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Equity- oriented accountability for charter schools: Lessons from Massachusetts

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Because of the many special characteristics of charter schools, policy makers who aim to promote a system of charters schools that ensures fair access to, and fair treatment of, disadvantaged students will need a public accountability system oriented, at least in part, to equity concerns. Massachusetts, with its single statewide authorizer, as well as its system of periodic site visits to schools and specific performance criteria, illustrates such a system. In this paper, we first explain why an equity-oriented approach is important. We then describe and evaluate the Massachusetts approach, with particular attention to the information provided by the periodic site visits. Although Massachusetts does not fully succeed with all its charter schools, especially with respect to fair treatment, it is hard to make the case that charter schools will be beneficial for disadvantaged students in the absence of an accountability system of this type.

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Equity- oriented accountability for charter schools: Lessons from Massachusetts

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Abstract

Because of the many special characteristics of charter schools, policy makers who aim to promote a system of charters schools that ensures fair access to, and fair treatment of, disadvantaged students will need a public accountability system oriented, at least in part, to equity concerns. Massachusetts, with its single statewide authorizer, as well as its system of periodic site visits to schools and specific performance criteria, illustrates such a system. In this paper, we first explain why an equity-oriented approach is important. We then describe and evaluate the Massachusetts approach, with particular attention to the information provided by the periodic site visits. Although Massachusetts does not fully succeed with all its charter schools, especially with respect to fair treatment, it is hard to make the case that charter schools will be beneficial for disadvantaged students in the absence of an accountability system of this type.

Introduction

Many proponents of charter schools focus on their potential benefits for disadvantaged students. As schools of choice, the argument goes, charter schools are expected to broaden the educational opportunities available to disadvantaged students who would otherwise be confined to low-performing neighborhood schools. In addition, advocates argue that their freedom from many bureaucratic regulations enables charter schools to offer higher quality education programs to all their students and, specifically, to the disadvantaged students they serve than traditional public schools. Thus, the extent to which charter schools are in fact advantageous for disadvantaged students is a matter of significant policy interest.

Extensive research is available on whether charter schools improve student outcomes as typically measured by student scores on standardized tests (e.g. CREDO, 2013, Gleason et al., 2010). The general conclusions of that research are that while some charter schools appear to succeed in raising student test scores above what they otherwise would be, many do not; and some have negative effects. The most positive findings are that charter schools in several urban areas, most notably in Boston and New York, appear to have strong positive effects on students' academic outcomes.(e.g. Angrist et al, 2013, Dobbie and Fryer 2013, and CREDO, 2015). Given that many of the charter schools in such urban areas serve disadvantaged students, the findings imply that charter schools can indeed, at least in some situations, generate better academic outcomes than traditional public schools for their disadvantaged students.

Importantly, however, studies that focus attention on the academic outcomes of enrolled disadvantaged students typically do not address issues related to how well charter schools meet the broader educational needs of disadvantaged students. One such issue, for example, is the

extent to which disadvantaged students have fair access to individual charter schools in the first place, and a second is the quality of the overall educational experiences enjoyed by the disadvantaged students once they enroll. Fair access would require, at a minimum, that a charter school recruit a student population that is representative of the disadvantaged students within the local area. To evaluate how well the students are treated within a charter school one would need information on attrition rates, suspension rates, and, importantly, on the availability and quality of school programs specifically designed to meet the needs of disadvantaged students. Although publicly reported data can shed light on some of these issues, a full understanding of the experiences of disadvantaged students within charter schools requires information on their internal school policies and practices and their effectiveness.

Our goal in this paper is to explore the extent to which Massachusetts charter schools offer fair access and provide high quality educational opportunities to disadvantaged students. We define disadvantaged students as racial and ethnic minority students, English Language Learners (ELL), students with disabilities (SWD), and those who are economically disadvantaged (ED).

We focus on Massachusetts for two reasons. First, the state has adopted a conscious policy of trying to promote a set of charter schools that serve disadvantaged students effectively. It does that in part through a state policy that incentivizes charter schools to operate in low-performing school districts and, in part, by encouraging the Massachusetts Department of Elementary and Secondary Education, including its Office of Charter Schools and School Redesign, to pay close attention to maintaining fair treatment for students of all backgrounds (NASCA, 2018, p. 221). Second, the state has an inspection-based accountability system that relies heavily on periodic site visits to all charter schools. Such an accountability system is well-

designed to draw attention to issues of access and equity and to generate information on how schools treat their disadvantaged students. If any statewide system of charter schools serves disadvantaged students well, it is likely to be Massachusetts.

Much of our analysis is based on several years of charter school site visits reports provided by the Massachusetts Department of Elementary and Secondary Education, supplemented by quantitative data from the Department on enrollment by categories of student, attrition rates of students with high needs, and rates of in-school and out-of-school suspension. We focus on three of the state's ten performance criteria for charter schools – those that are most directly relevant for disadvantaged students: Access and Equity, Program Delivery for Diverse Students, and Safe and Supportive School Environments.

Background and context

Charter schools are similar in being publicly funded, but differ from most traditional public schools in having more flexibility and by being schools of choice. Some early charter school advocates believed that the initial authorization process and the market-based accountability implicit in giving parents school choice would suffice to assure that charter schools would provide high quality education. But over time most charter school advocates have come to recognize the need for some additional form of ongoing public accountability. (See, for example, Finn, Mann ,and Vaorek, 2000). Moreover, given many of the special characteristics of charter schools, a strong case can be made that an appropriate accountability system should include an explicit equity focus. In this section, we first make the case for equity-oriented accountability and then describe the Massachusetts system.

The need for equity-oriented accountability for charter schools

Public accountability is clearly necessary for all publicly funded schools to assure fiscally responsible use of taxpayer dollars. In addition, accountability is needed to promote student outcomes that are spelled out in state or federal policy directives (such as student test scores initially required under No Child Left Behind and other related measures), to promote school improvement, and to foster the public interest in education, rather than only the private interests of those being served.

Public accountability is especially important for charter schools. In addition to serving the purposes that are relevant for all publicly funded schools, the special characteristics of charter schools demand that accountability be more expansive and take different forms, especially when a significant policy goal is to have them serve disadvantaged students. A number of charter school characteristics are particularly relevant for equity-oriented accountability.

First charters are schools of choice. That means parents need full and reliable information to make good schooling decisions for their children. Hence, accountability processes may be needed not only to provide general information for all parents but also to address the specific needs of some groups of parents, such as non-English-speakers who require information in their own language. Further, given that many parents, especially white parents, make decisions based in part on the composition of students in the school, external accountability may be needed to offset the pressures that parental choice can create for charter schools to be racially or economically segregated (Bifulco and Ladd, 2007, and Ladd and Mavzuna, 2020).

