

S U P P O R T I N G E V I D E N C E

Out of the Debate and Into the Schools

Comparing Practices and Strategies in Traditional, Pilot
and Charter Schools in the City of Boston

Prepared for
The Boston Foundation

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Comparing Practices and Strategies in
Traditional, Pilot and Charter Schools in the City of Boston

Supporting Evidence for Key Findings

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Supporting Evidence for Key Findings

In this section, we provide detailed evidence for the key findings described earlier, organized according to the six elements of the autonomy framework. In general, the interaction and connection among each element of the autonomy framework was clear throughout the study, however, the two autonomy elements that appear to be at the foundation of many of our findings and the other autonomy elements are *staffing* and *scheduling & time*. These autonomy elements served as a conduit to managing strategies that fall into the other autonomy elements. As such, the following section breaks away from the order of the elements within the autonomy framework, so that we can first address the two autonomy elements that may facilitate or mitigate the degree to which other autonomies can be used.

First, we discuss the autonomy elements of *staffing* and *scheduling & time*, followed by the other autonomy elements. Within each element of the autonomy framework, we examine how practices and characteristics differ across school type (charter, pilot, traditional) and then look at whether these differences occur for high-achieving schools as well, paying particular attention to how high-achieving schools work within the particular level of autonomy granted to them to support high student achievement. Finally, we draw connections between *staffing* and/or *scheduling & time* and how these primary autonomies influence the way in which the other autonomy elements are used.

Staffing

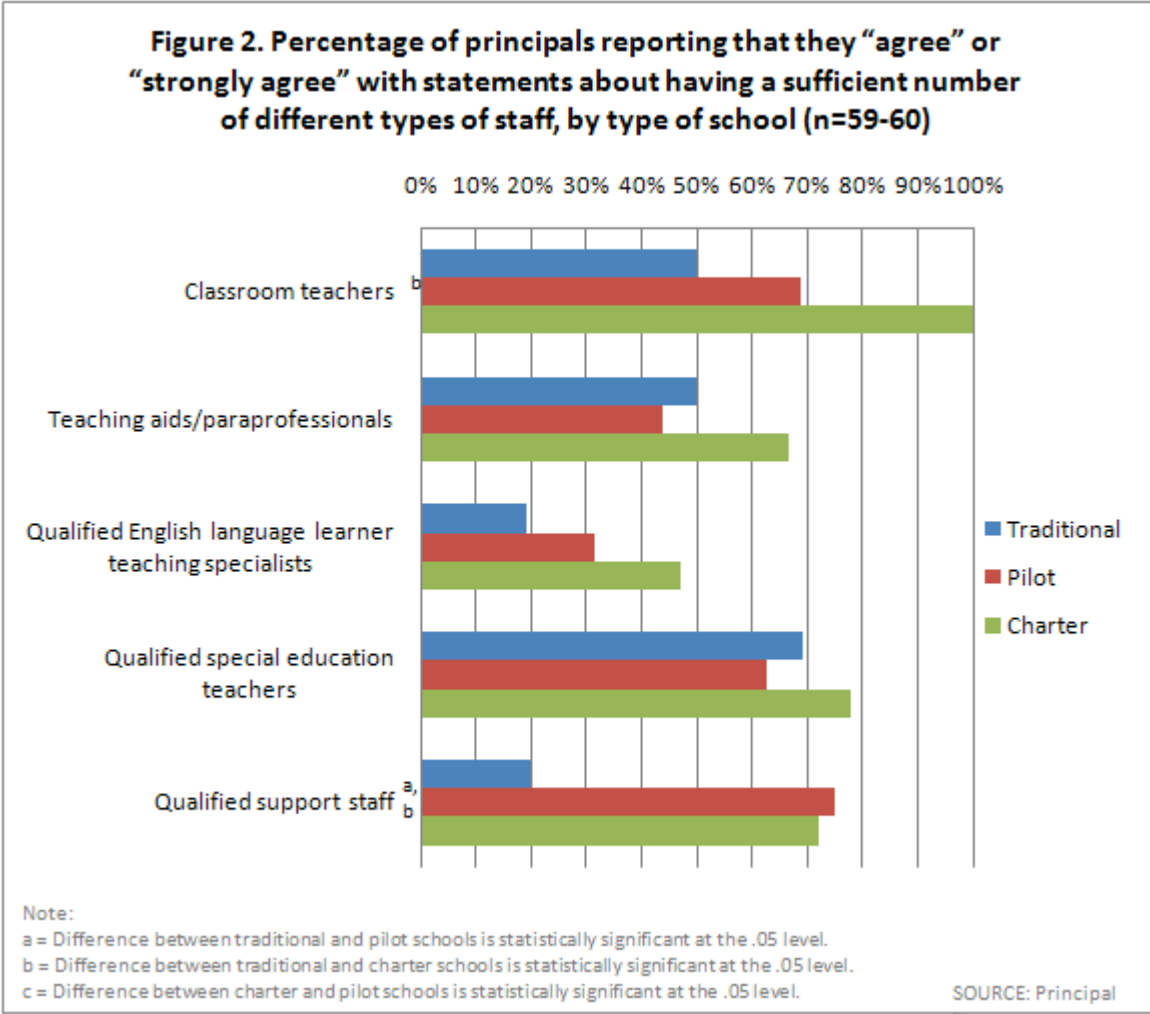
Teachers, administrators, specialists and support staff are the mainstay of any school. A principal's ability to have flexibility to control the number and quality of staff in the school building is key to ensuring a fit between individual staff, the school and students' needs. Our data examined staffing levels, hiring, staff characteristics, and teacher turnover and removal.

Staffing Levels

Comparisons Among the Three Types of Schools

Among all surveyed principals, charter school principals appear most satisfied with the number of staff currently working in their schools (Figure 2). For example, all of the charter school principals who were surveyed agreed that they had sufficient number of classroom teachers to meet their student achievement goals, compared to only 50% of traditional school principals who agreed with this statement. Fewer than half of the principals across all three types of schools agreed that they had sufficient numbers of qualified English language learner teaching specialists. A very low percentage (20%) of traditional school principals, compared to over 70% of pilot and charter school principals, agreed that they had sufficient numbers of qualified support staff.

NOTE: See Executive Summary for Figure 1: Percentage of principals reporting that they “agree” or “strongly agree” with statements about autonomy and leadership, by type of school (n=59-60)



Note: See the Executive Summary for Figure 1

High Achieving Schools

Among high-achieving schools, 100% of the charter and pilot school leaders reported feeling that they had a sufficient numbers of classroom teachers, compared with only 40% of traditional school principals who reported this. These data demonstrate that high-achieving schools, without autonomy over staff, do feel somewhat constrained in their ability to maintain sufficient levels of staff in their school.

However, our data showed that traditional, pilot and charter schools that participated in the case studies creatively developed programs to ensure that sufficient staff were available to provide students with the services they needed. For example, one traditional case study school developed an intern program for psychologists to provide services to students in the school with socio-emotional issues. Another pilot case study school developed an extended day program by asking paraprofessionals to start a few hours after school started and end when the extended day was finished to create a seamless connection for students, then enlisted City Year to support the teachers during the time when school started and the paraprofessionals began their day. In all of the case study schools, numerous

support staff positions were identified, ranging from college placement counselors to school clinicians and psychologists. While several schools had in-house support, others relied on local colleges and universities, and non profits such as City Year, to supplement their full-time staff. Still others used retired teachers to provide specialist services.

Indeed, in the classrooms observed, traditional and charter case study schools had similar adult to student ratios (approximately 12) while pilot schools had an even lower ratio (7.5)¹. Not surprisingly, the adult to student ratio in case study high schools was higher (14.3) than the in the case study elementary school classrooms (8.29). Adults in the classroom encompassed more than just classroom teachers, and there were differences in the number of adults in classrooms among the case study schools. Some examples of the adults observed in the case study school classrooms include special education teachers, specialists (e.g., reading, behavioral), paraprofessionals, teacher interns, and volunteers. Nearly all of the schools relied on a single teacher to lead the classroom.

Another difference between the pilot and charter case study schools, and the traditional case study schools, was the pilot and charter schools' allocation of administrators, specialists and other non-teaching staff. *The high-achieving pilot and charter case study schools drew on an array of supports and staffing patterns designed to meet the needs of students.* For example, one pilot case study school designated a full time registrar as an additional administrator to ensure that after routine (monthly or more frequently) monitoring of students' progress in classes through teacher reports and grades, each student's schedule would be changed to ensure that the student received immediate support in his or her area of need. Another example comes from a charter case study school principal, who designated an administrator to foster a positive school culture of orderly student behavior and collaboration among staff. Additionally, pilot and charter school principals reported that they had the flexibility to assign and reassign teachers to meet student needs. Traditional schools that participated in the case studies did not or were not able to make administrative changes to reflect student needs or the school mission as readily as pilot and charter schools. Rather, they relied on teachers to take responsibility for meeting students' needs as a secondary role to their primary role of classroom teaching.

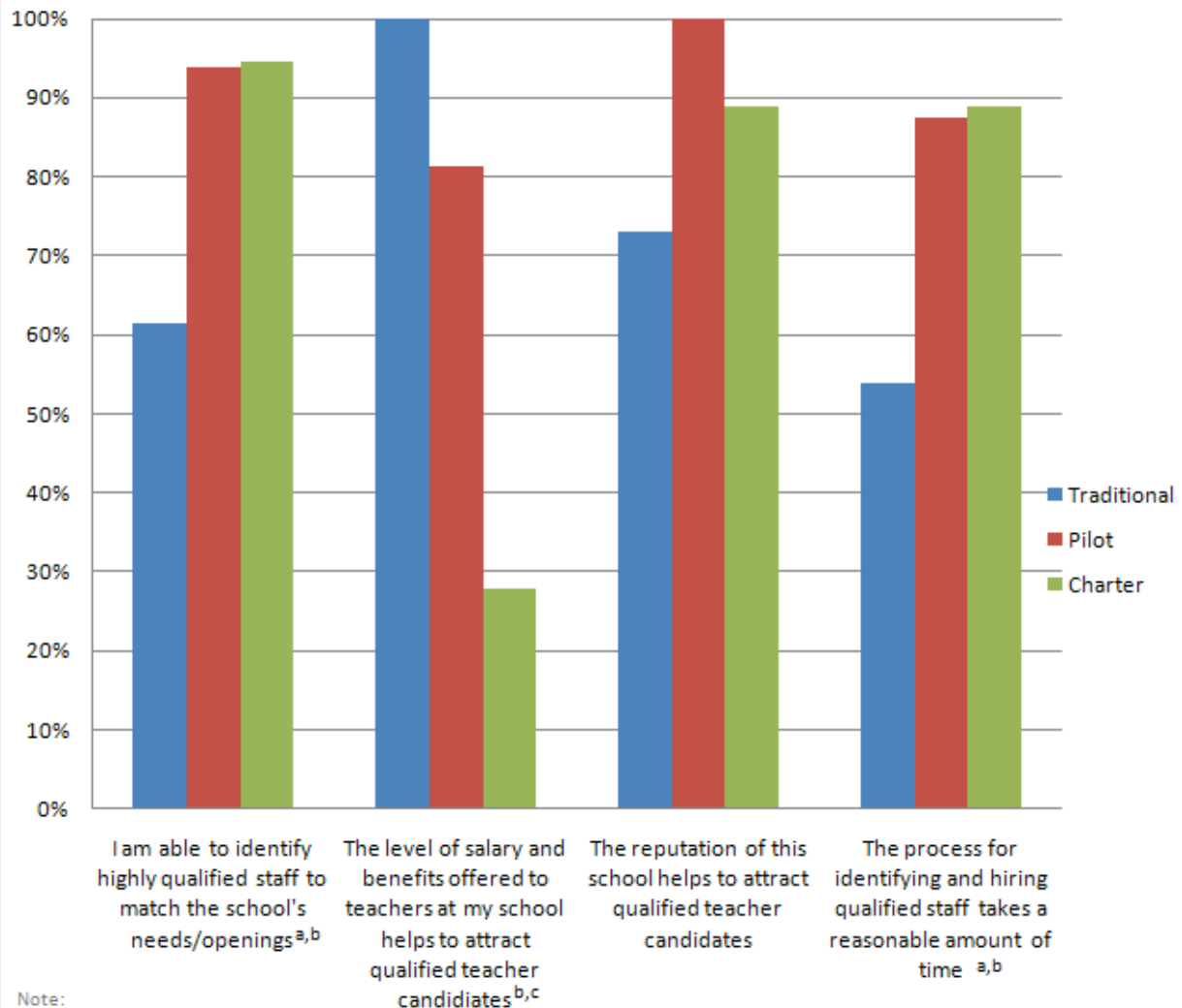
Hiring

Comparisons Among the Three Types of Schools

Nearly all of the pilot and charter school principals (94% and 95%) agreed that they were able to identify highly qualified staff to match their school's needs and openings, compared with only 62% of principals from traditional schools (Figure 3). Principals in pilot and charter schools were also more likely than principals in traditional schools to agree that the process for identifying and hiring qualified staff takes a reasonable amount of time.

¹ The lower adult to student ratio observed in the case study pilot schools may be attributed to these particular schools' inclusion models for special education students.

Figure 3. Percentage of principals reporting that they “agree” or “strongly agree” with statements about hiring staff, by type of school (n=60)



Note:
 a = Difference between traditional and pilot schools is statistically significant at the .05 level.
 b = Difference between traditional and charter schools is statistically significant at the .05 level.
 c = Difference between charter and pilot schools is statistically significant at the .05 level.

SOURCE: Principal Survey

Salary and benefits were important for attracting teachers to work in the traditional and pilot schools, while charter school principals reported school reputation was important for attracting teachers to their schools. When asked about what factors attract qualified teacher candidates to their school, all of the traditional schools principals, and over 80% of the pilot school principals, agreed that level of salary and benefits offered to teachers helped to attract candidates. Meanwhile, only 28% of charter school principals agreed that the level of salary and benefits helped to attract candidates, whereas nearly 90% agreed that the reputation of their school helped to attract candidates. This is not surprising when one

considers that the average teacher salary in the 2006-07 school year in Boston public schools (traditional and pilot schools) was approximately \$71,000 and for Boston charter schools it was \$48,600 schools.^{2,3}

High Achieving Schools

All of the principals from high achieving schools felt they were able to identify highly qualified staff.

Among the case study school principals, finding and hiring the right staff was important to the success of their schools. The case study school principals reported having very stable teaching staff and they invested time and resources to ensure that new teachers fit into the school culture. One traditional case study school principal explained, “We look for people who really want to succeed.” The case study schools were willing to hire individuals with potential. A charter case study school principal emphasized the philosophy and culture fit aspect of the hiring process, “I was able to sit down and know what my philosophy of education is and the culture I was trying to achieve, and so when I was interviewing I was able to get that from the start.”

The case study pilot and charter school principals enjoyed autonomy to select teacher candidates, but the traditional case study school principals also found ways to improve their ability to make staff hiring decisions. Traditional case study school principals, who were familiar with the district hiring systems and schedules, controlled the hiring process by working around the system. For example, a principal might be aware of an opening for the following year, but would wait to post the opening until after the transfer period in the district, which would allow them to identify their own teacher candidates outside of the district system.

Developing feeder systems, through which principals established relationships with organizations (e.g., teacher preparation programs), was a common strategy employed by traditional case study school principals to help them access a continuous pool of teacher candidates. For example, one traditional case study school principal developed a relationship with an urban teacher training program from a nearby college. Students from the program completed their student teaching at the school, and if he liked the student teacher, he found a way to hire the individual. Another traditional case study school had developed relationships with several teacher training programs and used the student-teaching process as a trial employment period to see if the candidate fit into the school culture. Some of the pilot and charter case study school principals described similar feeder strategies.

These examples reflect a general sense of self-determined autonomy among the principals of high-achieving traditional schools, which played out very deliberately in the area of *staffing*. A principal provide some insight into this de facto sense of autonomy:

² These data are from the Massachusetts Department of Elementary and Secondary Education School and District profiles. At the time of the report the most recent charter school data available were from 2006-07 (fiscal year 2007).

³ At least part of this difference may be explained by the difference in the age (and likely experience) of the teaching staff among charter school teachers and teachers in traditional and pilot schools. Boston charter school teachers are significantly younger than teacher in traditional and pilot schools (Figure 12).

In terms of the district—the less they know, the better they are. I seek forgiveness instead of permission.

Another noted,

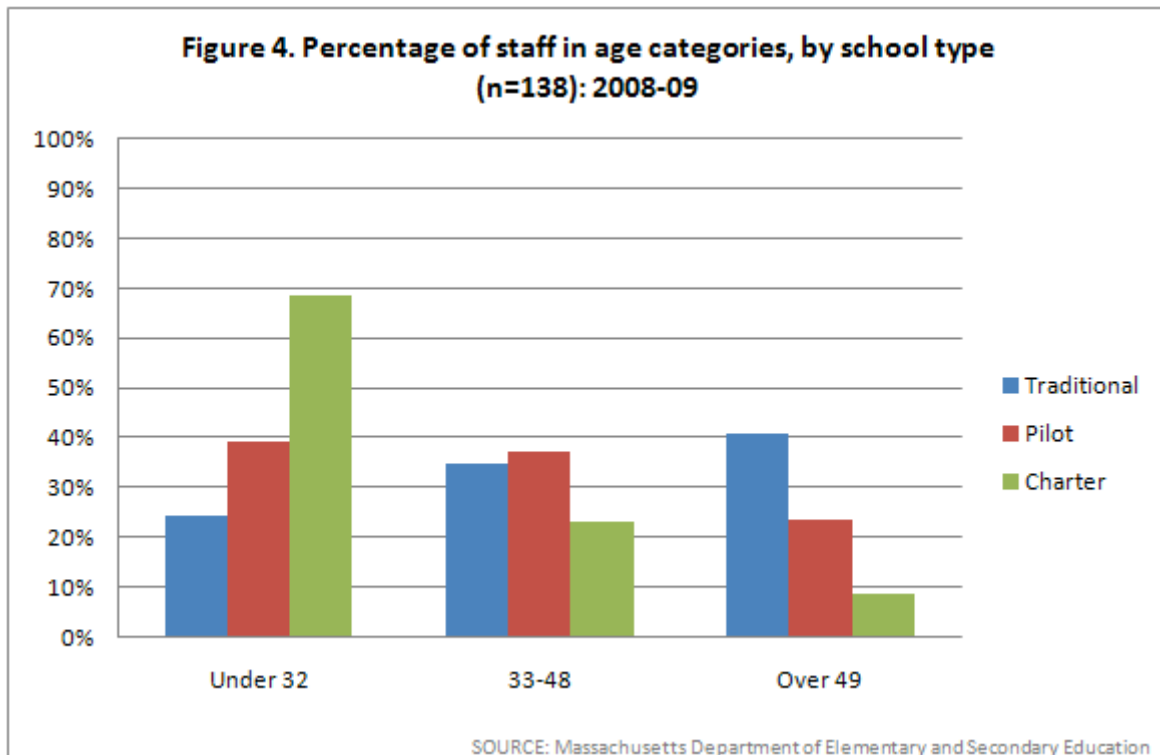
Doing what our students need often requires figuring out a way to do it “under the radar.”

