lawsuit concerning the approval of the charter. Some districts were indeed impacted financially. Portions of one district school closed due to declining enrollment as its students transferred into the charter school. In another district, a school was threatened with closure due to attrition into the charter school. Often, despite real or perceived financial impact, relations between the host and the charter improved over time. In some cases, districts that were originally hostile towards the charter schools not only improved their relationships with them, but began embracing some of their successful practices. Regardless of whether these adoptions of practices were out of a collegial or competitive spirit, they indicate that the charter schools are positively impacting the charter schools. We now describe some of these impacts.

Three of the districts are adopting school uniforms, reportedly in response to their respective charter school’s policy on uniforms. A fourth district has contacted the local charter school to inquire about the effects of their school’s uniforms on discipline, to help them make decisions regarding a similar policy.

There were several examples of what appeared to be competitive diffusion of innovation, as they occurred in districts that were losing substantial numbers of students to the charter schools. In one district, the local public schools began adopting multi-age classes in response to the charter school’s similar program. Another two neighboring districts each initiated an all-day kindergarten in order to prevent attrition to a charter school that had attracted kindergarteners from

both districts with its all-day program. Another district offered kindergarten for very young students, apparently in response to a similar program at the charter school. A final example of charter school innovation spilling over into non-charter public schools is the fact that three of the cyber charter schools were started by IUs—at the insistence of their member school districts—directly in response to cyber charters being started by other entities. This last example illustrates a competitive impact, however, because the districts responded by creating cyber charter schools rather than cyber traditional public schools one can argue that this is not an impact on district schools.

Other innovations that were adopted or at least strongly considered by local districts included wraparound services and family counseling, environmental education, and a longer school day or year. Some charters hope the local districts will pick up their unique curricula—for example, programs involving arts, technology, or aerospace programs—but thus far matters have not progressed beyond discussion.

In addition to providing inspirational innovations, the charter schools are providing other opportunities for benefitting the school district as a whole. For example, aspiring educators at one district high school students intern at the charter school. This arrangement enhances both the district and the charter school. In addition, there have been professional development activities that have included both district schools and charter schools. Similar charter-host district collaborations have served both parties in other states as well (Sullins & Miron, 2002). However, such cooperation appears the exception rather than the rule thus far. If relations between charter schools and host districts continue to improve, as they have in many Pennsylvania districts thus far, there will be more opportunities for such collaborations.

9.8 Discussion and Conclusions

This chapter sought to assess the extent to which Pennsylvania's charter schools have succeeded in fulfilling Act 22's mandate that they develop innovative teaching practices that might be emulated by other schools. As we have seen, any attempt to evaluate innovations is hampered by (a) ambiguities in the concept of innovation and (b) data limitations. The Charter Appeals Board provided a considerable amount of clarity on the issue of innovation, holding that a charter school innovation is any practice used by the charter school(s) but not the host district(s). This definition, however, may be problematic in that it makes it more difficult for charter schools located in or near large districts to qualify as innovative. From a research perspective, it requires explicit comparisons between charter schools and host districts. While quantitative data from the school profiles make such comparisons possible on a limited range of items, these comparisons are largely beyond the scope and budget of the present study. The CAB definition of innovation, limitations notwithstanding, provide opportunities for starting charter schools that provide true educational alternatives for families within the district.

Charter schools often differ from their host district schools in terms of size, structure, and schedule. Some of the charter schools had longer days or years than their district schools. Some offered all-day Kindergarten or after-school or Saturday activities. Charter schools may offer different grade level grouping than district schools, or even multi-age groups. Charter schools are usually smaller than their district counterparts, although they are tending to grow in enrollment. At least one school specified that their small school size made curricular and instructional innovations easier to implement.

We found a number of practices in charter schools that might qualify as innovations: theme-based instruction, hands-on teaching methods, project-based learning, the availability of family and vocational support services, and others. However, given that these observations come from charter school annual reports, we are unable to determine the extent to which these practices are prevalent in noncharter public schools.

The most significant charter school trend, in terms of innovation, is the emergence and growth of the cyber charter schools. These schools extend the choice offered by charter schools beyond local neighborhoods to all areas of the Commonwealth. Cyber charter schools offer innovative instructional methods, expanded curricular choices, and opportunities for students who have struggled in traditional school environments.

Successful charter school innovations not only provide alternatives for families, they also inspire district schools to adopt similar approaches. A number of the charter school directors reported that their districts had adopted some of their school's practices; for example, school uniforms or all-day kindergarten. The relation between the charter and the district affects the diffusion of innovation. Indifferent or hostile relations precludes the sharing of ideas. However, sometimes competition spur the districts' imitation of popular charter school approaches in order to stem attrition. In addition to diffusion of innovation, there were a few cooperative arrangements between charters and hosts. However, overall there has been little impact on the districts thus far. Improved district-host relations can amplify the positive impacts. Conversely, increased healthy competition from the charter schools can also spur reform in the districts.

In the final year of this project we plan to subject the self-reported innovation found in the charter school annual reports to a "jury of peers" consisting of education experts and practitioners. This will provide an independent assessment of the level of innovation in the schools (see, e.g., Mintrom, 2000), thus addressing the R&D definition of innovation discussed above. Second, we will conduct in-depth case studies of schools that appear to be engaged in innovative practices. These case studies might also help us determine the extent to which any potentially innovative practices are used by surrounding districts, thus addressing the requirements of the CAB definition of innovation.

Any such improvements in data collection, however, should not obscure the fact that innovation remains a highly contestable concept. Such contestation, ultimately, can be resolved only through democratic debate.