Second, charters are typically operated by non-governmental organizations with a variety of motives.¹ Some charter schools have incentives to operate in ways that may be counter to the public interest and, in particular, that are counter to the needs or disadvantaged students. For example, the organizations may have financial intives to minimize their intake of disadvantaged students, such as those with disabilities, who are expensive to educate. Others may have incentives to suspend or expel misbehaving students who disrupt the learning of other students, or whose behavior is inconsistent with the educational philosophy of the charter school. In addition, financial pressures may lead them to hire inexperienced and less costly teachers, some of whom may be underprepared to address the educational challenges facing disadvantage students. Such incentives may be exacerbated when charter schools need to show good performance on student tests to renew their charters and to attract students.

Third, charter schools are typically given extensive autonomy, largely in the form of exemption from many of the regulations that apply to traditional schools. Released from the requirement that all teachers be certified, for example, some charter schools may hire teachers not well trained to work with disadvantaged students such as English Language Learners or those with special needs.² In addition, unless state accountability policies assure that public transportation or subsidized school lunches are available to all charter school students, such schools may not be accessible to students who are economically disadvantaged.

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¹ In some states, although not in Massachusetts, charters may be granted to for-profit entities. In Massachusetts, the Boards of Trustees that hold the charters all become special state employees. Although such boards are permitted to contract with private entities to deliver academic services only 11 of the sstate's 81 charter schools do so.

² With respect to students with disabilities, Parham (2020) has highlighted the fundamental tension between the autonomy granted to charter schools and the services that must be provided by law to students with disabilities.

Fourth, many charter schools have unique missions and may be experimental by design.

Unique missions can serve useful purposes, but public accountability is needed to assure that the benefits of the specific mission to certain sub-sets of the school population are balanced against the needs of disadvantaged students. And while experimentation can sometimes lead to good outcomes both for the individual charter school and for other public schools, it can also be harmful to students, especially to disadvantaged students, when the experiment fails and schools need to be closed down.

A final equity-related argument for charter school accountability relates to their potential adverse impacts on other local public schools. In some situations the presence of charter schools can have detrimental effects on the local community's ability to serve other students, including those who are disadvantaged. Such adverse effects occur whenever public funding for charter schools significantly reduces funding for traditional public schools, or when charters enroll less than their fair shares of expensive-to-educate students, and thereby force greater concentrations of such students in the traditional public schools (for example, see Bifulco and Reback, 2014, and Ladd and Singleton, 2020).

We define public accountability as attention by one or more public officials external to the school designed to promote desirable behaviors and outcomes. Such accountability can draw attention to student outcomes that can be quantified, such as student test scores or suspension rates, or to the quality of internal school policies and practices, or some combination of both. The focus in this paper is accountability at the level of the individual school. We note, however, that if the goal is for individual schools to be effective, public accountability may well be needed for other agencies at the state and local level, namely those that provide funding or determine the regulations under which schools operate. For much of this analysis, we take the context

(including the availability of funding, or the quality of the state system) in which individual schools operate as given.

Massachusetts policies toward charter schools.

The sole authorizer of charter schools in Massachusetts is the state Board of Elementary and Secondary Education (BESE, or State Board), an 11-member appointed body. Overseeing the charter schools is the Office for Charter Schools and School Redesign (OCSSR, or the Office), an entity within the Massachusetts Department of Elementary and Secondary Education.³ The Department is led by a Commissioner who reports directly to the State Board. The state has two types of charter schools: Commonwealth Schools and Horace Mann Schools, both of which must be authorized by the State Board and are subject to renewal every five years.⁴

State law limits the number of charters that the State Board can grant by type and location. Importantly, the amount of funds a district can use for charter school tuition is strictly limited. Prior to 2010 no district could devote more than 9 percent of its net spending to charter school tuition. In that year, with a statutory revision, the limit was increased to 18 percent for districts in the lowest performing districts, defined as those whose students perform in the bottom 10 percent on the statewide tests. "Proven providers" – a designation granted by the Commissioner based on evidence provided by the individuals or organization seeking that status-

³ As of 2016, OCSSR had approximately 13 staff members (10.5 Full time equivalents) devoted to charter school authorization and oversight. About 10 percent of its budget was devoted to contracted renewal visits (NASCA 2018, p. 3).

⁴ They differ in that the Commonwealth schools are fully independent of local school committees or teachers unions, while Horace Mann Schools operate under a Memorandum of Understanding with the district where they are located and can take one of three forms with differing requirements.

- could apply to open new schools or to expand enrollment in current ones. ⁵ The new state law required charters to increase recruitment and retention efforts for students with high needs. These provisions provided clear incentives for charter school operators to apply for charters in low performing school districts and, at least in the city of Boston, led to the replication of effective charter schools (Cohodes, et al, 2019). ⁶ The net school spending caps were soon reached in some districts, resulting in calls for further expanding the cap. A highly publicized and contested 2016 referendum to do so was defeated.

The state has a robust, multistage process for approving charter schools (NACSA, 2018, pp. 16-20)). The application process begins with a letter of intent followed by a prospectus and a final application phase. Both internal and external reviewers are used throughout, with opportunities for written public comment, public hearings, and an interview with each applicant group and proposed board of trustees. Since 1994, when charters were first allowed in Massachusetts, the State Board has granted approval for 112 charter schools, 31 of which have subsequently either closed or never opened. ⁷ As of 2019, there were 81 charter schools, most of which are Commonwealth Schools independent of local districts. ⁸

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⁵ Proven provider status can be granted to two or more individuals, charter management organization (CMS), Education management organization (EMO) and school support organizations (SSO) or for currently operating charter schools.

⁶ In contrast to most other states, Massachusetts made an effort to offset the adverse fiscal effects on local school districts associated with the movement of students to charter schools. They did so by providing additional financial aid to a district based on a declining percentage of the revenue loss to charter school over 5 years. This aid program, however, was never fully funded (Schuster, 2016).

⁷ Massachusetts permits networks of charter schools to consolidate under a single charter for a variety of reasons, including the creation of a feeder pattern for high school grades. Eight of the 31 "closures" were related to consolidation requests granted to five charter school networks.

⁸ Since then three charter schools have closed or merged with other charters. Hence as of 2020, there are 78 charter schools.

Figures 1a and 1b show the growth of charter schools and charter school enrollment over time. The number of charter schools has leveled off in recent years although the number of

(Figure 1a and 1b about here – currently at the end of the paper)

enrolled students has continued to grow as charters have expanded grades over time in line with the grades proposed in their charter applications or have expanded the size of their student bodies.

Once a charter school is established, it is subject to ongoing review in the form of periodic site visits carried out by teams from the State Department of Education, often supplemented by other outside educators or specialists. The visits range from half a day to two days depending on the type and purpose of the visit. All schools are visited twice during their first year of operation as well as at other times during the renewal cycle for check-in visits or visits targeted at a specific issue. All of them are also subject to an inspection every five years at the time of the renewal decision.