Characteristics of Staff

Comparisons Among the Three Types of Schools

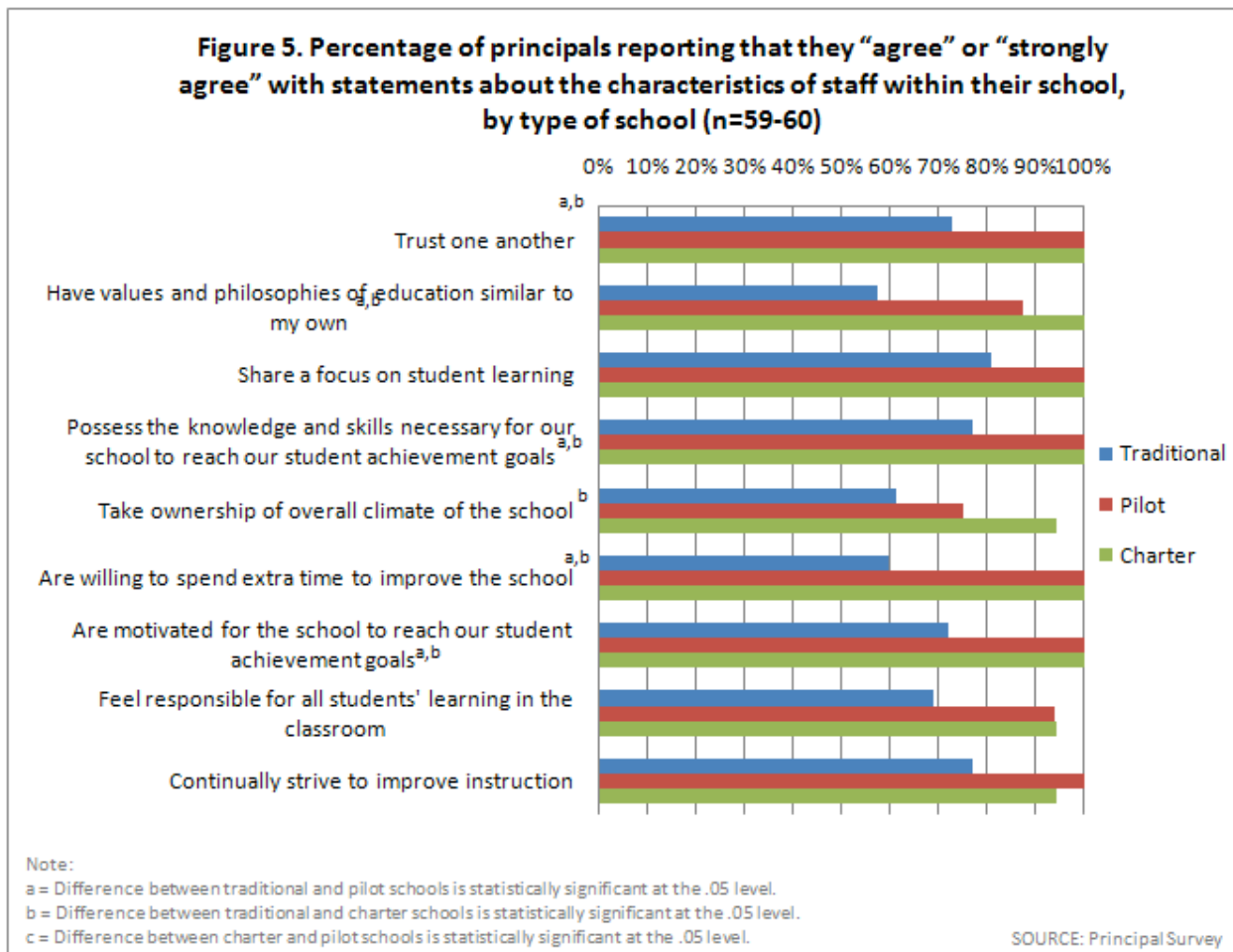
Staff in the charter schools are significantly younger than staff in either the traditional or pilot schools.

A majority (68%) of the staff in charter schools are under the age of 32 years, compared to less than half of the staff in traditional and pilot schools in this age category. Meanwhile, less than 10% of staff in charter schools are over the age of 49, compared to 41% and 24% of staff in traditional and pilot schools, respectively (Figure 4).



High percentages of principals from pilot and charter schools agreed that staff in their school trust one another, have values and philosophies similar to their own, share a focus on student learning, possess the knowledge and skills necessary for their school to reach its student achievement goals, take ownership of the overall climate of the school, are willing to spend extra time to improve the school,

are motivated for the school to reach its student achievement goals, feel responsible for all student learning in the classroom, and continually strive to improve instruction (Figure 5). While the majority of principals in traditional schools also agreed that their staff demonstrated these characteristics, the percentage of traditional school principals agreeing with these statements was, in several cases, statistically significantly lower than the percentage of principals in both pilot and charter schools who agreed with these statements. For example, a lower percentage of principals in traditional schools than pilot or charter school agreed that their staff trust one another, have values and philosophies similar to their own, possess the knowledge and skills necessary for the school to reach its achievement goals, are willing to spend extra time to improve the school, and are motivated for the school to reach its student achievement goals.



High Achieving Schools

Principals from high achieving traditional schools were more likely than all traditional school principals surveyed to report that their staff possess the knowledge and skills necessary for their school to reach student achievement goals, feel responsible for students' learning in the classroom and continually strive to improve instruction. These findings suggest that positive staff attributes may be more closely associated with student achievement level than they are with school type.

Data from the case study schools supported the findings that principals and staff in high achieving schools feel positive about the school environment. In each of the case study schools, the school climate was described as “collaborative.” In fact, case study school teachers were able to describe the difference between the high achieving school they were currently in, and schools they had been at before. One teacher stated,

I worked in [another] school [in this district], and... it was a great place to learn how to teach because nobody ever came in my classroom, nobody asked any questions. You were in your classroom with 32 kids and your door was shut....Then I came to [this pilot school] and it’s an open door. It’s a team effort.

Another teacher described a school she had worked for prior to the current school,

Where I worked before, there was a complete disconnect between what the teachers and students needed [and the school and leadership].

Yet, another teacher remarked,

[At the other school I worked at in Boston]... I loved working there. It was a lot of fun, and I learned a lot...but as far as guidance and student support is concerned... it was all on the guidance counselors. There was no support. There weren’t really personal relationships being established...the school was so big you got bogged down in clerical work.

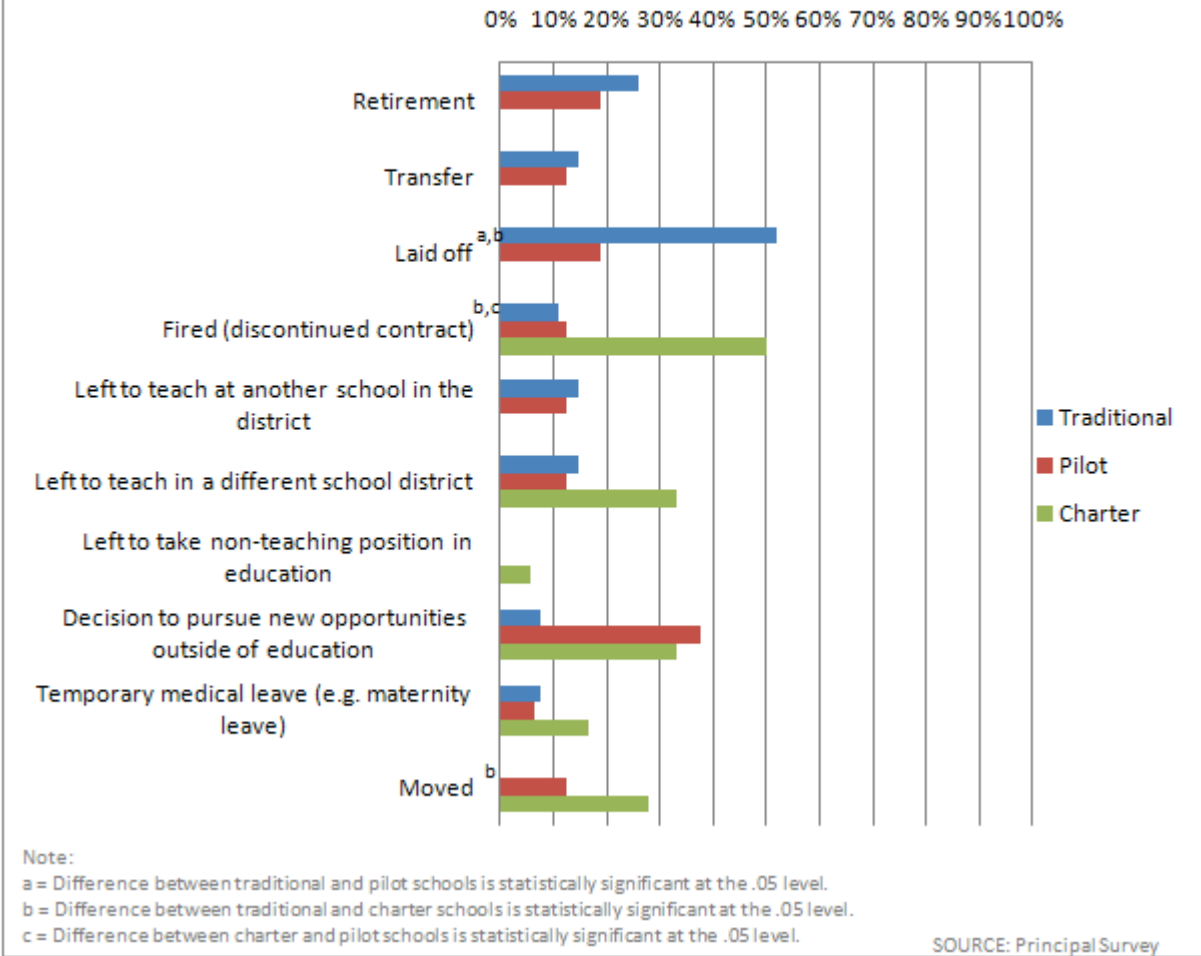
Teacher Turnover and Removal

Comparisons Among the Three Types of Schools

Pilot school survey respondents reported the least amount of teacher turnover between 2008-09 and 2009-2010. For example, 31% of pilot school survey respondents reported that no teachers left their school between 2008-2009 and 2009-2010, compared to 8% of traditional school survey respondents and 11% of charter school survey respondents reporting this. Similarly, only 19% of pilot school survey respondents reported that more than 10% of their teachers left, compared to 38% of traditional and 39% charter school survey respondents who reported this.

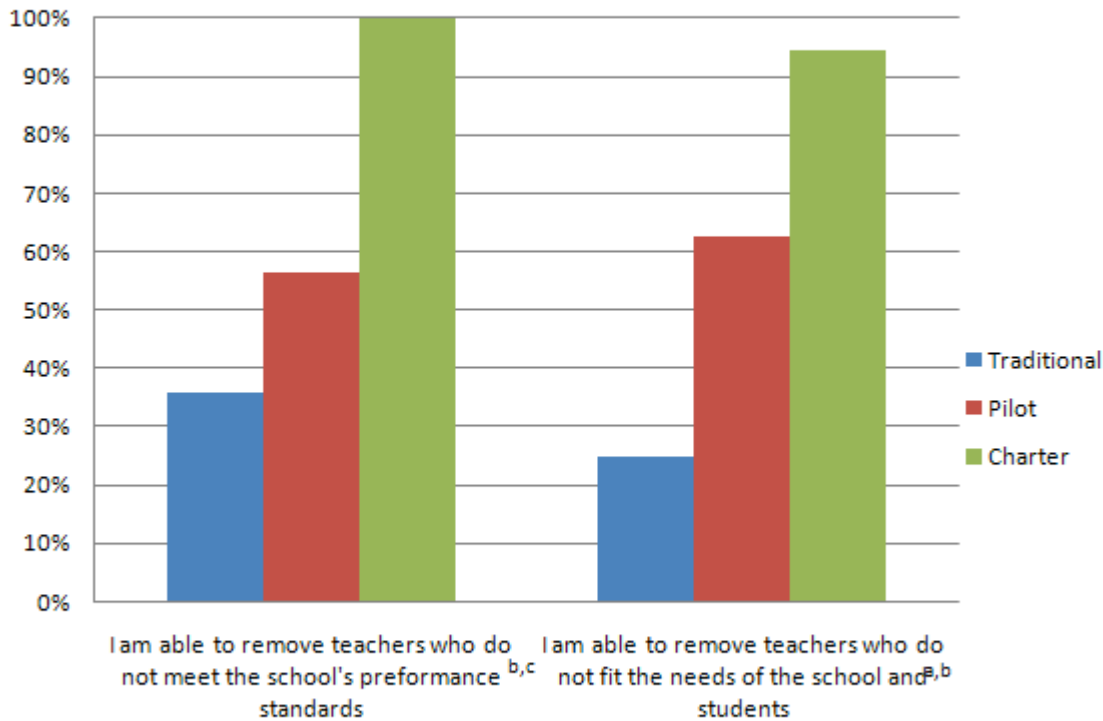
Principals reported a variety of reasons for why teachers left their school. For traditional schools, the most common reason was being laid off. In pilot schools, the most common reason that principals cited for teachers leaving their school was the decision to pursue opportunities outside education, and in charter schools, the most common reason given was being fired (discontinued contract). (Figure 6).

Figure 6. Percentage of principals indicating various reasons that teachers left their school in 2008-09, by type of school (n=61)



Nearly all charter school principals indicated that they are able to remove teachers who either do not meet their school’s performance standards or do not fit the needs of the school and students (Figure 7). This is compared to 56% of pilot school principals and 36% of traditional school principals who agreed that they were able to remove teachers who did not meet the school’s performance standards. Sixty-three percent of pilot school principals and 25% of traditional school principals agreed that they were able to remove teachers who did fit the needs of the school and students.

Figure 7. Percentage of principals reporting that they “agree” or “strongly agree” with statements about the removal of teachers, by type of school (n=58-59)



Note:

a = Difference between traditional and pilot schools is statistically significant at the .05 level.

b = Difference between traditional and charter schools is statistically significant at the .05 level.

c = Difference between charter and pilot schools is statistically significant at the .05 level.

SOURCE: Principal Survey

High Achieving Schools

A majority of principals from high achieving traditional schools and all of the high achieving pilot schools reported that they have autonomy to remove teachers, which was different from the data for all schools. For example, while only 25% of traditional school principals and 65% of pilot school principals in the full survey sample agreed that they were able to remove teachers who do not fit the needs of the school and students, sixty percent of traditional school principals and 100% of pilot school principals in the high achieving sub-sample agreed that this was true. The case study data provide some insight into this difference. All of the case study school principals felt they were able to remove staff who were not performing to the school’s standards. Traditional and pilot schools were required to follow rules from the collective bargaining agreement between the district and teachers union and district processes, while charter schools were able to remove staff as they felt necessary.

Each of the case study schools, however, had strong school cultures that served as a way for new teachers to quickly determine on their own whether there was a fit, or whether he or she should leave the school. For traditional case study school principals, this was one of the most effective means

through which they were able to maintain high quality staff. Traditional case study school principals talked about the hiring and removal process as a “mutual decision.” Similar to the “mutual decision” concept, a pilot case study school principal discussed how the school culture self-selects who stays and who leaves the school, stating “when you have like minded teachers...if you don’t agree with the philosophy of the school, you probably won’t stick around.” The case study charter school principals were more likely to use this authority and autonomy than the traditional and pilot school principals. As one charter school principal explained,

If they aren’t meeting expectations we try to get them to the point where they can then make the decision. Are they making progress? Are they going to make it here or not? If they are not, then we don’t renew the contract.

Overall, the data from this study suggest that leaders of high-achieving schools are likely to find and use autonomy in the area of *staffing* to create conditions necessary for school success. Principals of high-achieving traditional schools, in particular, use creative ways to work around district hiring rules to ensure that the teachers and staff in their schools are most likely to thrive.

Having the right staff is arguably one of the most important factors contributing to school success, and therefore having autonomy over *staffing* is critical. However, as the following sections will demonstrate, it is often the *combination* of autonomy over staff with autonomy over other elements – especially, *governance & leadership*, and *curriculum & instruction* - that appear to make a difference.