The purpose of the site visits is to gather information about a school's performance on the state's ten Charter School Performance Criteria. These criteria are shown in Table 1 and fall into three main categories: Faithfulness to the Charter Mission, Academic Program Success, and Organizational Viability. Most relevant for the specific purposes of this paper are Criterion 2 (Access and Equity), Criterion 6 (Program Delivery) and Criterion 7 (School Climate and Family Engagement).

(Table 1 about here. Currently at the end of the paper)

Importantly, we do not include any discussion of Criterion 5, "Student Performance."

Although how well a charter school's students perform on various state-wide tests and other

academic measures is clearly relevant for the overall evaluation of a charter school (and is weighted heavily in the charter school renewal process), that particular criterion is less relevant for this discussion of equity issues. That is because the criterion focuses primarily on the level and trends in overall student performance rather than exclusively on the performance of disadvantaged students. Similarly, we do not discuss other criteria that, while they may be crucial to a charter school's success and viability, do not relate directly to the equity-related lens of interest here, Such measures include those that measure fidelity to the school's mission, fiscal soundness or school governance,

The site visitors and the schools prepare well in advance for each visit. As part of that preparation, the schools provide a range of school documents and records. During the visit team members conduct focus groups and observe classrooms, guided by the relevant site visit protocols. After the visit, the Department prepares a written report to which the school may formally respond if it wishes. The process itself and the written reports are intended to draw attention to strong and weak aspects of the school. Significantly, the reports do not include specific advice about what the school must do moving forward.

Not all Performance Criteria are included in all site visits. By design, different types of scheduled visits (core, full, first year, targeted, or renewal visits) include different elements. For each specific performance criterion or indicator that is closely examined in a site visi, the school receives a summary rating indicating whether the school falls far below, partially meets, meets or

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⁹ Moreover, the form of the information presented varies over time and is not available for at least one recent year, as the state was changing its testing protocols for all schools in the state.

exceeds the specified standard. Each rating is followed by a written justification, with attention to the ways in which the school is or is not meeting the standard.¹⁰

Charters must be renewed every five years. As part of the renewal process, each school is given a summary review based on a renewal site visit and other material provided by the school during the charter period. The summary renewal report itself does not include a recommendation either for or against renewal. That decision is left to the Commissioner or the State Board to decide among the following four options: do not renew, renew, renew with conditions, or renew with probation.

Do the Massachusetts charter schools provide fair access for disadvantaged students?

Table 2 shows the 2019-20 statewide distributions of students in charter schools relative to all students in the state. The table clearly shows that on a state-wide basis, African-American and Hispanic students, as well as students who are economically disadvantaged or English language learners are overrepresented in charter schools compared to the state as a whole. Only students with disabilities are underrepresented in charter schools, with a 15.9 percent share in charter schools compared to an 18.4 percent share of students statewide. ¹¹

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¹⁰ Very few schools are rated either 'far below" or "exceeds." Hence in the discussion below we group the ratings into "meet" or "does not meet." Also in some cases, the review does not generate sufficient information for a summary rating, often because the site visit was too short for adequate class visits. In those cases, the report provides "findings" rather than a rating.

¹¹ Various studies have investigated possible explanations for lower reported enrollment rates for student with disabilities in charter schools than in district schools. Explanations include the reluctance of parents to enroll such students because of concerns about the lack of appropriate programs, high attrition rates for students with disabilities, possibly due to school "push out," and the fact that charter schools may be more likely than district

Table 2, Distribution of students in charter schools compared to the state.

Subgroups of students	Charter schools (% of all students)	State (% of all students)
African-American	30.1	9.2
Hispanic	35.1	21.6
White	26.3	57.9
Other *	8.5	11.3
Economically disadvantaged	43.3	32.8
English Language learner	13.5	10.8
Students with disabilities	15.9	18.4

^{*}Includes Asian, Native American, Native Hawaiian, Pacific Islander, multi-Race Source. https://www.doe.mas.edu/charterfactsheet.html

Thus, if fair access to disadvantaged students is defined in the aggregate, Massachusetts charters appear to do very well. However, students identified by their race, ethnicity or by disadvantage, as well as charter schools themselves, are unevenly distributed across the state's school districts. Hence, a more appropriate test for fair access is the extent to which individual charter schools enroll shares of such students that are similar to or higher than those in their local communities or comparison schools.

For a more detailed look, we start with the ethnic and racial mix of students in charter schools, and then turn to the enrollment of disadvantaged students.

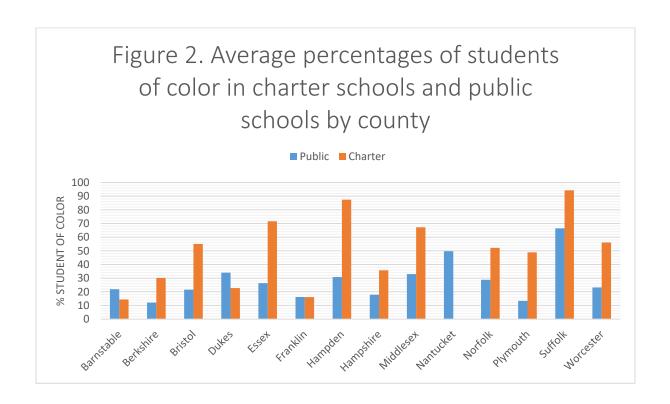
Enrollment by race and ethnicity -- distribution across counties and across schools.

schools to remove the special education designation as students progress through school. (See, for example, Winters, 2015, and Setrin, 2020)

Figure 2 compares the patterns of racial/ethnic enrollments for charter and traditional public schools across the state's 14 counties. ¹² The dark bars show that Suffolk County, which includes the cities of Boston, Chelsea, Revere and Winthrop, has the highest proportion of students of color. But such students are found in all the counties, including those such as Hampden and Middlesex that are home to the large and diverse cities of Springfield and Lowell, as well as in small counties such as the island county of Nantucket. A comparison of the dark and light bars indicates that in most of the state's counties, the average proportion of students of color in charter schools exceeds the average proportion of such students across the school districts within the county. The only exceptions are Barnstable, which covers Cape Cod; Dukes, which covers 11 islands near Cape Cod; Nantucket Island, which has no charter schools; and the small county of Franklin. Thus, we conclude that the state's charter schools do in fact enroll relatively large shares of students of color in most counties throughout the state.

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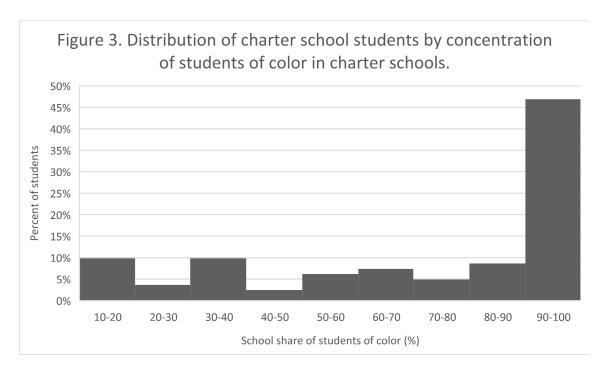
¹² We use the term county here to designate geographic areas across the state not as governmental units. In fact, many of them no longer have county governments.