Scheduling & Time

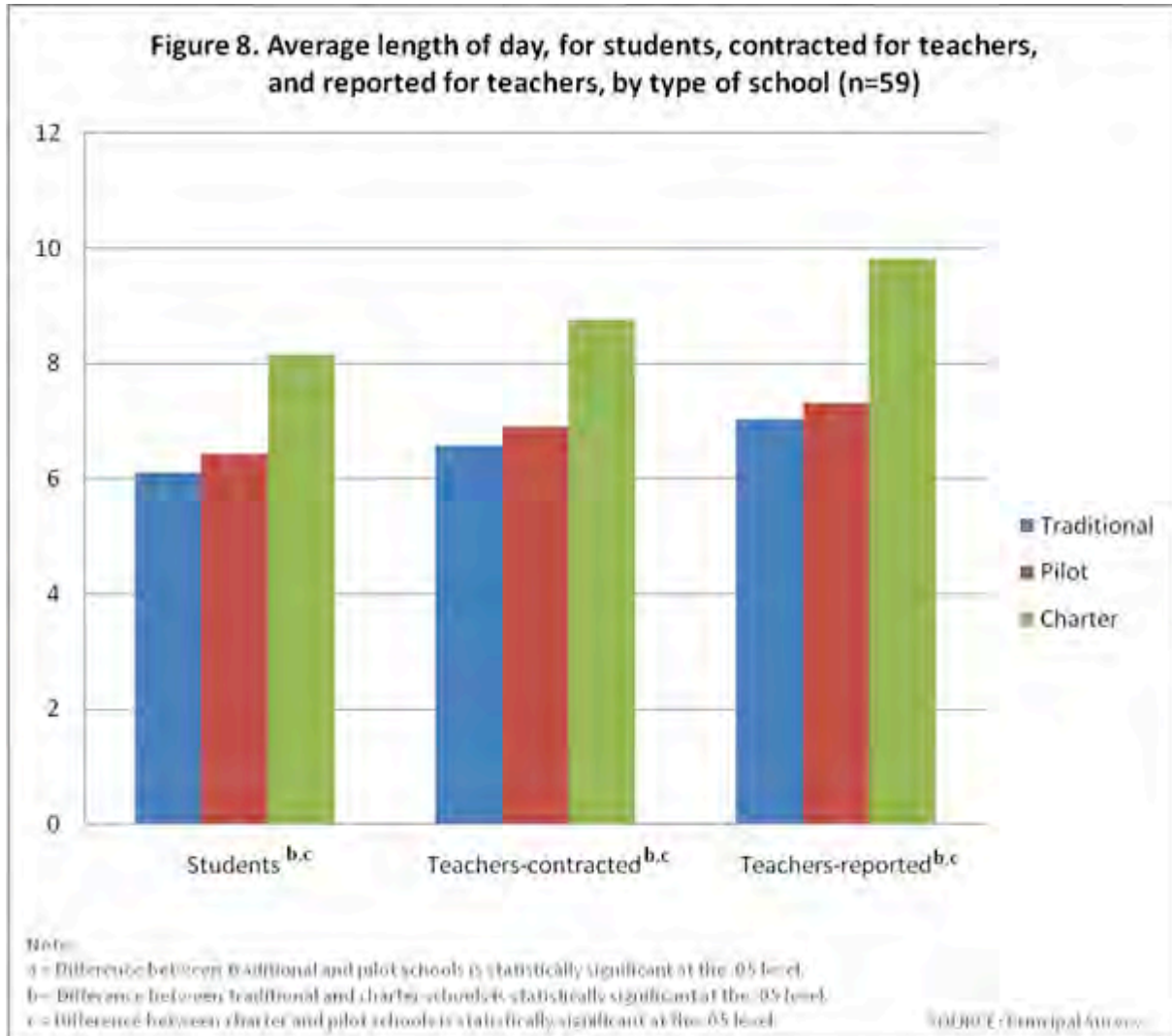
The *scheduling & time* autonomy element is critical for ensuring that a school is able to work effectively toward meeting student achievement goals and implement whole staff development aimed at meeting those goals. A leader’s ability to alter the schedule based on the evolving needs of students and staff allows the leader to design a schedule that optimizes student and teacher time for learning, teaching, planning, sharing and monitoring practice. Our data examined the length of their school day, percentage of time students spend receiving instruction in various content areas, and percentage of time teachers spend on various activities.

Length of School Day

Comparisons Among the Three Types of Schools

Overall, students and teachers in charter schools have longer school days than in traditional or pilot schools. The average length of day for students in charter schools is 8.2 hours, compared to 6.1 and 6.4 hours in traditional and pilot schools, respectively. Teachers also work longer hours: the average contracted teacher day lasts 8.8 hours in charter schools, compared to 6.6 hours in traditional schools and 6.9 hours in pilot schools (Figure 8). **Based on an estimate of 180 school days, this longer school day provides charter school students with an average of at least 378 more hours in school than their**

traditional counterparts. This is the equivalent of approximately 62 more traditional school days in a single year.⁴



In all three types of schools, surveyed principals reported that the typical teacher works longer than their contracted day. In traditional and pilot schools, principals reported that their teachers worked, on average, a little over a half hour beyond the contracted hours (principals reported the teacher’s contracted day to be 6.6 hours for traditional school teachers and 6.9 hours for pilot school teachers).

⁴ This number was calculated based on averages of school day lengths reported by surveyed charters, and traditional schools. The figure is calculated by subtracting 6.1 hours in the traditional school students’ day from the 8.2 hours in the charter school students’ day. The difference was then multiplied by 180 days, which is the state mandated minimum. However, some charters may have a longer school year than the state mandated minimum of 180 days.

Notably, according to a recent study by the National Council on Teacher Quality, “The Boston Public Schools has one of the shortest elementary work days in the country,” with 98% of 100 surveyed districts reporting longer work days.⁵ In charter schools, principals reported that their teachers worked an average of one hour beyond the contracted day of 8.8 hours.

High Achieving Schools

Among the high achieving case study schools, charter schools required students to be at school for nearly two hours longer (8.2 hours) than students in traditional schools (6.1 hours) and one hour longer than students in pilot (6.7 hours) schools. In addition to a longer school day, the case study charter schools have a longer school year. On average, the charter case study school students are in school for 192 days, while pilot case study school students attend school for 181 days and traditional case study school students attend school for 180 days. In other words, the charter case study school students have a school year that is more than two weeks longer than case study pilot or traditional school students.

In all of the high-achieving case study schools, principals and teachers reported that the teachers regularly stayed at the school beyond contracted hours. The principals and teachers attributed their longer work days to a sense of dedication to the school and students’ success, and a culture of collegiality among the staff. One pilot case study school teacher explained, “...Our day ends at 3:15p.m., but no one leaves then. People are here until the job is done for the day. We meet at coffee shops after school if we don’t have enough meeting time during the day. There’s no end-time.” A traditional case study school principal, discussing the dedication of the staff to meeting student needs, remarked, “You don’t have to tell them [teachers] to come early, they just do.”

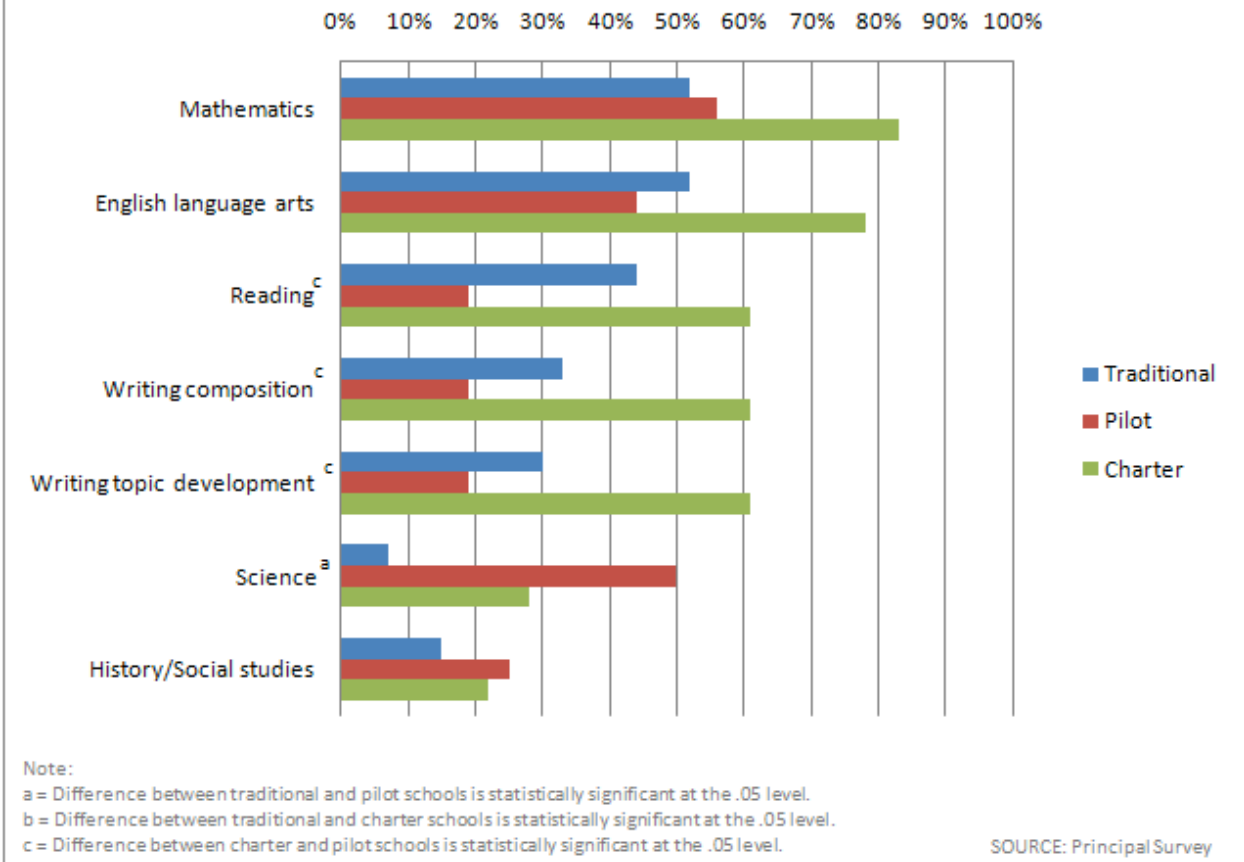
Instructional Time

Comparisons Among the Three Types of Schools

Not surprisingly, given their longer school day, high percentages of charter school principals reported that their students spend more than 5 hours during a typical week receiving instruction or doing work in mathematics (83%) and English language arts (78%). About half of the surveyed principals from traditional and pilot schools reported that their students spend more than 5 hours a week receiving instruction in mathematics or English language arts (Figure 9). The percentage of pilot school principals who reported that their students spend 5 or more hours per week receiving instruction in reading or writing (19%) was relatively low compared to the surveyed principals in traditional (33-44%) and charter (61%) schools. Additionally, according to the survey, students in pilot and charter schools are more likely to spend 5 or more hours per week on science than students in traditional schools.

⁵ This finding focused on elementary school teachers. See National Council on Teacher Quality (2010). Human Capital in Boston Public Schools: Rethinking how to attract, develop and retain effective teachers. Washington, DC: National Council on Teacher Quality (Massachusetts Business Alliance for Education).

Figure 9. Percentage of principals reporting that their students spend 5 hours or more per week receiving instruction or doing work in different content areas, by type of school (n=54-59)



High Achieving Schools

Among the high achieving case study schools, pilot and charter school principals reported a particularly strong focus on mathematics. Survey findings for high achieving schools support this finding with 75 % of high achieving pilot and 80% of high achieving charter school principals reporting that students spend five or more hours receiving instruction or doing work in mathematics. Less than half of the principals from high achieving traditional schools reported that students spend five or more hours on mathematics per week. In English language arts, 80% of the principals from high achieving charter schools reported that students spend five or more hours receiving instruction or doing work in that content area. Only 50% of high achieving pilot school principals and 40% of high achieving traditional school principals reported the same.

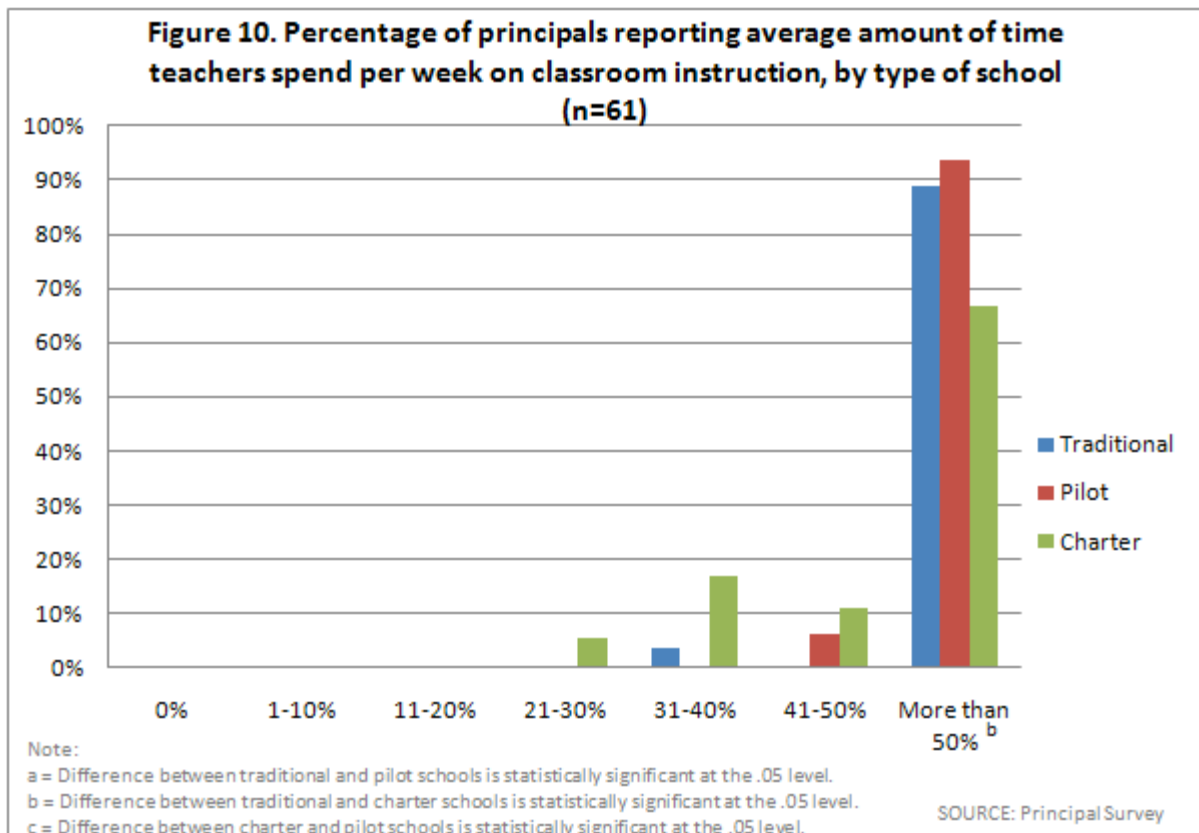
Staff in all of the case study schools focused on maximizing classroom time on instruction and student learning. Conversations about instruction with principals and teachers in the case study schools indicated a focus on reading/literacy, English language arts and mathematics. Nearly all of the schools indicated that students received instruction in these areas for longer periods of time than other content areas. For example, one charter case study school ensured that each student received a double period

of English language arts daily. Other strategies for increasing levels of instruction in these areas included project based learning and integrating curriculum across subject areas.

Teacher Time

Comparisons Among the Three Types of Schools

The majority of principals across all three types of schools reported that their teachers spend more than 50% of an average week on classroom instruction. In traditional and pilot schools, nearly all principals (89% and 94%) indicated that their teachers spend more than 50% of an average week on classroom instruction, whereas in charter schools, only 67% reported this (Figure 10). Taking into account the longer school day for charter school teachers, these data are not surprising. *Teachers in charter schools have more time in their days and weeks to take on more activities beyond classroom instruction.* For example, according to surveyed principals, pilot (81%) and charter (84%) school teachers are more likely to spend time on student advising than traditional school teachers (56%).



High Achieving Schools

All of the case study schools reported that teachers spend a majority of their time on classroom instruction. Again, the charter case study school teachers worked longer days than their counterparts, and consequently there was more time available for other activities. One charter case study school principal spoke to the rationale behind the longer school day noting, “We’re trying to have kids have more time with teachers.”

In all of the high achieving case study schools there was a purposeful focus on enabling teachers to have the maximum amount of instructional time with students; however, pilot and charter schools seemed more purposeful in this pursuit. For example, a pilot case study school principal explained that the teachers in the school had no “extra duties” such as lunchroom duty, or hallway duty, so that the teachers were free to focus on instruction and student needs. A charter case study school principal discussed this strategy,

We make sure that we’re holding every minute of instructional time as sacred and not tolerating disruption at all. We make sure that in every class teachers can focus on teaching and kids can focus on learning.

Teachers in nearly all of the case study schools spent time on student advising, collaborative planning and formal student-centered discussions, when they were not providing classroom instruction.

Student advising and support was a critical component identified by all of the case study schools. These advisories were opportunities for an adult in the school to have a conversation with a student and get to know the student through routine non-classroom meetings.

Additionally, in each of the high achieving case study schools, the schedule had been created to ensure that teachers had some common planning time, whether by grade level or by content area. All of the case study schools had collaborative planning time for teachers by grade level or by content area. In one charter case study school, teachers had collaborative planning time daily, but in most of the schools visited collaborative planning time occurred once a week. There were differences among the types of schools and individual schools. For example, one charter case study school teacher stated, “It feels like half of my time is spent on planning.” In each instance, case study schools distinguished between common planning time and other types of group meeting time (such as grade level, content level, or child study team), and most allocated time for both types of meetings in the teacher schedule.

Student-centered discussions captured a considerable portion of teacher time in the case study schools. Discussions might focus on students who were flagged because of course performance, as in one of the traditional case study schools where the teachers held hearings with students and teachers to discuss the academic reasons for a student failing. In two of the pilot case study schools, blocks of time were set aside during the regular school schedule so that teachers were able to hold regularly scheduled and as-needed meetings focused on student needs. One of the pilot case study school teachers described the as-needed “case conference” approach,

When a student’s in trouble, when we’re really worried, we don’t just give a referral, we’ll bring in the [student] and have 1 to 12 people come in to brainstorm about how we can help, what we can do. Last spring we had a lot of meetings, it’s really good for the kids...

Case study pilot and charter schools had designated time to routinely monitor and discuss student needs. Each of the charter case study schools had set aside time for teachers to plan collaboratively and have student centered conversations. A charter case study school teacher explained one example of this type of conversation,

At the grade level meeting we talk about students of concern and what we should do. The first thing is six weeks of tutoring, then we look more, we talk about strategies, by the next meeting we look at progress. If there is none... we keep working through this mechanism – team meetings with parents and with students.

Traditional case study schools tended to use less formal opportunities to discuss student needs as a staff. The traditional case study schools coordinated planning time within the regular school day during designated meeting or planning time, or before or after school.

In both case study pilot and charter schools, students were given opportunities to complete homework as part of the regular or extended school days. For example, one pilot case study school had developed independent study/tutor time for students to receive support on homework. Another school convened an Advanced Placement study group for students to work together on homework.

While each autonomy element is important to the ability of a school leader to create the conditions that may lead to high levels of student achievement, control over *scheduling & time* can create more opportunities to accomplish school goals. The way in which the pilot and charter schools designed the schedule and set the expectations for how time was used mark the important difference among these schools. Still, it is clear that simply adding time to the school schedule is not enough. The longer school day in charter schools provided an opportunity for students, teachers and school leaders to use time in school for continually supporting student needs, developing individual and collective staff skills and improving *curriculum & instruction*. In other words, for charter schools, the longer school day affords them greater opportunities to build in *professional development* and student supports, *without compromising on instructional time*. Autonomy over *scheduling and time*, therefore, appears to contribute to greater control and flexibility in other elements of the autonomy framework; namely, *professional development and curriculum & instruction*.