There is also a less positive side to this enrollment pattern. The right hand bar of Figure 3 shows that in close to half of the state's charter schools students of color account for more than 90 percent of a school's students. Although most of these charters are located in counties, such as Suffolk and Hamden, with high proportions of students of color, the county-wide proportions are lower than those of many of the individual charter schools. Thus, it appears that many charter school students of color are being educated in more racially segregated school environments than they would be in traditional public schools.

In addition, in another 10 percent of the charter schools (see the left most bar of figure 3), students of color account for less than 20 percent of the students, implying that they are being educated in very white school environments. Because the predominantly white charter schools are typically located in areas that serve even higher average proportions of white students, however, these charters are generally somewhat more diverse than the local district school. One

exception to this pattern is the Francis W. Parker Essential School, a regional charter school that enrolls a far higher proportion of white students than the very large, 46-district region it serves.¹³



Enrollment of disadvantaged students (EDS, ELL and SWD)

To determine the extent to which charter schools enroll their fair shares of economically disadvantaged students (EDS), English Language Learners (ELL) and students with disabilities (SWD), we turn to the data provided in site visit reports in the section on Access and Equity (or in the appendices for that section). One advantage of relying on the information from the site visits is that the reports provide data not only on the absolute shares of subgroups in each charter

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¹³ According to its 2016/17 site visit report, the school enrolled a student population that was 92 percent white, far higher than the 68 white share in the region it serves. Moreover, although African-American students represented 20 percent of the student population in the region, they accounted for less than 1 percent of the school's enrollment. The explanation seems to be that more than 70 percent of the school's enrollment comes from only 10 of the region's 46 districts and these 10 districts are far whiter than the full region.

school, but also for comparison indexes based on other schools within the district (or within the region for regional charter schools) serving similar grades.

The top row of Table 3 indicates the number of site visits for which the data were available during the fiscal years 2017, 2018, and 2019 along with the site visit summary reports for the charter schools that were visited as part of the renewal process in 2019. For each specific subgroup of students (EDS, ELL and SWD), we report in the table by year, the number of schools for which the share of that specific group of students was high (at least 10 percent above the comparison index), similar (within plus or minus 10 percent of the index), or low (less than 90 percent of the index). We interpret either "similar" or "high" as an indicator that the school is enrolling at least its fair share of the specified subgroup and "low" as an indicator that a charter school is not enrolling its fair share, where fair share is measured in relation to the local area. The final two columns refer to all the site visits in each row, both as a sum and as a percentage of the 63 site visits.

Table 3. Charter schools by relative enrollment of student subgroups, by year of site visit							
	FY 2017	FY 2018 18	FY 2019	2019	Total visits	Percent of	
				renewals	(all years)	site visits	
Total site	18	13	20	12	63	100%	
visits							
Economically	Economically disadvantaged (number of schools with shares in specified category)						
High	6	5	11	4	26	41%	
Similar	5	3	5	3	16	25%	
Low	7	5	4	5	21	33%	
English Language Learners (number of schools with shares in specified category)							
High	5	6	8	5	24	38%	
Similar	2	1	4	2	9	14%	

Low	11	6	8	5	30	48%	
Students with	Students with disabilities (number of schools with shares in specified category)						
High	12	6	12	5	35	56%	
Similar	1	3	2	5	11	17%	
Low	5	4	6	2	17	27%	

Notes. Based on site visits by year for all schools with appropriate data. Definitions: High means that the percentage of students in the specified category in a school is more than 10 percent higher than the comparison index. Similar means that the percentage is within plus or minus 10 percent of the comparison index. Below means that the percentage is below 90 percent of the comparison index. Calculations by the authors based on data in the site visit reports.

Based on the pattern in the final column, we conclude, first, that about two thirds (66%=41% +25%) of the charter schools in the table enroll their fair shares of economically disadvantaged students and an even higher proportion (73 %= 56% + 17%) enroll their fair shares of students with disabilities. In contrast, 48 percent of the schools fall short in terms of their enrollments of English Language Learners, with the shortfall for ELL students being most evident in schools visited during FY 2017. Not shown in the table is that 12 of the 63 schools enrolled high shares students in all three student categories, while 7 schools enrolled low shares in all three categories. Thus, overall, many, but certainly not all, Massachusetts charter schools enroll comparatively large proportions of disadvantaged students.

The role of the site visits and summary reports.

This relatively positive enrollment picture for Massachusetts charter schools undoubtedly reflects the state's general charter school policies, including its careful process of authorizing charter schools and the requirement that all charters have recruitment and retention plans. The ongoing site visit process also plays a significant role by encouraging charter schools to reflect

¹⁴ A recent study of participants in the applications lotteries for 30 charter schools in Boston from 2003-2004 to 2014-2015 (representing about 90 percent of charter enrollment in Boston in 2012-13) reported that English language learners and students with disabilities were both overrepresented among the applicants at the time of the lottery (Setrin, 2020). Those who enrolled in a charter school, however, were more likely to have their specialized classification removed.

on their internal school policies and practices in light of the state's ten Performance Criteria.

Most relevant for successful enrollment outcomes is the performance criterion labeled Access and Equity.

The enrollment-related guidelines for this criterion draw attention to the school's strategies for recruitment and retention, the resulting demographic characteristics of its students, and potential barriers to program access such as the inadequacy of translated marketing materials. Interestingly, the state has significantly modified the wording of the guidelines in recent years. The 2017 protocol document, for example, focused primarily on whether the school had attained the required state approval for its recruitment and retention plan and the extent to which it was making efforts to implement it. The 2018 protocol, in contrast, goes beyond the existence of the policies themselves to draw attention to the school's success, or lack thereof in meeting desired outcomes. For, example, among the enrollment related sub-questions in the 2018 protocol (which is relevant for the FY 2019 reviews) are:

Has the school been successful in recruiting and retaining a student population that is demographically comparable to the population that is enrolled in similar grades in schools from which the charter school enrolls students?

Do school policies and practices allow all students to have equal rights of access to the within-school opportunities provided by the educational program?

Along with these more specific questions, the recent site visit reports now include more detailed data specifically linked to the sub-questions. Earlier reports included some numbers in the text but typically also referred the reader to appendix tables or to state data websites. In the 2019 reports, the relevant data are far more clearly highlighted in the text itself and are often

color coded with green to signify positive and red to signify negative outcomes relative to comparative schools. Highlighting the comparisons in this way ensures that no school official or other person interested in the school can fail to understand which,,if, any, subgroups of students the school is under enrolling.