Governance & Leadership

Autonomy in the areas of *staffing* and *scheduling & time* contributes to the degree to which leaders are able to exert autonomy in other aspects of the autonomy framework. Arguably, *governance & leadership*, once autonomy over the elements is granted, is the most influential of the autonomies as it is the leaders who must set goals, interpret school-wide needs and make decisions aimed at meeting these goals and needs. Additionally, *governance & leadership* are at the heart of the difference between traditional, pilot and charter schools. For example, the *governance & leadership* autonomy that is given to charter and pilot schools allows them to create leadership structures that best meet the unique needs and makeup of their students and staff. In this area, our data examined: principal time and distributed leadership practices.

Principal Time

Comparisons Among the Three Types of Schools

While a majority of principals spend more than 55 hours per week at their schools, charter school principals reported spending more time working in their schools than traditional and pilot school principals. Half of principals in charter schools reported spending more than 66 hours per week on work-related activities. None of the charter school principals reported spending between 40 and 55 hours per week on work-related activities, whereas 25% of pilot school principals and 30% of traditional school principals reported working between 40 and 55 hours per week.

High Achieving Schools

For principals in high-achieving schools, time spent per week was similar across types, with 40% of principals in both high-achieving traditional and charter schools reporting spending more than 66 hours per week on school-related activities. However, the way in which principals spend their time in the high achieving case study schools varied by school type. Traditional case study school principals reported spending their time managing external demands and supporting teachers. For example, in one traditional case study school, the principal described his role as managing and balancing support for the teachers and giving them what they needed to succeed, and managing external demands so that the teachers in the school could do their job. Pilot case study school principals spent time facilitating and empowering teacher leadership and monitoring support for students. A pilot case study school principal described her job as facilitating and empowering teacher leadership in the school and monitoring systems of support for students. Other pilot case study school principals described spending time in the classrooms and meeting with teachers. Charter case study school principals spent time ensuring teachers were focused on *curriculum & instruction* and on the improvement of instruction based on information from assessment data.

The time principals spend on their jobs in some cases can reflect a level of commitment to the work, but in others, reflects the time available to them to do the work. For charter schools in particular, the longer school day affords them more structured time to do their job. Again, this example demonstrates how autonomy over *scheduling & time* contributes to the use of autonomy over *governance & leadership*.

Distributed Leadership

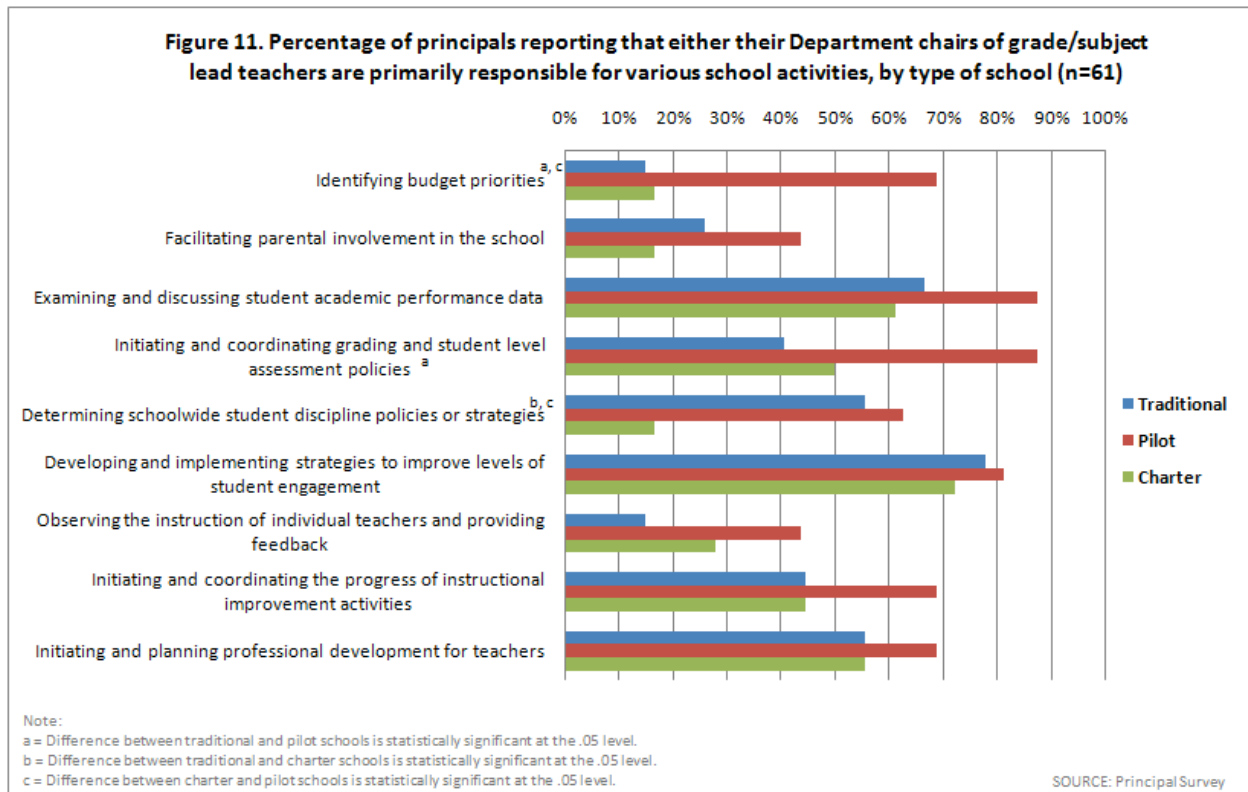
Comparisons Among the Three Types of Schools

Distributed leadership over key school decisions was practiced in all types of schools; however, pilot school principals shared responsibility over more aspects of the school, while charter school principals were less likely to share responsibility in some areas (budget decisions and schoolwide discipline policies). The majority of principals across all three types of schools reported that either they or their assistant principal (or both) assumed primary responsibility for major school activities, such as identifying *budget* priorities, facilitating parent involvement in the school, examining and discussing student academic performance data, initiating and coordinating grading and student level assessment policies, determining schoolwide student discipline policies or strategies, developing and implementing strategies to improve levels of student engagement, observing the instruction of individual teachers and

providing feedback, initiating and coordinating the progress of instructional improvement activities/initiatives, and initiating and planning *professional development* for teachers.

Pilot school principals appeared more likely to implement distributed leadership strategies in which teachers assumed primary responsibility for some of the major activities of the school. As illustrated in Figure 11, at least half of the pilot school principals surveyed reported that their department chairs or lead teachers are primarily responsible for identifying *budget* priorities, examining and discussing student academic performance data, initiating and coordinating grading and student level assessment policies, determining schoolwide student discipline policies or strategies, developing and implementing strategies to improve levels of student engagement, initiating and coordinating the progress of instructional improvement activities/initiatives, and initiating and planning *professional development* for teachers.

A significantly higher percentage of pilot school principals than traditional and charter school principals reported that their department chairs or lead teachers are responsible for identifying *budget* priorities. Pilot school principals were also more likely than traditional school principals to report giving primary responsibility for initiating and coordinating grading and student level assessment policies to department chairs and lead teachers; they were also more likely than charter school principals to report having department chairs and lead teachers who are responsible for determining school-wide student discipline policies or strategies.



High Achieving Schools

Shared leadership was common among all types of high achieving schools, but was more distributed among pilot schools, and more centralized in charter schools. The case study data provide deeper insight into the leadership practices in high-achieving schools. Traditional case study schools used different leadership approaches depending on the strengths and weaknesses of their school. Pilot case study school principals relied heavily on a distributed leadership model in which teachers were involved in all types (from *budget* priorities to the schedule, to school assessments) of decisions about the schools. Last, charter case study school principals tended to centralize many of the school functions, and while the teachers were empowered in these schools, this empowerment was limited to the domain of curriculum, instruction and student learning.

Although each of the traditional case study schools had similar leadership models, such as Instructional Leadership Teams (ILTs) to analyze data, communicate information and improve instructional practices, the ways in which distributed leadership manifested itself varied among the traditional schools visited. In one traditional case study school, individual or groups of teachers were granted flexibility to make changes to the curriculum and to develop new programs after school based on student interests. This model of distributed leadership depended on individual teachers' motivation to make changes or start new initiatives and the school climate enabled these activities. In another traditional case study school the distributed leadership was more systemic and formal as it relied on the ILT to identify student needs, develop strategies for improvement, and monitor improvement over time.

Each of the pilot case study school principals relied heavily on teachers to share or own instructional leadership responsibilities in their schools. In the pilot case study schools teachers had a strong and consistent voice in how the school operated, and conversations were anchored in discussions about the needs of students and how to best serve those students. In fact, teachers in at least two of the pilot case study schools had schedules that limited their non-teaching duties, in order for them to maintain a focus on students. One principal described the working environment for teachers and teachers' role in the leadership of the school,

A teacher at our school works hard. Let's put that on the table. They probably work harder than they've worked anywhere else, but they never question what they're doing or why they're doing it. They have small classes, tons of time with peers, a voice in the decision making, [less classroom teaching time] as compared to [Boston Public School District] schools...They have what they need to continue to become great teachers.

Another pilot case study school principal commented,

I think that because the teachers have such voice in the schools – we are constantly surveying, talking with teachers... I have a structure whereby there are department liaisons so they are not department heads where they would have an evaluation process over teachers. They are just teacher-to-teacher peer colleague department liaisons.

Because teachers are represented on the governance board, the ethos in the pilot case study schools was consistently focused on teacher empowerment and teacher leadership.

Interestingly, in the charter case study schools, like the pilot schools, teachers' time was focused on instruction and student needs, however, the leadership structure was more centralized among the principal and administrative leadership team. Charter school teachers were expected to be active members in developing *curriculum & instruction* to meet student needs, but the charter school leadership team played a strong role in monitoring classroom practices and ensuring that routines and procedures (e.g., student discipline, classroom management) were closely followed. The charter school leadership teams in each of the schools took on the primary responsibility for creating consistent and predictable structures for students (and teachers) and for holding teachers accountable for implementing procedures, structures and practices.

The tendency towards distributed leadership in pilot schools and centralized leadership in charter schools demonstrates, again, how autonomy over *staffing* and *scheduling & time* contribute to the use of autonomy over *governance & leadership*. Leaders in pilot and charter schools develop and implement leadership strategies that cater specifically to the unique characteristics of their staff. In pilot schools, where teachers are older and more experienced, a distributed leadership strategy is likely to be well-received. In charter schools, where teachers are less experienced, principals tend to centralize control over some functions so that teachers can spend more focused time on instruction.

Curriculum & Instruction

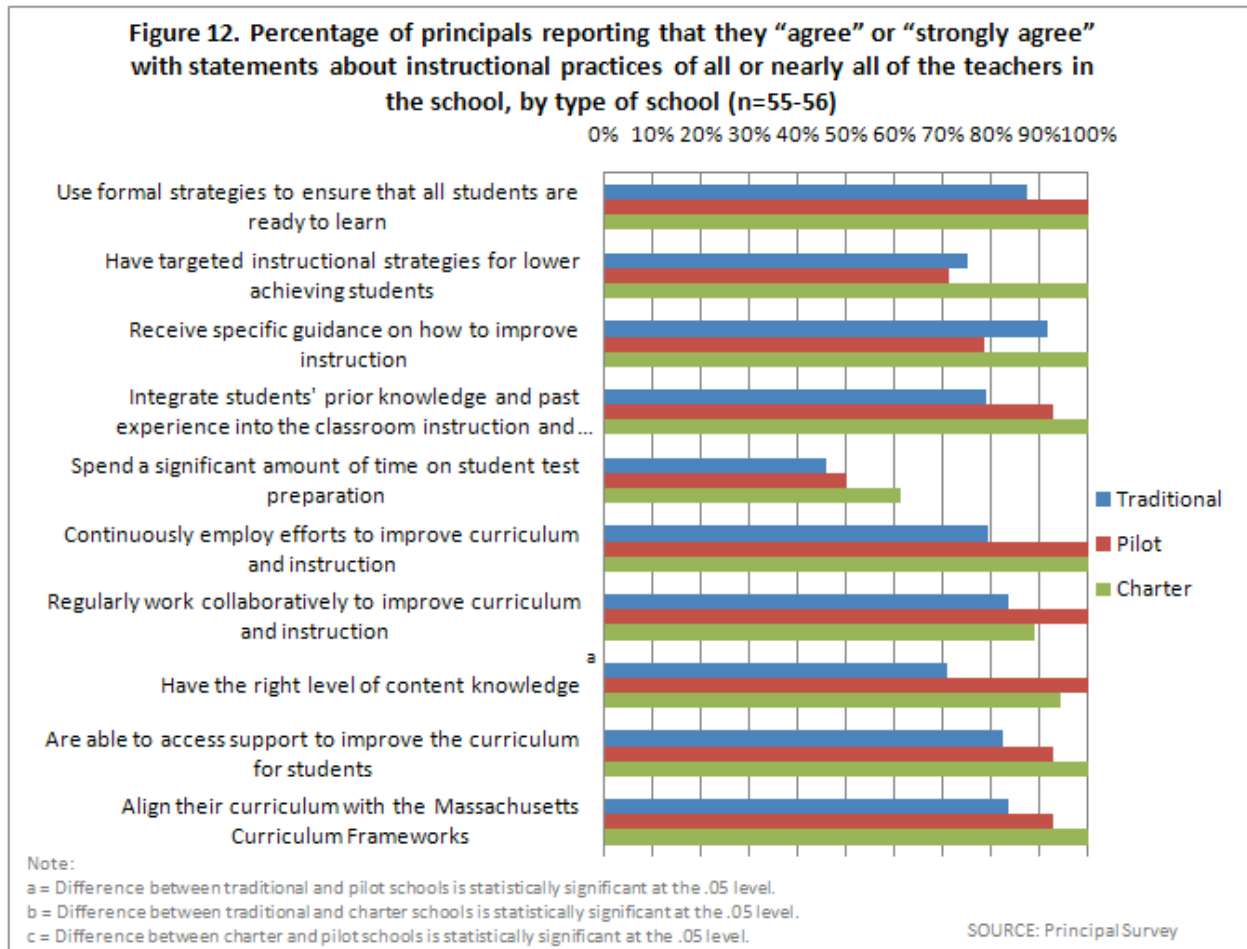
Curriculum & instruction are the means by which classroom teachers ensure that students learn. Our data show that while principals from all types of schools believed their schools' student achievement goals were attainable, the challenges they faced were different, especially when considering the needs of students enrolled in each type of school. Additionally our data show that instructional and assessment practices varied, and the time allotted for student supports was different by school type. Many of the differences reported by the school leaders can be attributed to the autonomy elements of *staffing* and *scheduling & time*.

Schoolwide Instructional Strategies

Comparisons Among the Three Types of Schools

Principals from each type of school reported that a variety of instructional strategies were used in their schools. *All, or nearly all, principals in pilot and charter schools, and the majority of principals in traditional schools, agreed that all, or nearly all, of their teachers use formal strategies (e.g., collaborative planning time focused on adapting to classroom and student needs and collective professional development) to ensure that all students are ready to learn, have targeted instructional strategies for lower achieving students, receive specific guidance on how to improve instruction, integrate students' prior knowledge and past experience into the classroom curriculum & instruction, continuously employ efforts to improve curriculum & instruction, regularly work collaboratively to improve curriculum & instruction, have the right level of content knowledge, are able to access support to improve the curriculum for students, and align their curriculum with the Massachusetts*

curriculum frameworks. An exception was spending a significant amount of time on student test preparation, which was reported as a common practice by approximately half of the principals across all three types of schools (Figure 12).

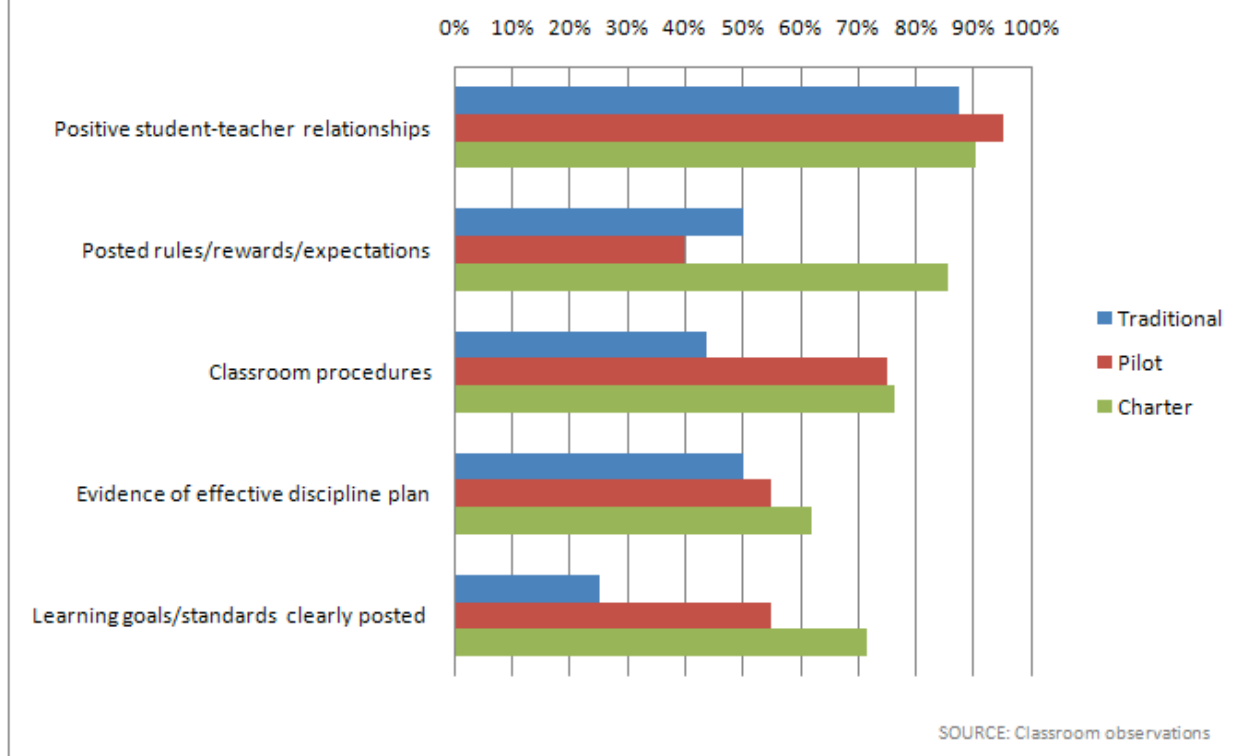


High Achieving Schools

Instructional strategies among the high achieving schools were similar with the exception of the time spent on test preparation. *Seventy-five percent of principals in high-achieving traditional schools reported that all or nearly all of their teachers spend a significant amount of time on student test preparation, compared to half of principals of high-achieving charter schools and a third of principals of high-achieving pilot schools.*

While positive student-teacher relationships existed in all of the case study schools, in charter schools the learning goals and standards, classroom procedures and rules, rewards and expectations were more explicit in the schools and classrooms (Figure 13). Generally, charter case study schools had more schoolwide coherent, consistent, and centrally controlled classroom management practices and routines than did the traditional or pilot case study schools. In fact each of the charter case study schools dedicated the first week of school so that teachers and students could establish behavioral expectations.

Figure 13. Percentage of case study school classrooms in which different classroom management practices were observed, by type of school (n=9)



All of the traditional case study schools used the district curriculum and pacing guides and the leaders created an environment in which teachers were given some flexibility in the classroom. Traditional case study schools used the district mandated curriculum and pacing guides. Pilot case study schools used a mix of district curriculum which they had opted to adopt, commercially developed curriculum and teacher developed curriculum. Charter case study schools developed their own curriculum or used pre-developed curriculum and adapted it to their students needs. While pilot and charter case study schools had the freedom to develop their own curriculum, traditional case study schools were able to inject some flexibility and empower teachers to make changes based on the needs of students.

One traditional case study school teacher summed up how the experience in her current school differed from her experience in other Boston traditional schools,

Every staff member feels that they are trusted to do their job, which is a huge difference, because we do know what to do. We are allowed to make changes to our curriculum, to make it our own, which makes a real difference.

In each of the traditional case study schools, the leaders and teachers described a climate in which they were willing to risk deviating from the district curriculum as long as it helped students. One traditional

school administrator noted, “We have flexibility because we have decided that it’s important for the student, and we’re willing to take risks for their benefit.”

The pilot case study schools reported that they used a combination of district and their own curriculum, and adapted the curriculum based on knowing the students and their needs. Conversations about curriculum in the pilot case study schools centered on the relationships between teachers and students and teachers and families and then focused on academic content. Creating engaging learning opportunities for students was at the center of the pilot case study schools’ drive to develop curriculum. As one pilot case study school teacher stated,

You’ve got to find a way to reach those kids that are struggling, because if you can build a relationship with those kids, you can work through behaviors, you can work through... the academics. And that’s what happens here. They’re everybody’s kids.

In the pilot case study schools, teachers collaboratively made decisions about curriculum and were empowered to make professional judgments as to whether to adopt a district curriculum or create their own. Still, this did not preclude teachers from adopting the district curriculum. In fact, two of the pilot case study schools discussed using the district curriculum in at least one subject area and spoke highly of the standards based curriculum and district coaching and *professional development* that helped teachers to improve their instruction and delivery of the curriculum. And, one pilot case study school had piloted the mathematics curriculum that the district eventually adopted. Another pilot school used a theme of social justice and experiential learning to engage the students in their own learning.

The charter case study schools in some instances adapted commercially purchased curriculum or in most cases developed their own curriculum. “Teachers are committed to developing their own curriculum,” stated one charter school administrator. A charter case study school teacher explained how teachers are empowered and encouraged to share curriculum,

No one says ‘this is how you have to teach it,’ or ‘This is the new program we are going to use.’ It’s more like we are a bunch of smart hard working people, and we are going to figure it out together... Groups try out different things then we all share what’s working and what’s not.

Even though teachers were responsible for adapting or developing curriculum, the principal and administrators closely monitored their efforts to maintain standards and decrease variability. Charter case study school administrators were actively involved in centralizing processes. One charter case study school used a map of standards that provided information about what the students were expected to know at each grade and guided support and advanced course work for students. Another charter case study school required staff to maintain lesson plans on a centralized system, and used this as a way for teachers to learn what and how content was being taught in other subject areas and/or grade levels.

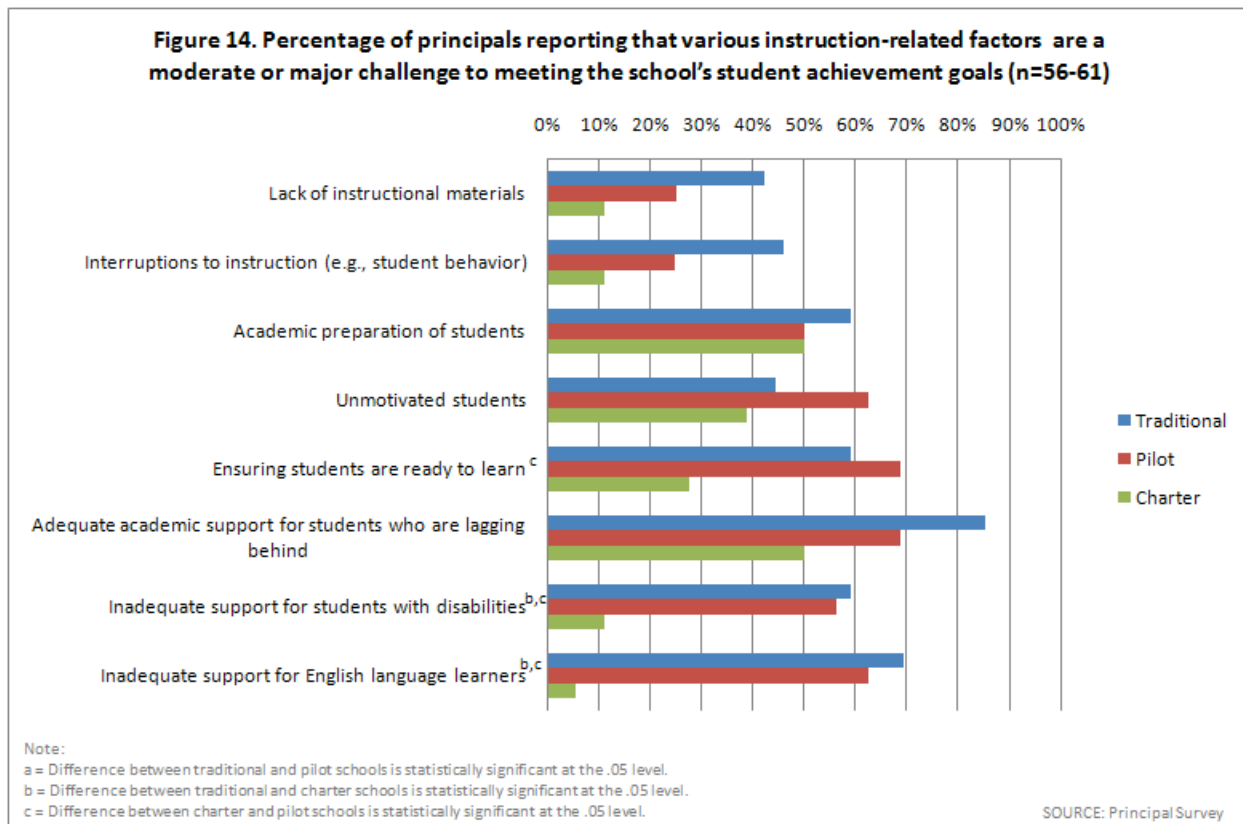
Differences among the case study schools by type were evident. *Traditional case study schools had created a climate that enabled “risk taking” and flexibility aimed at meeting student needs, but in each case this was discussed as a deviance rather than a mandate in and of itself.* One traditional case study school teacher remarked on this idea, “The [principal] really helps. There’re a lot of things we have to do with the curriculum, but there is a little bit of flexibility too, and ability to use your professional judgment.” The pilot and charter case study schools relied on teachers as professionals to build curriculum that met the needs of students. The case study charter schools emphasized knowing the students and their family as a critical element to building a curriculum that meets the needs of students. The charter case study schools rejected “scripted curriculum”, placed responsibility for developing and revising curriculum on teachers, and held teachers responsible for ensuring standards were met. Developing a new curriculum and revising a curriculum were an expectation of teachers in the pilot and charter case study schools, while revising a curriculum was seen as a granted flexibility or risk for teachers in the traditional case study schools.

Each of the differences in *curriculum & instruction* are closely tied to the amount of time staff have to dedicate to these activities. For example, charter school principals dedicated substantial time training staff on classroom management and school wide behavior expectations. Additionally, staff in high-achieving pilot and charter case study schools had time to make collaborative decisions about *curriculum & instruction* to address long- and short-term needs of students. For staff in the high achieving traditional schools, the district had saved the faculty time by providing curriculum and pacing guides; however, by supplying these, it sometimes created a climate in which collaborative decisions to change curriculum and pace may have felt like a risk, rather than an appropriate professional judgment.

Challenges

Comparisons Among the Three Types of Schools

Principals from each type of school reported that several factors pose moderate or major challenges to *curriculum & instruction* in their schools. *Nearly 90% of traditional school principals identified “adequate academic support for students who are lagging behind” as a moderate or major challenge to meeting their school’s student achievement goals.* More than half of the traditional school principals cited the academic preparation of students and ensuring students are ready to learn as a challenge. More than half of the pilot school principals reported support for students who are lagging behind, ensuring students are ready to learn, and unmotivated students as challenges to their students’ success. *Generally, fewer charter school principals than traditional and pilot school principals reported challenges to meeting their school’s student achievement goals* (Figure 14).



Principals in traditional and pilot schools were more likely than principals in charter schools to report that inadequate support for special education students and for English language learners was a moderate or major challenge to meeting their school's student achievement goals (Figure 14).

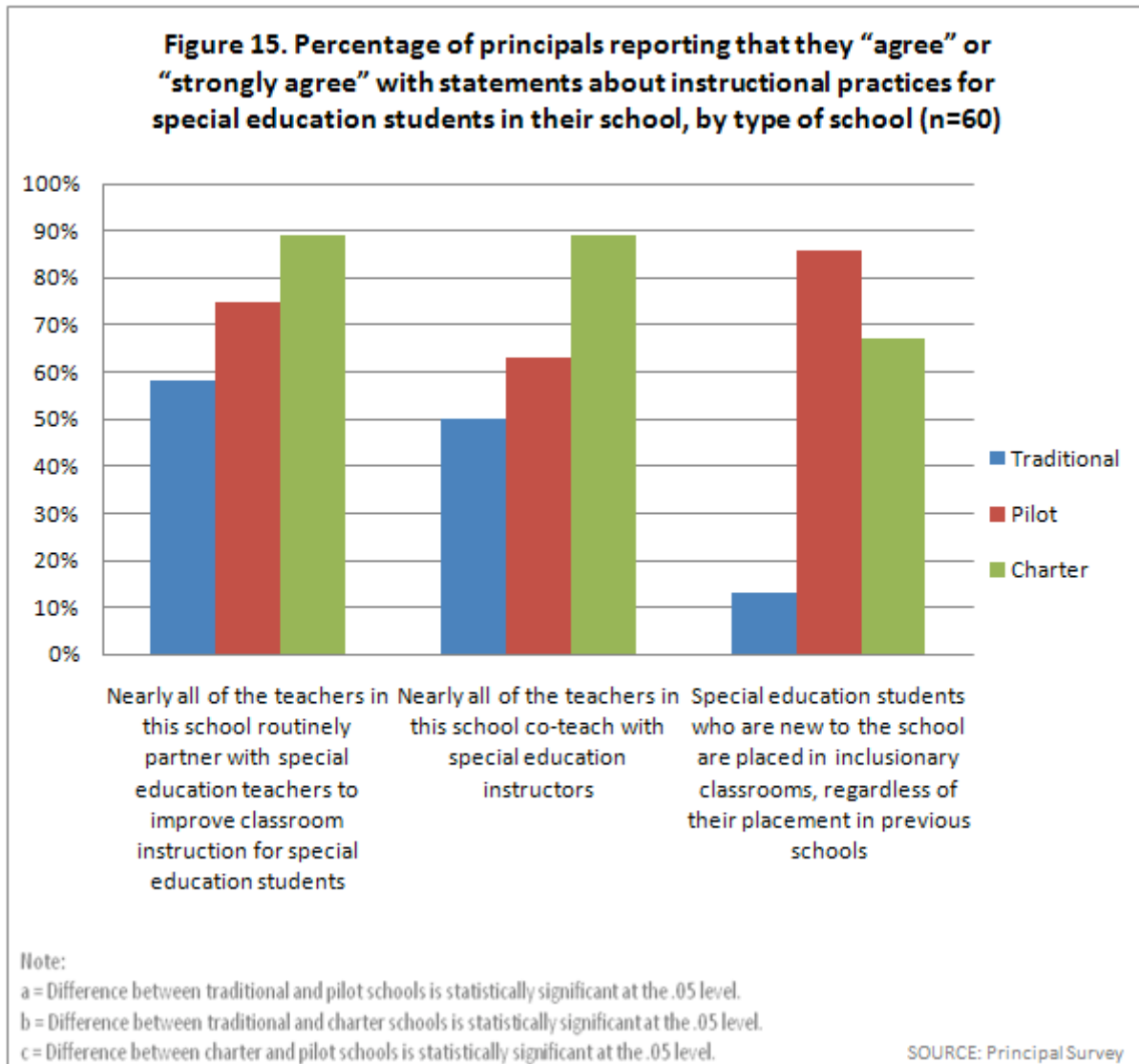
At least part of the reason for principals reporting that support for special education and limited English proficient students was inadequate may be explained by the differences in the level of need among students enrolled. Charter schools are required to select students by lottery, in order to ensure that students of all backgrounds have equal opportunity to attend. However, there are notable differences among the special education and limited English proficient (LEP) student populations being served in charter schools, when compared to traditional and pilot schools. For example, 12.8% of students in charter schools have a special education designation, compared to 20.2% in traditional schools and 19.6% in pilot schools. Additionally, 2.2% of students in charter schools have an LEP designation, compared to 18.7% in traditional schools and 17.2% in pilot schools.

Instructional Strategies for Special Education Students

Comparisons Among the Three Types of Schools

Our survey data showed that the majority of principals across all three types of schools agreed that their teachers routinely partner with special education teachers to improve classroom instruction for special education students or that they co-taught with special education teachers. *Partnering with special education teachers and co-teaching were particularly common in charter schools, where nearly 90% of principals agreed that their teachers engaged in these practices (Figure 15). Additionally, survey data showed that principals in pilot and charter schools were more likely than those in traditional schools*

to report that special education students who are new to the school are placed in inclusive classrooms, regardless of their placement in previous schools.



High Achieving Schools

Data from the high achieving case study schools revealed a similar pattern, in that the pilot and charter case study schools implemented more inclusive practices than did the case study traditional schools.

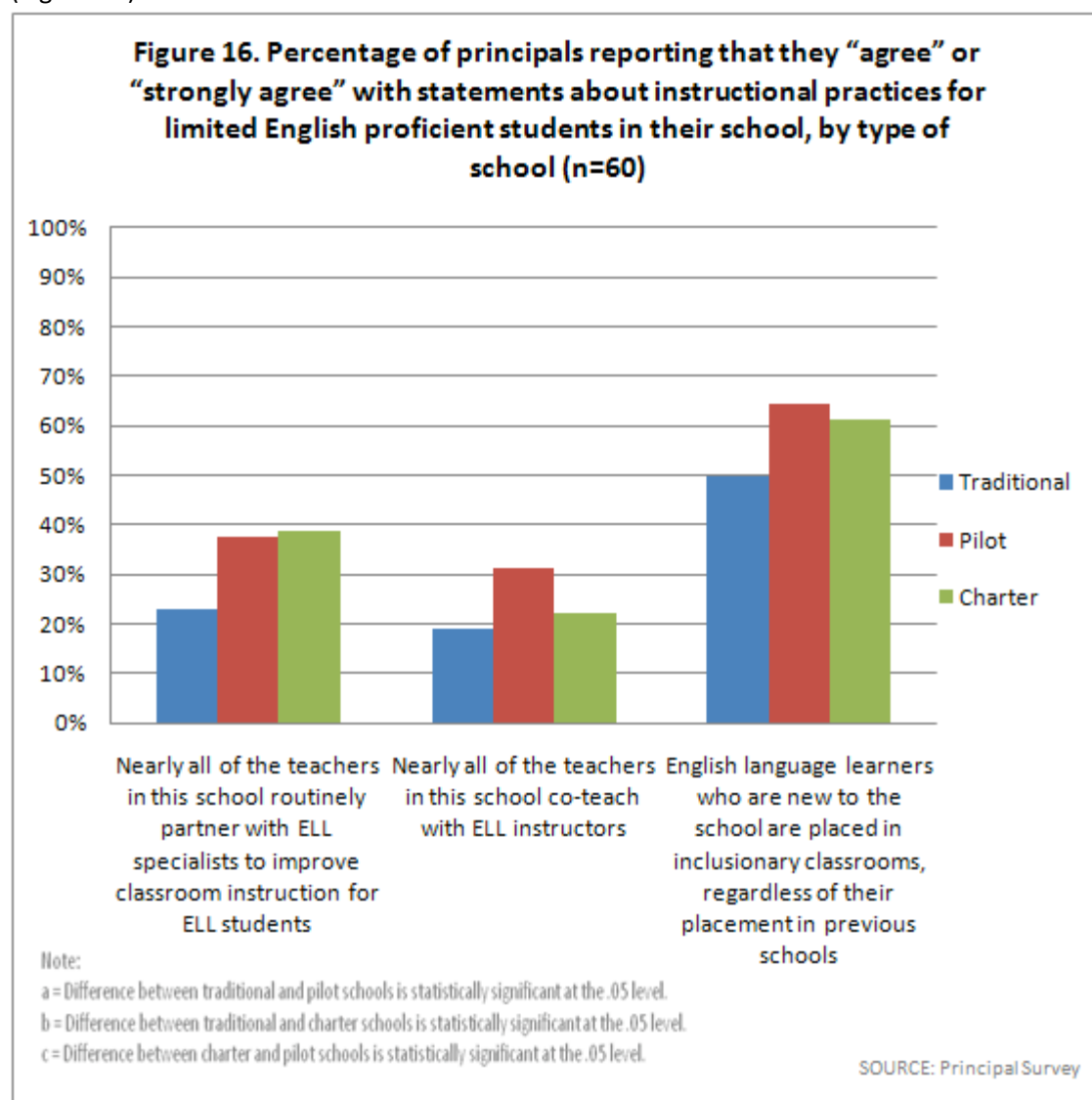
It is important to note that two of the three traditional case study schools housed specialized programs for students with specific needs (e.g., severe autism), so these schools were working with students with high levels of need. On the other hand, all of the pilot case study schools described using an inclusive model, and in the classroom observations, it was clear that students received special education supports in the general education classroom. In fact, one pilot case study school teacher remarked that, “It is difficult to manage the classroom with students with a wide variety of needs.” Each of the charter case study schools also described using inclusive classroom practices. In one charter school the classrooms were designed for a co-teaching model in which one of the teachers was a special education teacher who shared responsibility for the whole class with the regular classroom teacher.