With respect to policies and practices, the inspectors pay particular attention to potential barriers to the enrollment of needy students, such as those who are economically disadvantaged or have special needs. Among the highlighted barriers are the limited translation of promotion and other materials into the various languages that are common in the local area and insufficient descriptions of the availability of school's programs for special education or ELL students. They also include less easily measured barriers that are discernable only from focus groups and parent surveys, such as the possibility that the school is sending signals that it is looking primarily for particular types of students. Schools, in turn, are offered an opportunity to explain any shortfalls. One regional school noted, for example, that transportation for economically disadvantaged students from outlying portions of the district was not available, 15 while another cited the fact the lottery selection process for charter schools sometimes makes it difficult to meet various recruitment goals. Of the 27 charter schools up for renewal in 2018 and 2019, the summary reports indicated that five schools failed to translate their materials into all the appropriate languages and 11 had insufficient descriptions of their programs for students with special needs. Thus, despite the efforts of the inspectors to highlight such barriers in earlier site visit reports, by the time of their 5-year renewal visits, some charter schools still had not eliminated them.

¹⁵ In Massachusetts, local school districts are responsible for providing transportation to all students, including those in charter schools, residing within district boundaries, but only to the boundary of the district.

The site visit reports also provide clear ratings indicating whether or not a school meets the state standard for Access and Equity. We note, however, that starting in 2019 the guidelines for this criterion were expanded beyond enrollment issues to place new attention on a school's suspension rates. Within the framework of this paper, suspension rates fit more clearly under the topic of a school's treatment of disadvantaged students than under the topic of access. Hence, consistent with the data we presented above only about a third of the schools rated in 2017 and 2018 failed to meet the state standard for Access and Equity. In contrast, about 80 percent of the schools that were rated in 2019 failed to meet the new standard that included attention to suspension rates.

Prior to 2019, charter schools fell short on this criterion for various reasons that differed across schools. The most common was a low proportion of students in one or more of the three categories of disadvantage: Economically disadvantaged students, English language learners, or students with disabilities relative to the average proportion in local comparison schools – or even, in some cases, explicit barriers for such students. Interestingly, the shortfalls were not closely related to how long a school had been operating. For example, among the six schools reviewed in FY 2017 that did not meet the standard, three were relatively recently established (one was reviewed in year 1 and two in year 3), one was reviewed in year 8, and the other two were reviewed in year 22.

Thus, through the discussions they have with school personnel and the ratings they give, the site visitors put continual pressure on the schools to enroll their fair shares of disadvantaged students. We remind the reader, however, that the site visitors have no power to impose sanctions or to tell the schools precisely what they must do. Nor does a poor rating on the Access and

Equity Criterion translate readily into the imposition of a condition or the non-renewal of a charter since it is only one of 10 performance criteria that affect the renewal decision.

The bottom line.

We conclude that many, but certainly not all, Massachusetts charter schools successfully enroll their fair shares of disadvantaged students. While we are not in a position to determine how much of this success can be attributed specifically to the site visits and related reports, we are quite confident in concluding that without the pressure and nudges provided to schools through the site visit process the enrollment patterns would be far less positive. Enrolling their fair shares of disadvantage students, however, is only one part of the equity challenge. Another question is how well charter schools serve their disadvantaged students.

How well do Massachusetts charter schools treat their disadvantaged students?

Determining how well any charter school serves its disadvantaged students requires attention to its internal school policies and practices. While some elements of those practices, such as differential suspension rates, are subject to quantitative measurement, many of the relevant factors can only be assessed by observing what is happening within the school. The information in the first part of this section comes directly from the school-specific reports of the site visitors, and focuses on the performance measures for Program Delivery (Criterion 6) and School Climate and Family Engagement (Criterion 7). Unfortunately, comparable qualitative information for district schools is not available. At the end of the section we turn to data on attrition and suspension rates for students with high needs, with some comparisons to district

schools. We remind the reader that we say nothing here about the academic performance of disadvantaged students in charter schools, a topic that has been frequently studied by others and requires more sophisticated quantitative analysis than we are able to pursue for this project.

Program Delivery (Criterion 6).

The performance criterion for Program Delivery includes four indicators: Curriculum (6.1); Instruction (6.2); Assessment and Program Evaluation (6.3); and Supports for Diverse Learners (6.4). Of these, the most relevant for our equity—oriented analysis — and, fortunately, the one with the most complete information — is the indicator labeled Supports for Diverse Learners (6.4). This indicator draws attention to whether the school has the "interventions, supports and resources to meet the academic needs of diverse learners, including but not limited to students with disabilities and English language learners" (2017 protocol). The 2017 protocol asks the schools what sorts of interventions and supports they provide. In contrast, the 2018 protocol specifically asks whether the school has an appropriate data-based system for identifying the strengths and needs (not just academic, but also behavioral and socio-emotional) of all students, whether it implements a tiered support model, and whether it uses data to evaluate and modify its support programming.

While the other three indicators in the Program Delivery category are relevant for the overall academic quality of the school, we briefly draw attention here only to the indicator labeled Instruction (6.2.) This one is potentially important for within-school equity because the protocol language refers throughout to the quality of instruction for "all" students. To make a judgement on the quality of instruction, the site visitors first determine through their interviews with school leaders, focus groups, and classroom observations whether the school has a common

understanding of high quality instruction for all students. They then use classroom observations to determine whether instruction reflects high expectations for all, whether it fosters student engagement by all students and whether the classroom environments are conducive to learning. The 2018 protocol is similar to the 2017 protocol but includes an additional question about whether the instruction reflects cultural proficiency. For many schools in recent years, the site visits were too short for site visitors to spend enough time observing classrooms for the reviewers to report a rating for the category. In many of those cases, the reviewers report what they refer to as "findings" rather than a rating. As a result, there have been very few ratings for the instruction category in recent years.

The summary ratings for the two program delivery categories are shown in the first panel of Table 4. Of primary interest are the number and shares of schools that do not meet the state standards for program delivery. The table indicates some significant shortfalls. For example, of the 56 ratings related to school supports for diverse learners for FYs 2016 to 2019, 31 of the 73 schools, or about 43 % fell short of the state standard. Similarly during that same period the reviewers concluded that about two-thirds of the schools for which instruction was rated fell short of the state's standards. (But we note that only four schools received ratings for instruction in FY2019). The summary ratings for the state in the first panel of Table 4. Of primary interest are the number and shares of schools that do not meet the state standards are significant shortfalls. For example, of the 56 ratings related to school supports for diverse learners for FYs 2016 to 2019, 31 of the 73 schools, or about 43 % fell short of the state standard. Similarly during that same period the reviewers concluded that about two-thirds of the schools for which instruction was rated fell short of the state's standards. (But we note that only four schools received ratings for instruction in FY2019).

A review of the site visit reports for the 10 schools that did not meet the state standard for Supports for Diverse Learners in FY 2017 illustrate the nature of the shortfalls. Most of the schools had adequate systems for screening students to determine their needs, although some

¹⁶ The table does not include the renewal summary reports in 2018 and 2019 because, while such reports include discussion, they do not include summary ratings for this category.