One of the charter case study school teachers from that school noted, “The kids probably don’t even know I’m the special education teacher.”

Instructional Strategies for Limited English Proficiency (LEP) Students

Comparisons Among the Three Types of Schools

While inclusive instructional practices were quite prevalent across all types of schools for special education students, they were not as prevalent for LEP students, according to survey data. *Fewer than half of the principals across all three types of schools agreed that their teachers routinely partnered with LEP specialists to improve classroom instruction for LEP students, or that they co-taught with LEP instructors.* Additionally, slightly more than half of principals reported that LEP students who are new to the school are placed in inclusionary classrooms, regardless of their placement in previous schools (Figure 16).



High Achieving Schools

In the case study schools visited, the support for LEP students was not as easily observed or evident in the classroom observations, and all but one of the schools centered their support for LEP students on sheltered English Immersion. The one exception was the traditional middle case study school which had a two-way bilingual program. In this school, each classroom had a bilingual (Spanish and English) teacher. However, during the case study visit, the Spanish portion of the school program had been limited so that the teachers and students could focus on raising test scores in the elementary grades.

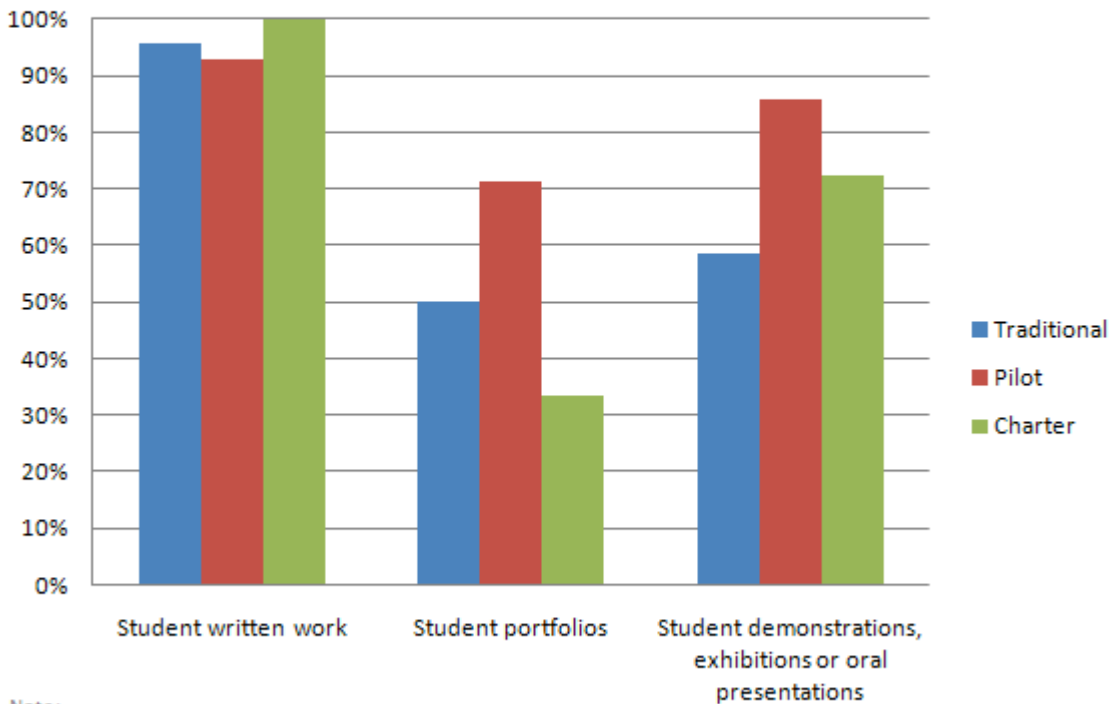
Assessment

Comparisons Among the Three Types of Schools

The majority of principals across all three types of schools reported that their teachers use student MCAS results (78-100%) and teacher developed assessment results (91-100%) to inform classroom instruction. Principals in traditional schools had higher percentages reporting that their teachers used district assessment results (88%) than principals in pilot (43%) and charter schools (44%). Approximately half of the principals across all three types of schools reported that their teachers use commercially developed assessment results to inform classroom instruction.

Nearly all principals, across all three types of schools, agreed that their teachers routinely assess student learning through student written work. Additionally, a majority of principals across all three types of schools agreed that their teachers routinely assess student learning through student demonstrations, exhibitions, or oral presentations. Half of principals in traditional schools, over 70% of principals in pilot schools, and 30% of principals in charter schools reported that their teachers used student portfolios to assess student learning (Figure 17).

Figure 17. Percentage of principals reporting that they “agree” or “strongly agree” with statements about method through which all or nearly all teachers routinely assess student learning, by type of school (n=51-56)



Note:

a = Difference between traditional and pilot schools is statistically significant at the .05 level.

b = Difference between traditional and charter schools is statistically significant at the .05 level.

c = Difference between charter and pilot schools is statistically significant at the .05 level.

SOURCE: Principal Survey

High Achieving Schools

A majority of principals from high achieving traditional and pilot school reported using commercially developed assessments Among the surveyed high achieving schools, the reported assessment practices were varied. All of the traditional and pilot schools reported used a combination of MCAS results, district assessment results, and teacher developed assessments to inform instruction.

Similar to the survey results for high achieving schools, *the case study data showed that high-achieving schools relied on a variety of assessments and analyzed assessment data to identify student need and improve instruction. State assessments (MCAS) and analyzing student level data from the assessment were common practices in all of the case study schools.* Teacher developed assessments were also common among the schools. Traditional case study school teachers relied on district assessments, commercially developed assessments, and school developed assessments to provide formative assessment information on student progress. Pilot case study schools also used commercially and school developed assessments. And, two of the pilot case study schools and one of the traditional case study schools used an online (ANet) system that regularly tested students and quickly provided analysis of the results with the intent of informing instruction. Charter case study schools used school or teacher

developed assessments usually based on school standards or MCAS questions. One charter case study school principal attributed the teachers' freedom to develop their own curriculum to their standards based assessments,

Grade level teams create their own curriculum units...There are standards based assessments – so we are sure to align to the standards.

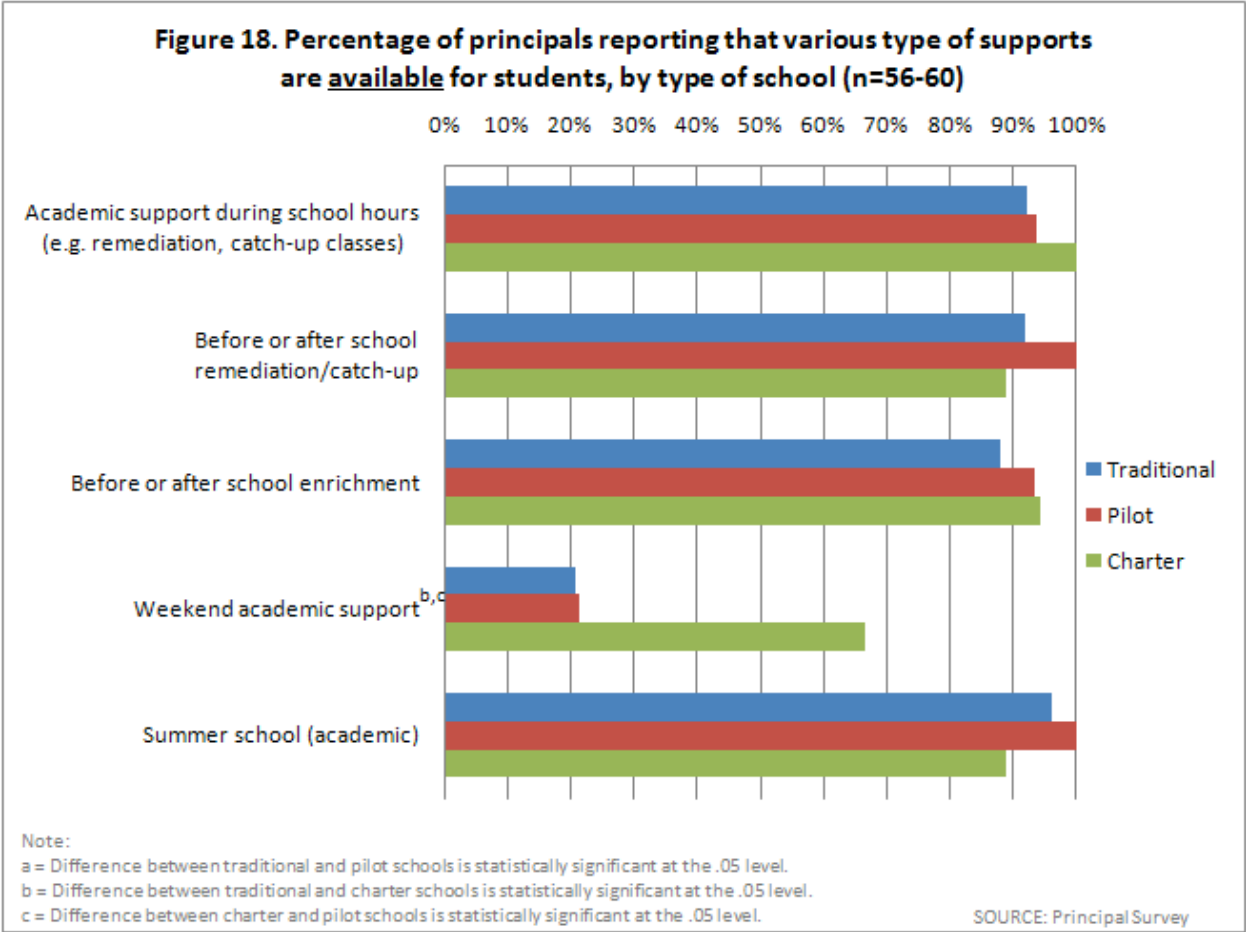
One difference observed in the case study schools was in the frequency and level to which administrators and teachers analyzed assessment data and made immediate changes to instruction, or identified student supports based on that information. *Traditional school teachers and teams were analyzing student data, but described being limited in their ability to make schoolwide improvements based on the information. Time to analyze the data, time to communicate information to colleagues and time collectively to discuss improvement strategies were all challenges cited.*

For the pilot and charter case study schools, systemic and routine student assessments and the flexibility to make changes to address student needs were consistently present. The pilot and charter case study schools involved expected all teachers to participate in the analysis of student level data, and to develop strategies to respond to students' needs. For example, in two of the pilot case study schools, teachers frequently described routine assessments. A pilot case study school principal described this theory of action among staff in the school, "This school is extraordinarily flexible, almost to a fault. There isn't that 'Well this is how we do it.' It's always, 'what else can we try? Let's find what works'." All of the charter case study school principals and teachers described a pervasive expectation that teachers know whether students were succeeding and if they needed support they could immediately access it. A charter case study school principal described it as a focus on prevention rather than intervention, "when it may be too late."

Student Support

Comparisons Among the Three Types of Schools

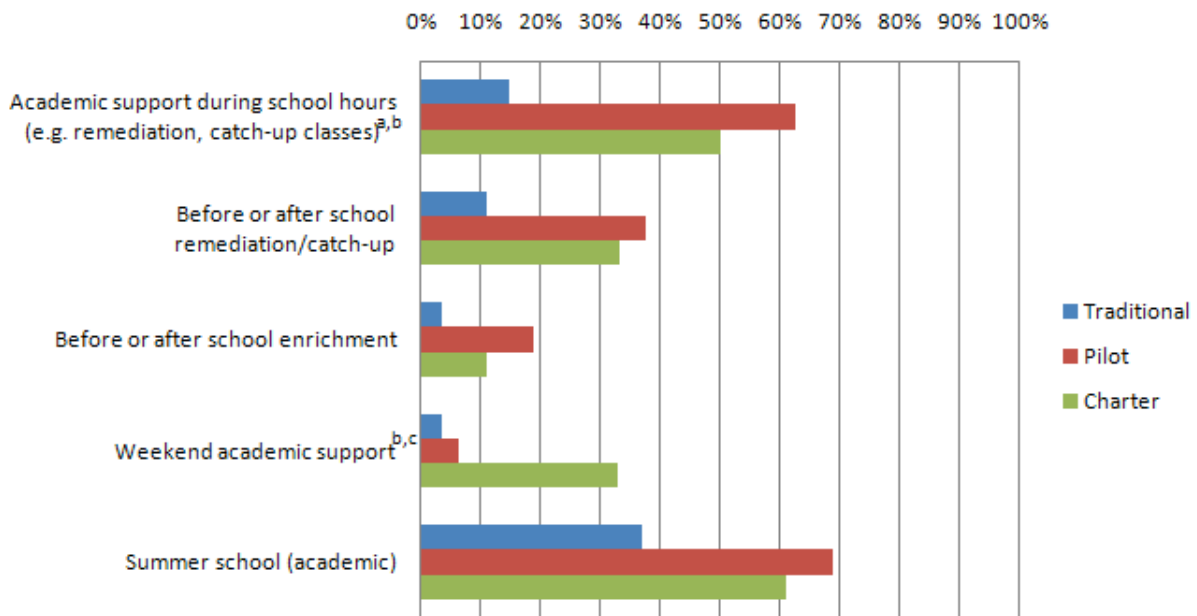
While the availability of various types of student support is relatively similar across type of school (Figure 18), charter schools are more likely to provide weekend academic support to students - 67% reported doing so compared to only 21% each of principals in traditional and pilot schools.



Other types of services that were offered across all three types of schools included: breakfast programs (97% of schools) food/clothing assistance programs (55% of schools), and family health services (54% of schools).

Although all schools offered extra support, a lower percentage of principals in traditional schools (15%) than pilot schools (63%) and charter schools (50%) reported that they required academic support during school hours (Figure 19). Low percentages of traditional school principals also reported requiring before or after school remediation, before or after school enrichment, weekend academic support, and summer school.

Figure 19. Percentage of principals reporting that various type of supports are required for some or all students, by type of school (n=56-60)



Note:
a = Difference between traditional and pilot schools is statistically significant at the .05 level.
b = Difference between traditional and charter schools is statistically significant at the .05 level.
c = Difference between charter and pilot schools is statistically significant at the .05 level.

SOURCE: Principal Survey

High Achieving

Student academic support was offered by all types of high-achieving schools. All of the high achieving traditional schools offered academic support before, during and after schools. Approximately half of the high achieving pilot and charter schools offered summer school.

While all of the high achieving schools offered academic supports, a high percentage of principals of high achieving pilot (75%) and charter (60%) schools also required some or all students to participate in academic support during school hours. Interestingly, it appears that the main mechanism of required academic support among high achieving traditional schools was summer schools (80%).

Among the case study schools, student supports in terms of academic, behavioral and socio-emotional supports were critical to their work. These supports helped ensure students entered classrooms ready to learn, and teachers were able to maximize their time working with students in the classroom.

Approaches to supporting students among the three types of schools differed. The traditional case study schools used before and after school time to work with students who needed academic help. To provide behavioral or socio-emotional support, the schools enlisted external service organizations, grants and district services to bring experts into the school to provide direct support to students. The traditional case study school teachers had routine conversations about students and the climate within the school facilitated their ability to do so.

Although the traditional case study schools offered a comprehensive set of supports, it was clear that in the pilot and charter case study schools they were more sensitive to the immediate needs of students and had integrated student support into the regular school schedule. For example, one pilot case study school met every two weeks to review student progress reports, and to identify any students who might need support and match them to an appropriate support. An individual student's schedule could change every two weeks. Both pilot and charter case study schools had built-in enrichment or special support student time into the regular school day. For example, a charter case study school had a reading enrichment program that was offered daily; any student could access the support and, when ready to return to the regular classroom, move seamlessly back to the regularly scheduled class.

As the findings described above demonstrate, autonomy over *curriculum & instruction* is dependent on how *scheduling & time* are controlled. Charter and some pilot schools generally have longer school days, and thus they have more time in the schedule for teachers to develop curriculum, revise and enhance instructional strategies, review assessment data to improve instruction, and provide support to students who need more academic or behavioral assistance.