¹⁷ Two of the schools were subject to full year 2 reviews, 1 to a targeted year 3 review, and one to a year 6 review.

schools were apparently still working to refine their systems. The most common shortfall observed and reported by the site visitors was that the school was providing limited supports or interventions for its needy or struggling students. In many cases that reflected a lack of capacity, especially in terms of staff certified to teach ELL students or students with special needs. In others it also reflected the absence of systems, such as an ESL curriculum, well designed tutorial programs, or appropriate accommodations required to meet the needs of struggling students. Based on the modified standard for FY 2019, reviewers in more recent years also noted that some schools did not use data to the degree required for state assessments to evaluate their support programs.

For the schools not meeting the state standard for the instruction indicator (6.2) many of the site visit reports noted that in more than half the observed classes, the teachers failed to maintain high expectations for all students and failed to keep the students engaged. Moreover in some cases, the observers concluded that the classroom environments were not conducive to learning, perhaps because of poor classroom management or general disruptive behavior of the students. With the modified standard for FY 19, the reports also typically commented on the "cultural proficiency" of the instruction.

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¹⁸ Observed examples of high expectations include: a teacher not giving up on students when they were struggling; a teacher asking students to explain their thinking, a teacher drawing connections among ideas, a teacher supporting students in solving equations without telling them what to do; and students responding to peer answers. Examples of instructional practices that did not reflect high expectations include a teacher not correcting a student's incorrect answer, a teacher asking questions and then answering them when students were unable to; teachers providing few criteria to guide students in successfully completing complex assignments; and teachers allowing students to chat about off task topics for extended periods during class. (Examples from the year 22 targeted site visit report for the SABIS International Charter School).

School Climate and Family Engagement (Criterion 7).

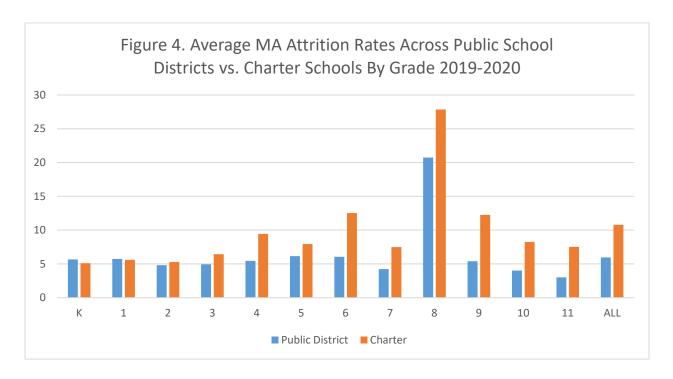
Finally, we turn to a specific indicator for Criterion 7, namely the one labeled Safe and Supportive Environment, starting in 2018. Earlier ratings are not included here because the indicators differed in prior years and most schools were not rated on them. Only in FY 2019 was a rating provided for this indicator for all the school visits. The indicator asks whether the school and classroom environments are safe, supportive and culturally responsive; whether they support all students' sense of belonging; whether the school helps students develop social and emotional skills; and whether the school has formal procedures to support students in crisis or at risk of dropping out. All of these are directly relevant to the quality of the experiences of the school's disadvantaged students.

Three-quarters of the 20 schools receiving site visits in 2018-2019 received favorable reviews on Criterion 7, while only five were classified as not meeting the standard. Many of the problems noted among schools in the latter category related to school discipline. Students in such schools typically complained about excessive punishments for minor infractions, inconsistent application of rules across groups of students and more emphasis on handing out "demerits" than "merits." Students in these schools also tended to feel that teachers did not respect them, especially when they came from very different backgrounds. Several of these schools indicated that they were now moving away from harsh disciplinary approaches and placing less reliance on suspensions. By contrast, schools that were deemed to have met Criterion 7 tended to have found ways to celebrate diversity by means such as awards and support for student affinity groups. Such schools also tended to have formal structures to identify struggling students and to have policies favoring restorative justice.

Table 4. Summary of ratings related to treatment of disadvantaged students						
	FY 2016	FY2017	FY2018	FY 2019	Total	
Program Delivery (C	riterion 6)					
Supports for Diverse L	earners (6.4)					
Total ratings	17	20	16	20	73	
Standard not met	5	10	9	7	31	
Share not met (%)	29.4	50.0	56.3	35.0	42.5	
Instruction (Criterion	(6.2)		•	•		
Total ratings	10	9	8	4	31	
Standard not met	8	6	4	3	21	
Share not met (%)	80.0	66,7	50.0	75.0	68.0	
Safe and Supportive Environment (Criterion 7)						
Total ratings				21	21	
Standard not met				5	5	
Share not met (%)				23.8	23.8	

Attrition. We return here to other information included in the site visit reports under the Access and Equity criterion that we interpret as indicative of how the charter schools treat their disadvantaged students. We begin with student attrition, which is defined as the proportion of students who leave a school between the end of one school year and the start of the next, i.e. over the summer. While high attrition rates suggest that something may be amiss within the school, we are not able to distinguish between students who chose to leave for family reasons (such as residential moves) irrespective of the quality of the school, or for reasons signifying a misfit between the student and the school. In any case, the site visitors draw attention to attrition in their reports as part of their responsibility to assure that charter schools not only enroll, but also retain, their fair share of disadvantaged students.

Figure 4 compares attrition rates in charter schools to those in traditional public schools by grade. Aside from in the early K-2 grades, charter schools feature higher attrition rates at every grade than traditional public schools. Even setting aside the very high charter attrition rates



for grades 6 and 8 which could partly reflect student movement among schools that occur at the end of natural grade spans, the figure makes clear that charter schools typically have higher attrition rates than do traditional public schools.

Table 5 provides a closer look at five charter schools that were up for renewal in 2019. Of the 12 charter schools being renewed in that year, only these five had attrition rates (in 2018) for their students with high needs that exceeded the median of comparison schools. ¹⁹ With the exception of River Valley which serves grades K-8, all of them offered high school grades, and

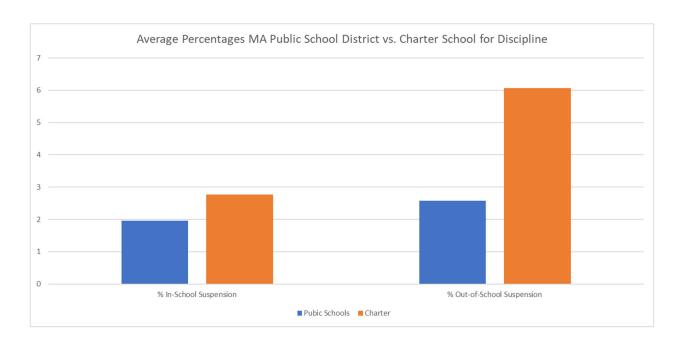
¹⁹ High needs students are those who are low income, ELL, or former ELL (within the past two years) or students with disabilities. The median refers to the midpoint of all comparison schools.

their attrition rates ranged from 14.2 percent to 20.4 percent. Most striking is Berkshire Arts and Technology, whose rate of 20.4 percent is high both absolutely and, especially, relative to the median of 7.7 percent in comparable local schools. In addition, as noted in the final column, the school's attrition rate was not only high at the time of renewal; it had been rising during the previous few years. Phoenix Academy presents a more positive picture. Although its attrition rate for high needs students was very high in 2018, it was only slightly above the median of comparison schools at that time and had been declining over time. In 2017, for example, its attrition rate had been over 34 percent.