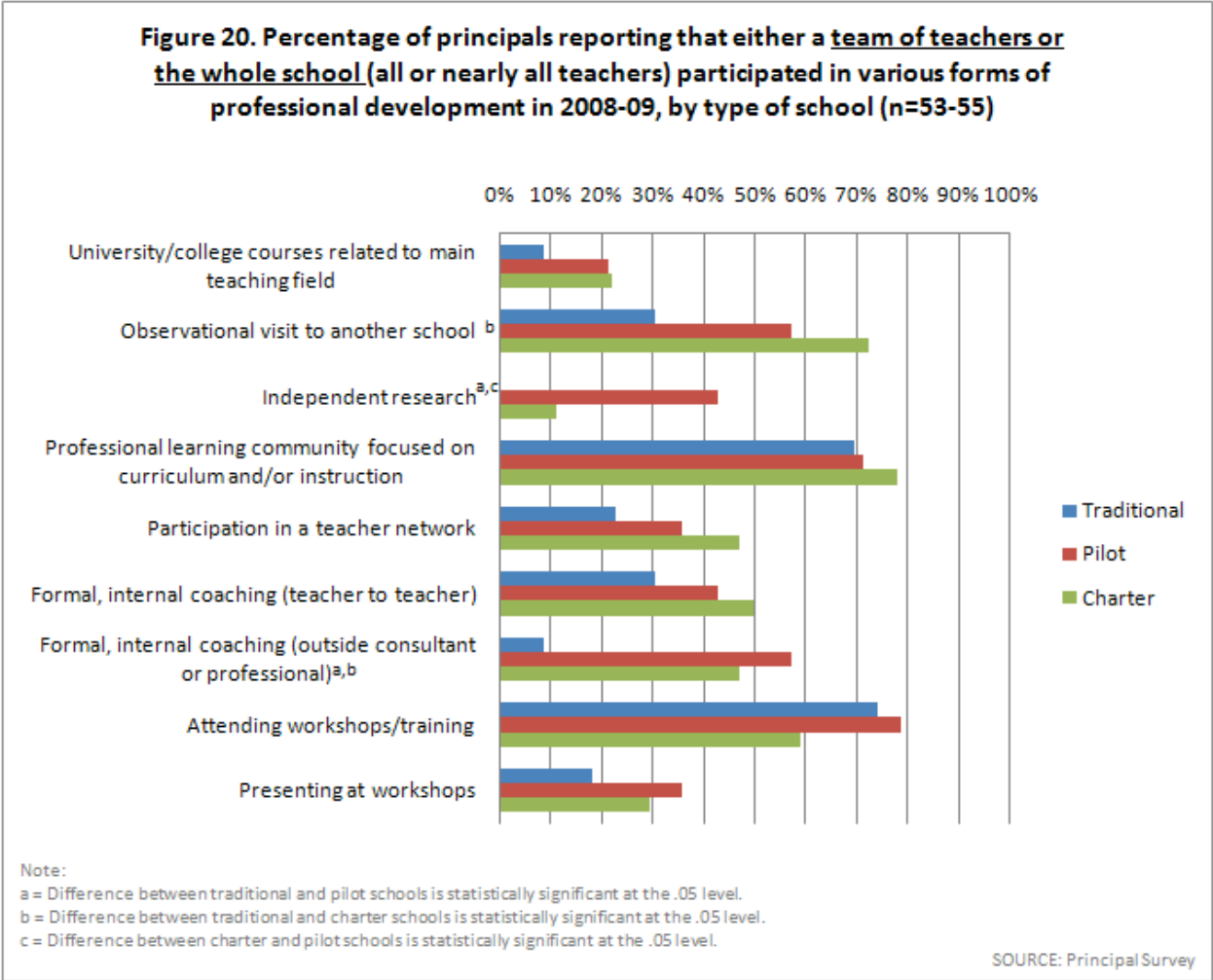
Professional Development

Autonomy over *professional development* lies in the school leaders' ability to take the time and resources necessary to develop teachers' skills both individually and collectively. The data showed differences across school type in the extent to which schools built in time for collective *professional development* into the school day.

Comparisons Among the Three Types of Schools

It is clear that teachers working in each type of school are participating in professional development in a multitude of formats. All principals reported that at least some of their teachers attended workshops and training, and over 90% reported that some of their teachers participated in university or college courses related to their main teaching field. High percentages of pilot and charter school principals reported that some of their teachers conducted observational visits to other schools, participated in a teacher network, and received formal, internal coaching from an outside consultant or professional.

Survey findings suggest that pilot and charter schools may have a different approach to *professional development* than traditional schools. Pilot and charter schools are more likely than traditional schools to have a team or whole school of teachers participate in certain *professional development* opportunities. As shown in Figure 20, a significantly higher percentage of charter school principals (72%) than traditional school principals (30%) reported that a team of teachers or the whole school participated in observational visits to another school. Similarly, *a significantly higher percentage of pilot and charter school principals (57% and 47% respectively) than traditional school principals (9%) reported that either a team of teachers or the whole school received formal, internal coaching from an outside consultant or professional.*



High Achieving Schools

The survey data reveal that for the most part the *professional development* practices among high achieving schools were similar to those reported for all schools and the case studies provide insight into these practices.

Overall, the case study school leaders and staff focused on *professional development* that is designed to ensure they have the skills and content knowledge necessary to serve their students. The direct connection between student needs and *professional development* required flexibility in the types of *professional development* obtained (externally provided, workshops, etc.). Case study pilot and charter school principals were better able to be flexible about the *professional development*, as it was offered more frequently than in the traditional case study schools. Still, examples of a focus on *professional growth* existed in at least some of the case study schools of all types.

Among the case study schools, principals in all types of schools described striking a balance between individual and collective *professional development* needs among the staff. Pilot and charter school principals discussed the goal of professional growth for teachers more often than did their counterparts

in traditional schools. Also, the pilot and charter case study schools provided more in-school *professional development* than did the traditional case study schools.

Unlike their counterparts, traditional case study schools principals were limited in the number of contracted in-school *professional development* hours they could ascertain. The traditional case study school principals had flexibility in how they used those hours. For example, in one school they had a few hours per month of *professional development*, while another school had two *professional development* days in the summer and a few hours during the school year. Collective *professional development* in the traditional case study schools often built off of data analysis or support in areas of weakness. For the most part, teachers pursued individual *professional development* on their own, or with approval of the principal (especially during school hours). The district had many *professional development* opportunities for teachers and principals. The *professional development* opportunities created an incentive for staff to pursue their individual needs (with the approval of the principal). These individual *professional development* opportunities were combined with the contracted in-school *professional development* days focused on whole school or teacher team *professional development*.

In the case study pilot schools, opportunities for whole-school or teacher team professional development were built into the regular school schedule. In each of the pilot case study schools three to four hours on a weekly or bi-monthly basis were dedicated to *professional development*. For example, one school had a half-day every Friday dedicated to “in-house” staff development focused on experiential learning. Pilot case study schools also accessed district *professional development* opportunities when it made sense for their needs. Last, all of the pilot case study school principals described mechanisms to support individual *professional development* needs. One pilot case study school dedicated half of the *professional development* time to collective *professional development* and the other half to individual *professional development* pursuits. Another pilot case study school hired a retired teacher to mentor and coach teachers in their classrooms.

The case study pilot school principals and staff discussed staff development and professional growth as important to the operation of the school. One pilot school principal remarked,

If a teacher is willing to work on issues, they're in the perfect place. We're going to give [them] that professional development... to take teachers and move them forward.

Whether external to the school or internally developed, professional development in the charter case study schools had a specific aim - for staff to improve instruction and curriculum so that it would meet the needs of students in the school. One charter case study school principal frankly stated, “[Professional development is] meant to ensure that [teachers] have the skills needed to teach these kids. The goal isn't for a teacher to get certified.”

Much of the *professional development* among the charter case study schools was as a whole school or a team of teachers. While the topic or focus would change each year, they sought coherence over the course of a school year. One teacher at a charter school explained:

When we talk about teacher quality we are all focusing on the same issues—we all move forward in the same way, then we tackle something else and we all move forward in that way. It's very deliberate and purposeful, because we talk about it over and over again.

In the case study schools, there were differences in the degree to which the schools relied on their own expertise or whether expertise came from outside of the organization. For example at one charter school, all teachers participate in a teaching observation system in which a selected portion of a teacher's class is video recorded, and then, as a group, the teachers watch the videotape to discuss strengths of the instructional excerpt and strategies to improve instructional practice in the future. In this model, the instructional areas of focus are selected over the course of the year so they are able to see improvements in individuals and as a collective over time. The charter school teachers identified professional reflection and growth afforded by the sustained strategy and focus over the course of the school year as a strength of the *professional development* offered in the school. One charter school teacher remarked, "Every year here, I've grown as a teacher and I approach my kids differently and then, I feel bad for the kids I taught in the previous years."

Another example of an in-house approach to *professional development* can be found in one of the pilot case study schools. At this school, an experiential learning coordinator not only supported groups of teachers as they developed experiential learning modules for their students, but he also routinely designed experiential *professional development* opportunities for the staff as part of the *professional development* process. An example from a traditional school is the professional discussion sessions. Run like a book club, groups of teachers set aside time to have professional discussions after reading scholarly articles on a particular student need or instructional practice.

These examples show how high-achieving schools exercise autonomy in the area of *professional development*. For all of these schools, *professional development* is targeted and customized to the needs of staff and to the time available in the schedule to conduct it. For charter and pilot schools, who have greater autonomy over staff, designing and implementing a cohesive *professional development* program that aligns closely with the collective philosophies and goals of the staff can perhaps be easier to do, compared to traditional schools, which have less control over the staff coming into their building. Additionally, for charter schools, the longer school day allows for the incorporation of *professional development* into the regular schedule, while still providing sufficient focused instructional time for students. These findings, therefore, demonstrate how the effective use of autonomy in the area of *professional development* depends very much on autonomy in the areas of *staffing* and *scheduling & time*.

Budget

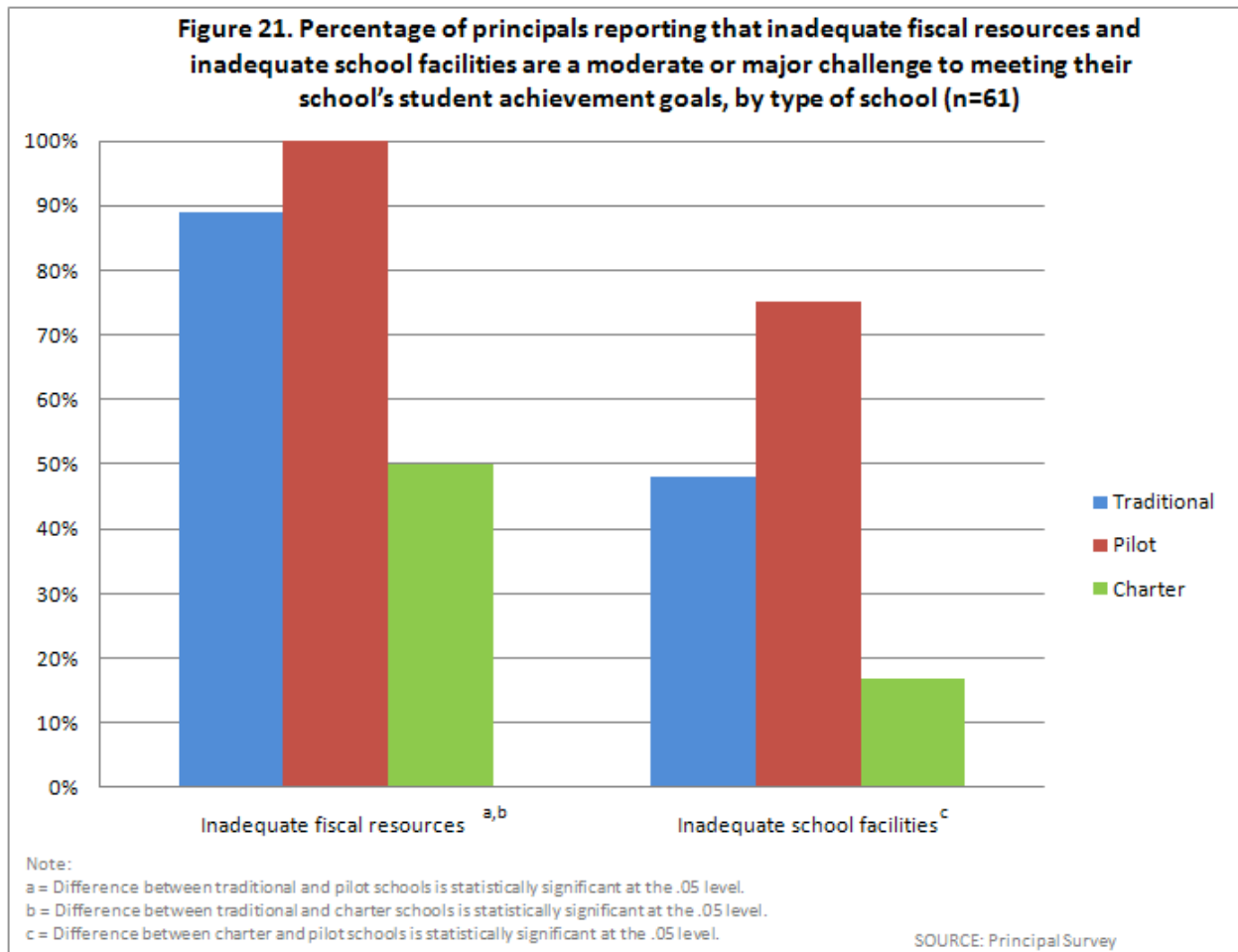
Autonomy over the *budget* is the ability for school leaders to make decisions about how resources are allocated within the school. Data from the principal survey revealed some significant differences across school type in terms of satisfaction with school resources.

Adequacy of Resources

Comparisons Among the Three Types of Schools

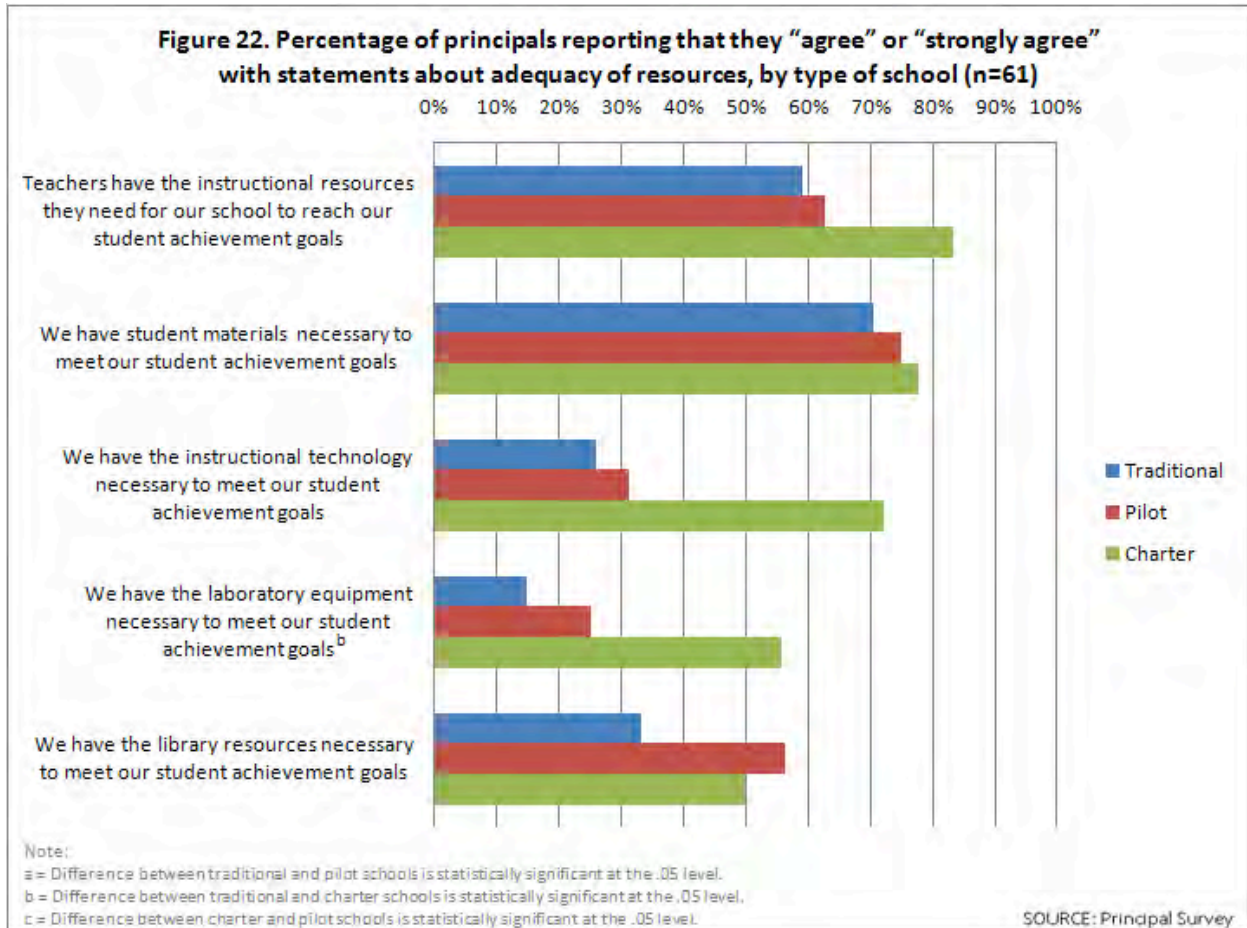
Charter school principals were generally less likely to consider inadequate resources a challenge, and more satisfied with their ability to obtain the materials and resources needed to meet the needs of students within their schools, than leaders of traditional schools.

Charter school principals expressed a relatively high degree of satisfaction with the level of financial resources available to them. Half of charter school principals indicated that inadequate fiscal resources are a moderate or major challenge to meeting their student achievement goals, while all pilot school principals and a vast majority (89%) of traditional school principals reported that fiscal resources are a moderate or major challenge. Similarly, only 17% of charter school principals, compared to 75% of pilot school principals, reported that inadequate school facilities are a moderate or major challenge to meeting their school's student achievement goals (see Figure 21).



Charter school principals expressed a relatively high degree of satisfaction with the level of material resources available to them. Over half of charter school principals agreed that they had the instructional resources, student materials, instructional technology, laboratory equipment, and library resources necessary to meet their student achievement goals. Meanwhile, less than one-third of principals from

traditional and pilot schools felt that they had the instructional technology or laboratory equipment necessary to meet their achievement goals (Figure 22).



High Achieving Schools

Principals of high achieving pilot and charter schools expressed opinions similar to all pilot and charter principals regarding the adequacy of the financial resources. Among high-achieving traditional schools however, survey data show a high percentage of principals indicated that the financial resources were adequate. For example, when limiting the survey data analysis to high-achieving schools only, 80% of traditional school principals reported having adequate instructional resources, instructional technology, and library resources. In fact, the percentage of high-achieving traditional school principals reporting that they had the instructional technology they need was higher than that of high-achieving pilot school principals.

The traditional case study principals support the survey finding about the adequacy of resources, and also reveal that perception of the adequacy of resources had more to do with being able to live with the constrained budget, and looking for creative ways to improve services without funding.

Traditional case study school principals each described having a constrained *budget*, but did not identify this as a major barrier to meeting student achievement goals. One traditional case study school principal remarked, “I try to keep the student-teacher ratio low with the budget, but there isn’t a lot of

money left over.” Still, the principal was able to meet this *budget* priority. Another traditional case study school principal remarked, “In terms of budgetary decisions, there’s a limited budget so there aren’t so many decisions to make... we draw from our staff to supplement human resources.”