Table 5. Charter schools with attrition rates above the median for high needs students, 2019 renewal reviews.					
Charter school	Year school opened	Grades in school	Attrition rate	Median	Trend (3 or 4 years)
Berkshire Arts and Technology	2004	6-12	20.4	7.7	Rising
Hamden Charter School of Science East	2009	6-12	14.2	11.3	Mixed
Phoenix Academy	2014	9-12	20.3	19.1	Down
Roxbury Prep	1999	5-12	16.6	15.8	Up
River Valley	1999	K-8	8.0	6.3	Down slightly

Suspensions. Many charter schools, including most of the charter schools in Boston that have often been praised for their students' strong academic performance, use a "no-excuses"

approach to education. This approach features high academic standards, strict disciplinary codes that often lead to high suspension rates, extended instructional time, and targeted supports for low-performing students (Angrist et al. 2013 and Dobbie and Fryer,2013). Experimental studies have confirmed the positive effects of the "no-excuses" approach on student achievement (Cheng et al, 2015). Only recently, however, has the state called them out for their high suspension rares. As of 2014, a new state law (Chapter 222) required the state Department of Elementary and Secondary Education to collect and report suspension rates for all public school districts throughout the state, to investigate high rates, and to propose alternative models. Not until the fall of 2018, however, did the state modify its guidelines for charter school reviews to draw specific attention to high suspension rates. Based on state-wide discipline data for 2018-19, the following figure shows that the average rates of both in-school and out-of school suspensions were higher in charter schools than in traditional public schools, especially in the case of out-of school suspensions.



²⁰ One must be careful not to over interpret this figure given that charter schools represent such a small and non-representative share of all public schools in the state.

Table 6 reports levels and trends for the four charter schools up for renewal in 2019 whose in-school or out- of- school suspension rates (or both) for all students were above 10 percent. Roxbury Prep, which had been in operation for 20 years, illustrates some of the recent efforts to reduce suspension rates.

Table 6. Schools with high suspension rates among those up for renewal in 2019.						
	Year school opened	Grades in school	In school Suspension rate (2018)	Trend	Out of school suspension rate (2018)	Trend
Argosy	2014	6-12	18.9	Up	7.2	Down
City on a Hill New Bedford	2014	9-12	20.7	Up	17.0	Down
Phoenix Academy	2014	9-12	0.0	Flat	16.1	Up
Roxbury Prep	1999	5-12	6.0	Mixed	21.1	Way down

With an out-of- school suspension rate of 40 percent in 2015, Roxbury Prep was selected in 2016 to participate in a new state program for districts and schools designed to reduce the inappropriate or excessive use of long-term suspensions and expulsions, including disproportionate rates of suspension for students with disabilities or students of color.²¹ In subsequent years Roxbury Prep's overall out-of- school suspension rate declined to 28.0 percent in 2016, 25.7 percent in 2017, and 21.1 percent in 2018. Even in this recent year, however, its

²¹ The program is the Department's Rethinking Discipline Professional Learning Network (PLN).

suspension rates for English language learners and economically disadvantaged students were about 25 percent, and for students with disabilities it exceeded 35 percent. The school's summary report in 2019 noted that it had made a number of changes, including developing alternatives to suspension, leveraging individual behavior plans and reducing the use of suspensions lasting longer than two days. The reviewers also noted, however, that school leaders recognize to be that more needed done. These concerns led the state to impose conditions of the school as of February, 2019.

As we briefly noted earlier, this recent focus on high suspension rates in charter schools has dramatically increased the fraction of charter schools that fail to meet the Access and Equity Performance Criterion according to recent site visits. When combined with problems such as high attrition rates for disadvantaged students in some charter schools, shortfalls related to program delivery and quality of instruction, and the failure of some charters to provide a safe and disadvantaged students fairly, it is clear that not all the state's charter school treat their disadvantaged students fairly.

Conclusion.

How well a state's charter schools serve disadvantaged students depends on both the state's authorization practices and on the practices of individual schools. Massachusetts tends to favor charter schools that are located in areas with disadvantaged students, as is evident from its current policy of placing financial limits on the amount a school district can devote to charter school tuition, with higher limits in districts with low-performing students. Further, the state's requirement that each charter have a state-approved recruitment and retention strategy encourages charters to recruit disadvantaged students. Most striking about the Massachusetts

accountability system is its use of specific equity-oriented performance criteria within an elaborate system of periodic site visits to charter schools. This approach illustrates the potential importance of paying attention to school-specific practices if one wants information on how the charter schools treat the disadvantaged students they enroll.

The role of the site visits

We are not in a position to determine how much the equity-oriented accountability standards and the site visits themselves have promoted more equity and access among Massachusetts charter school than would have emerged without them. But the mere fact that some charters do not meet the standards suggests the need for such procedures. With the information provided in the site visit reports – information gleaned from a school's annual report, school data, interviews, focus groups and classroom observations -- no school is able to ignore the fact that it is falling short of state expectations with respect to disadvantaged students and the ways it is doing so. Given the autonomy granted to charter schools, however, how a school responds to any shortfalls is ultimately up to the school. The inspectors do not tell the schools what they must do. Instead, the process is designed to make sure school officials understand the ways in which they are falling short and thereby to strengthen any internal pressures on the schools to make changes. Clearly, the new attention to high suspension rates in the most recent protocol for the Access and Equity criterion, for example, provides pressure for charter school leaders to acknowledge to their stakeholders and students the high suspension rates for disadvantaged students, and to find ways to reduce those rates.

In addition, the ongoing inspection reports provide useful information to state policy makers - information based on qualitative data that is far more detailed than would be available

without this type of accountability system. The site visit reports remain part of each school's permanent record. In addition, each school is subject to a site visit every five years in preparation for its renewal. This visit leads to a summary report that serves as the basis for the decision on whether the charter should be renewed, with or without conditions, or placed on probation.

Final thoughts

Many proponents of charter schools support them in the hope that they well be particularly beneficial for disadvantaged students. To fulfill this expectation, the special characteristics of charter schools imply that equity-oriented accountability policies are needed. Even if empirical studies show that some charter schools successfully raise the achievement of the students they serve, policy makers need to pay attention to a broader set of issues.

In particular, for charter schools as a group to be helpful for disadvantaged students, states will need intentional charter school policies that specifically promote both fair access for such students and high quality environments once they enroll. The equity-oriented approach used by Massachusetts, including its authorization policies and its system of periodic site visits to charter schools, illustrates one approach to accomplishing this goal. Even with that approach, however, not all charters in Massachusetts treat their disadvantaged students fairly. In the absence of an equity-oriented accountability system, it is hard to make the case that charter schools are generally beneficial for disadvantaged students.

Figure 1A. Number of charter schools in Mass. by year

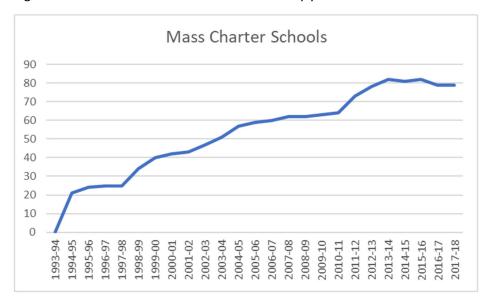


Figure 1B. Number of students in charter schools by year

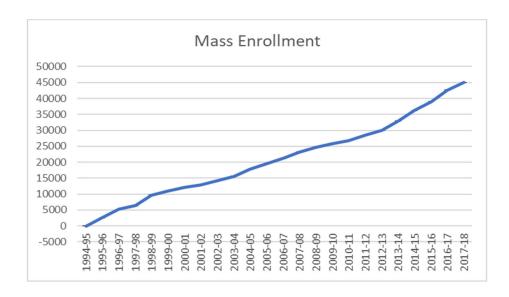


Table 1. Performance Criteria for Charter Schools

ter	1.	Mission and Key Design Elements: The school is faithful to its mission, implements the key design elements outlined in its charter, and substantially meets its accountability plan goals.					
s to Char	2.	Access and Equity: The school ensures access and equity for all students eligible to attend the school.					
Faithfulness to Charter	3.	Compliance: The school operates in compliance with the terms of its charter and applicable state and federal laws and regulations regarding public charter schools.					
Fa	4.	Dissemination: The school provides innovative models for replication and best practices to other public schools in the district where the charter school is located.					
	5.	Student Performance: The school consistently makes progress in student academic achievement for all students as defined by the statewide accountability system.					
cess	6.		1. Curriculum				
Suc		Program Delivery: The school delivers a high quality	2. Instruction				
am.		academic program that meets the academic needs of all students.	3. Assessment and Program Evaluation				
rogr		Students.	4. Supports for All Learners				
Academic Program Success	7.	School Climate and Family Engagement: The school creates safe, positive, healthy, culturally responsive, inclusive, and welcoming learning environments. These	Safe and Supportive Environment				
A		environments cultivate supportive, authentic relationships and a strong sense of belonging and connection, which value the diverse assets and voices of all students, staff, and families.	2. Family Engagement				
	8.	Capacity: The school sustains a well-functioning	1. School Systems and Leadership				
lity		organizational structure and creates a professional, inclusive, respectful, and welcoming working climate for	2. Professional Climate and Standards for Performance				
I Viability		all staff.	3. Contractual Relationships (If applicable)				
Organizational V	9.	Governance: Members of the board of trustees uphold their responsibilities under Massachusetts law and regulations to act as public agents authorized by the state and provide competent and appropriate governance to ensure the success and sustainability of the school.					
Organ	10.						

References

- Angrist, J.D., Pathak, P.A., and Walters, C.R. (2013). Explaining charter school effectiveness. American Economic Journal: Applied Economics, 5, 1–27.
- Angrist, J.D., Cohodes, S.R., Dynarski, S.M., Pathak, P.A., & Walters, C.R. (2016). Stand and deliver: Effects of Boston's charter high schools on college preparation, entry, and choice. Journal of Labor Economics, 34, 275–318.pilots. *Quarterly Journal of Economics*, 126(2). 699-748.
- Bifulco, R. and Ladd, H. (2007). School choice, racial segregation, and test-score gaps: Evidence from North Carolina's charter school program. Journal of Policy Analysis and Management, 26(1), 31-56.
- Bifulco R. and Reback, R. 2014. "Fiscal Impacts of Charter Schools: Lessons from New York, *Education Finance and Policy* 9(1), 86-107.
- Cheng, A., Hitt, C. and Kisida., B. 2015.No Excuses Charter Schools: A Meta-Analysis of the Experimental Evidence on Student Achievement. Educational Research Alliance for New Orleans, EDRA Working paper no. 2014-11.
- Cohodes, S., Setren, E., and Walters, C. (2019). "Can Successful Schools Replicate? Scaling up Boston's Charter School Sector." National Bureau of Economic Research. (May),
- CREDO (2013). *National Charter School Study*. Stanford University Center for Research on Educational Outcomes. Retrieved from https://credo.stanford.edu/publications/national-charter-school-study
- CREDO (2015). Urban *harter School Study*. . Stanford University Center for Research on Educational Outcomes. Retrieved from https://credo.stanford.edu/publications/national-charter-school-study

- Dobbie, W, and R. G. Fryer. 2013. "Getting beneath the Veil of Effective Schools: Evidence from New York City" *American Economic Journal: Applied Economics*. Vo. 5, no. 4 pp. 28-60.
- Finn, C.C. Jr., Manno, B.B. & Vanourek, G. (2000). Charter schools in action: Renewing public education. Princton, NJ: Princeton University Press.
- Gleason P., M.Clark, CC. Tuttle, E. Dwoyer. 2010. The Evaluation of Charter School Impacts: Final Report, NCEE.
- Ladd, H. F. and Turaeva, M. 2020. "Charter Schools and Segregation in North Carolina." Working paper, National Center for the Study of Privatization in Education, Teachers College, Columbia University.
- Ladd, H. F. and Singleton, J.D. 2020 "The Fiscal Externalities of Charter Schools: Evidence from North Carolina." *Education Finance and Policy* 15(1), pp 191-208.,
- NACSA. Rausch, M.K. Conlan, S., Brooks-Uy, V. & Smith, N. (2018). "A Look at Massachusetts Board of Elementary and Secondary Education: Case Study Analysis for the Quality Practice Project." Chicago, IL, National Association of Charter School Authorizers (NACSA). Retrieved from http://www.quality.charters.org/research/quality-practice-project/
- Parham, Katharine. 2020 "Charter Schools and Special Education: Institutional Challenges and Opportunities for Innovation". National Center for the Study of Privatization in Education. Working paper 242. Teachers College, Columia University August 10
- Schuster, Luc. 2016. "Charter School Funding, Explained." Massahusetts Budget and Policy Center. (April 6, 2016)

- Setren, Elizabeth. 2020 A Charter Boost for Special-Ed Students and English Learners. Education Next. (Vol. 20, Issue 2)
- Winters, Marcus A. 2015. "Understanding the Gap in Special Education Enrollments Between Charter and Tradition Public Schools: Evidence from Denver, Colorado. "Educational Researcher, Vol. 44, no. 4,pp. 228-236.