Although high-achieving traditional school principals find creative ways to use and supplement their budgets, they remain constrained by limited resources. Charter school principals, on the other hand, have more freedom over the *budget*, which, coupled with autonomy in the area of staff, can potentially make room for more resources. As discussed earlier in the section on staffing, the average teacher salary in charter schools in Boston is over \$20,000 lower than in traditional schools in Boston. With a smaller portion of the *budget* devoted to teacher salaries, charter school leaders are able to use their budgets to purchase additional materials and supplies, support specialized programs, or fund additional staff positions, which may help explain why charter school principals generally expressed more satisfaction with their resources than did pilot or traditional school principals. In this way, autonomy over *budget* is closely connected to autonomy over staffing.

REFERENCES

- Abdulkadiroglu, A., Angrist, J., Cohodes, S., Dynarski, S. Fullerton, J., Kane, T., and Pathak, P. (2009). Informing the Debate: Comparing Boston's charter, pilot and traditional schools. Boston, MA: The Boston Foundation.
- Adelman, N.E., Haslam, M.B., & Pringle, B.A.. (1996, October). The uses of time for teaching and learning. (Vol 1: Findings and Conclusions.) Washington, DC: Policy Studies Associates, Inc.
- Aaronson, D., Barrow, L., and Sander, W. (2003). Teacher and Student Achievement in the Chicago Public High Schools. Chicago, IL: Federal Reserve Bank of Chicago Working Paper 2002-28.
- Bellei, C. (2009). Does lengthening the school day increase students' academic achievement? Results from a natural experiment in Chile. *Economics of Education Review* 28(5), 629-640.
- Boston Public Schools. (October 2008). Boston Public Schools at a Glance, 2008-2009. Boston, MA: Author.
- Brown, C., Smith, M., and Stein, M. (1996). Linking Teacher Support to Enhanced Classroom Instruction. Paper presented at the American Educational Research Association, New York, NY.
- Buckley, J. and Schneider, M. (2007). Charter Schools: Hope or Hype?. Princeton, NJ: Princeton University Press.
- Bryk, A. and Schneider, B. (2002). Trust in Schools: A core resource for improvement. New York: Russell Sage Foundation.
- Center for Collaborative Education . (2006). Description of Boston Pilot Schools Network. Boston, MA: Author.
- Desimone, L., Porter, A.C., Birman, B.F., Garet, M.S., & Suk Yoon, K. (2002). How do district management and implementation strategies relate to the quality of the professional development that districts provide to teachers? *Teachers College Record* 104(7), 1265-1312.
- Duncan, A. (June 22, 2009). Turning Around the Bottom Five Percent. Secretary Arne Duncan's Remarks at the National Alliance for Public Charter Schools Conference. Retrieved from: <http://www.ed.gov/news/speeches/2009/06/06222009.html>
- Elmore, R. (2000). Building a new structure for school leadership. Washington, DC: Albert Shanker Institute.
- Hartman, C. (2002). High Classroom Turnover: How Children Get Left Behind. in Dianne M. Piche, W.L.Taylor, and R.A. Reed (Eds.), *Rights at Risk: Equality in an Age of Terrorism*, 227-244, Citizen's Commission on Civil Rights.
- Heck, R. and Hallenger, P. (2009). Assessing the contribution of distributed leadership to school improvement and growth in math achievement. *American educational Research Journal* 46(3), 659-689.
- Hill, C., Thompson, B., and Williams, E. (1997). A Guide to Conducting Consensual Qualitative Research. *The Counseling Psychologist*. 25(4), 517-572.
- Hill, P. et al. 2001. A Study of Charter School Accountability. Washington, DC: U.S. Department of Education.

- Hirsch, E., Freitas, C., Church, C., and Villar, A. (2008). Massachusetts Teaching, Learning and Leading Survey Final Report. Santa Cruz, CA: New Teacher Center.
- Hossler, C., Stage, F., & Gallagher, K. (1988, March). The relationship of increased instructional time to student achievement. Policy Bulletin: Consortium on Educational Policy Studies.
- Jordan, B., Correnti, R. and Miller, R. (2002). What large-scale survey research tells us about teacher effects on student achievement: Insights from the Prospects Study of Elementary Schools. Teachers College Record, 104(8), 1525-1567.
- Jordan, H.R., Mendro, R., & Weerasinghe, D. (1997). Teacher effects on longitudinal student achievement: A preliminary report on research on teacher effectiveness. Paper presented at the National Evaluation Institute, Indianapolis, IN.
- Lipsky, M. (1977). Street-Level Bureaucracy: Dilemmas of the Individual in Public Services. New York: Basic Books.
- Massachusetts Department of Elementary and Secondary Education (2007). Technical Advisory 07-01 Teacher qualifications in Massachusetts charter school. Memo from Commissioner Driscoll to Charter School Leaders. Malden, MA: Author. Retrieved on January 8, 2010 from http://www.doe.mass.edu/charter/tech_advisory/07_1.html.
- Merseth, K. Cooper, K., Roberts, J. Tieken, M. Valant, J., and Wynne, C. (2009). Inside Urban Charter Schools: Promising practices and strategies in five high-performing schools. Cambridge, MA: Harvard Education Press.
- Murnane, Richard. The impact of school resources on the learning of inner city children. Cambridge, MA: Ballinger, 1975.
- National Council on Teacher Quality (2010). Human Capital in Boston Public Schools: Rethinking how to attract, develop and retain effective teachers. Washington, DC: Author.
- Nelson, S. (1990). Instructional time as a factor in increasing student achievement. Portland, OR: Northwest Regional Educational Laboratory.
- Nolan, M. J., & Chandler, K. (1996). Use of cognitive laboratories and recorded interviews in the National Household Education Survey. Technical Report. Washington, DC: National Center for Educational Statistics.
- Porter, A., Garet, M., Desimone, L., & Birman, B. (2003). Providing effective professional development: Lessons from the Eisenhower Program. Science Educator 12(1), 23-40.
- Rivkin, S., Hanushek, E. and Kain, J. (2005). Teachers, Schools, and Academic Achievement. Econometrica. 73(2), 417-458.
- Rockoff, J. (2004). The Impact of Individual Teachers on Students' Achievement: Evidence from Panel Data. American Economic Review 94(2), 247-52.
- Rowan, B., Correnti, R. and Miller, R. (2002). What large-scale survey research tells us about teacher effects on student achievement: Insights from the Prospects Study of Elementary Schools. Teachers College Record, 104(8), 1525-1567.

Rumberger, R. (1999). *The Educational Consequences of Mobility for California Students and Schools*. California: Policy Analysis for California Education.

U.S. Department of Education, National Center for Education Statistics. (2008). *Numbers and Types of Public Elementary and Secondary Schools From the Common Core of Data: School Year 2006–07* (NCES 2009-304), [Selected Findings](#).

Weick, K. (1976). Educational organisations as loosely coupled systems. *Administrative Science Quarterly*, 21(no. 1), 1-19.

Wiley, D. and Yoon, B. (1995). Teacher Reports of Opportunity to Learn: Analyses of the 1993 California Learning Assessment System. *Educational Evaluation and Policy Analysis*, 17, 355-370.

APPENDIX A – Methodology

Methodology

In order to gain a more in-depth understanding of how traditional, pilot and charter schools identify and implement strategies to improve student outcomes, we conducted a study comprised of a principal survey, condensed school case studies, and analysis of extant data. The principal survey and case study research focused on the six areas in the autonomy framework: 1) *governance & leadership*, 2) *budget*, 3) *staffing*, 4) *professional development*, 5) *scheduling & time*, and 6) *curriculum & instruction*. Extant data from the Massachusetts Department of Elementary and Secondary Education (MADESE) was used to identify similarities and differences in the student population in traditional, pilot and charter schools.

Principal Survey

The purpose of the principal survey was to gather information on school practices. A total of 84 principals in Boston were surveyed, including all charter and pilot school principals, and a random sample of traditional schools principals⁶.

Traditional School Principal Survey Sampling Strategy

A random sample that is representative of the population of traditional school principals was selected for this study, excluding Boston's three exam schools.⁷

Our target number of schools for this sample was 40, which represents about a third of all traditional Boston schools. In order to ensure adequate representativeness on key dimensions of interest, the team employed a two-stage stratification procedure based on the following variables: (1) school level; and (2) average school achievement. Data on the final sample were reviewed to ensure that averages for key demographic variables—percentage limited English proficient, special education, low-income, and from different racial-ethnic groups—closely mirrored averages for traditional schools in the district as a whole.

In creating the first strata, we categorized schools into three groups according to level: elementary, middle, and high. Typically, elementary schools cover grades K-5, middle schools cover grades 6-8, and high schools cover grades 9-12. However, in Boston, some schools have alternate grade configurations, such as K-8, 6-12 or 1-12. As a result, the groups in this first stage were not mutually exclusive, with some schools falling into more than one group. The list of eligible schools was limited to those that had achievement data available for what we determined as a representative grade of interest and was aligned with the student performance in: grade 4 for elementary schools, grade 8 for middle schools, and grade 10 for high schools. Based on these criteria, the elementary school group had 71 eligible

⁶ Sampling principals from the traditional schools was done at the request of the Boston Public Schools, in order to minimize overall respondent burden.

⁷ The one exception to this rule was the elimination of the three exam schools—Boston Latin, Boston Latin Academy, and O'Bryant School of Math & Science—from consideration. Their status as exam schools makes them categorically different from the overall population of Boston public schools, and therefore not good candidates to represent traditional schools in a comparative study against pilot and charter schools.

schools, the middle school group had 21 eligible schools, and the high school group had 20 eligible schools.

We then categorized schools according to average achievement, within each level. As a measure of average school achievement, we used the Composite Performance Index (CPI), a 100-point index that is used as a measure of “the extent to which students are progressing toward proficiency in English language arts and mathematics...”⁸, for the target grades (Grades 4, 8, and 10), averaged for English language Arts (ELA) and math over the years 2006, 2007, and 2008. We used this variable to divide each group into thirds according to achievement—the highest third, the middle third, and the lowest third. This stratification resulted in a total of nine groups, or strata, of eligible schools (Table 1).

Table 1. Number of eligible schools for traditional school sample, by strata

	Elementary	Middle	High	Total
High achieving	24	7	7	38
Average achieving	23	7	6	38
Low achieving	24	7	7	38
Total	71	21	20	114

In selecting the final sample, we randomly selected approximately one-third of the schools within each strata, in order to reach our originally projected total number of 40 schools. Our target sample sizes for each stratum are shown in Table 2 below.

Table 2: Target sampling numbers, by strata

	Elementary	Middle	High	Total
High achieving	8	2	3	13
Average achieving	8	3	2	13
Low achieving	8	3	3	14
Total	24	8	8	40

Once the target per-strata sample sizes were identified, we used a random sequence generator program, accessed via www.random.org, to randomly select schools within each stratum. Using the high-achieving elementary schools stratum as an example, we first numbered these schools from 1 to 24. We then used [random.org](http://www.random.org) to generate a random sequence of the numbers 1 through 24, and then picked the first 8 numbers from that random sequence. The schools identified by those 8 numbers became the random sample for that stratum. This process was repeated for each stratum. Once the final list was identified, we first checked to see that no schools appeared twice due to their status as a multi-level school (e.g., K-8). We also checked to ensure that demographic data for the sample did not deviate

⁸ Massachusetts Department of Elementary and Secondary Education. (2004). 2004 Glossary of Accountability and AYP Reporting Terms. Retrieved from: http://profiles.doe.mass.edu/ayp2004/ayp04_glossary.html on 8/31/2009.

significantly from demographic data for the traditional school population overall. Both of these criteria were met.⁹

The final overall survey sample consisted of 84 principals—40 from traditional schools, 25 from pilot schools, and 19 from charter schools. For pilot and charter schools with grade configurations that crossed traditional school levels (e.g., K-8, 6-12), we surveyed more than one principal (e.g., for K-8, one principal in charge of elementary grades and one principal in charge of middle grades). The overall sample of 84 principals therefore represents only 73 schools. Table 3 below describes the sample in terms of principals and type of school.

Table 3: Final survey sample, by respondent and type of school

	Traditional	Pilot	Charter	Total
Principals	40	25	19	84
Schools	40	20	13	73

Development of survey instrument

The survey instrument included questions focusing on the six key areas of autonomy: 1) governance & leadership, 2) budget, 3) staffing, 4) professional development, 5) scheduling & time, and 6) curriculum & instruction.¹⁰ Within each focus area, a review of research was conducted to identify characteristics and strategies found to support higher levels of student achievement and to inform the development of survey questions (see *Research Reviewed for the Development of Data Collection Instruments*).

A draft of the survey was reviewed by researchers at the American Institutes for Research (AIR) and the Rennie Center, and then pilot tested with principals and former principals in Massachusetts. The pilot was conducted using a cognitive laboratory method¹¹ whereby individuals were asked to think aloud as they took the survey, and a researcher took notes on the participant’s interpretation of the questions. Information from the pilot informed further refinement of the survey instrument. Then, the survey was reviewed by senior staff at the AIR and the Rennie Center, and last, it was reviewed by the AIR Internal Review Board to ensure the rights of participants were protected.

The final survey consisted of a combination of Likert scale response questions, open-ended questions and some short answer questions. In total there were 40 questions covering all of the key areas of autonomy.

⁹ During survey administration, some of the original sample schools were replaced with similar schools, in order to maximize the response rate. Five weeks after releasing the survey, the response rate among traditional schools was analyzed, and an alternate sample was generated that matched the characteristics of schools that had not yet responded. The survey was sent to these additional schools, and those that responded then replaced the original sampled schools.

¹⁰ For a description of the six area of autonomy, see the *Autonomy Framework* section on page 5.

¹¹ e.g., Camburn, et. al., 2000; Nolan and Chandler, 1996

Administration of survey

Prior to launching the survey, the research team secured formal permission from the Boston Public Schools to conduct the survey and emailed a letter of introduction to all principals in the sample. The letter served to a) introduce the research organizations; b) explain the intent of the study; c) notify individuals of the forthcoming survey; d) assure them of the confidentiality of all survey responses; and e) provide study participants with contact information for a member of the research team.

Survey Monkey, an online survey platform, was used to administer the principal survey. All respondents were sent an email invitation from Survey Monkey, with a link to the survey. In order to increase the response rate, a hard copy of the survey was mailed to respondents who had not yet completed the survey three weeks after the initial invitation was sent. Additionally, we followed up with phone calls, and engaged the support of the Center for Collaborative Education and the Massachusetts Association of Charter Schools to encourage responses from pilot and charter school principals, respectively.

Our final overall response rate was 66 out of 84 principals, or 79%. The table below provides additional detail on how the response rate differed among principals from different types of schools (Table 4).

Table 4. Survey response rate, by school type and level¹²

	Traditional	Pilot	Charter	Overall
Elementary	21/24 = 88%	4/7 = 57%	4/4 = 100%	29/35 = 83%
Middle	6/8 = 75%	4/7 = 57%	8/9 = 88%	18/24 = 75%
High	4/8 = 50%	9/11 = 82%	6/6 = 100%	19/25 = 76%
Overall	31/40 = 78%	17/25 = 68%	18/19 = 95%	66/84 = 79%

Data Analysis

We analyzed the survey data using SPSS, a statistical programming software. Data were downloaded from Survey Monkey and subsequently imported into SPSS for analysis. We ran frequencies or means on all variables in the survey, for all respondents and across different sub-groups of respondents.

First, we examined differences in means between the three types of schools (traditional, pilot and charter), noting statistically significant and policy relevant differences. We looked for patterns of differences that might indicate a cohort of schools using similar practices and strategies.

Second, we examined the relationship between survey variables and school-wide achievement, as measured by average CPI. We generated correlations separately for each type of school (traditional, pilot and charter). The purpose of this analysis was two-fold: (1) to reveal the factors that are most strongly correlated with MCAS performance; and (2) to reveal whether these relationships differ by type of school. Additionally, we identified a cohort of high-achieving schools within each school type category

¹² The response rate is based on the grades served. Therefore, the response rate may be greater than the number of actual schools by type. For example, a K-8 pilot school would have been surveyed for the elementary level and then for the middle school level. Because it is likely that the each school level is unique, the principal's ability to generalize about a specific school level led to more accurate data collection.

(traditional, pilot and charter),¹³ and re-ran all comparative analyses across school type within this cohort only, in order to identify any patterns in responses or differences in means that are unique to high-achieving schools.

Case Studies

The purpose of the school case studies was to gain an in-depth understanding of the perspectives of stakeholders, and practices and strategies used in high-performing traditional, pilot and charter schools. Data collected for the case study primarily came from a one-day site visit that included an in-person interview with the principal, one or two teacher focus groups and classroom observations. Data gathering during the site visits was aimed at garnering information about leadership and staff perspectives on school and classroom level strategies and practices. The site visits took place between October and November 2009, and in total, interviews were conducted with nine principals and nine administrators, eleven focus groups with 60 teachers and specialists were convened, and 57 classrooms with 890 students and 88 adults were observed (Table 5).

Table 5: School case study participants and components

	# of Schools	Interviews		Focus Groups		Classroom Observations		
		# of Principals	# of Administrators ¹⁴	# of Focus Groups	# of Teachers	# of Classrooms	# of Adults	# of Students
TOTAL	9	9	9	12	60	57	88	890
<i>By School TYPE</i>								
Charters	3	3	5	4	18	21	28	346
Pilots	3	3	2	4	22	20	40	302
Traditional	3	3	2	4	20	16	20	242
<i>By School LEVEL</i>								
Elementary	3	3	5	4	19	22	41	340
Middle	3	3	3	4	20	19	27	284
High	3	3	1	4	21	16	20	266

Site Visit Selection

Nine schools (three traditional, three pilot and three charter schools) were selected for case studies. Within each type of school, one elementary, one middle, and one high school was selected. In selecting the schools for case studies, we sought to capture the highest achieving schools while at the same time

¹³ See the case study school selection for an explanation of how the high achieving schools were identified.

¹⁴ The total number of administrators does not include the principals.

ensuring that the student bodies at the respective institutions were representative of the composition of the overall student body in the Boston public schools.

The first step in the selection process was to identify all of the traditional, pilot and charter public schools in the city of Boston, and identify each school according to its type and grade level. The list was then narrowed down to schools that had experienced the highest levels of overall student achievement over the previous three academic years (2006-07, 2007-08, and 2008-09). To identify the highest achieving schools in at each grade level, we used the CPI. The three-year CPI average in English language arts and mathematics were used to rank schools. Then, the top-performing schools in each category were examined for anomalies. Immediately, the exam schools were eliminated from the list, as they are considerably different from the other schools. After ensuring that each of the top-performing schools had consistently high performance across the three years, the research team compiled a preliminary list of high-achieving traditional, pilot, and charter schools representing the elementary, middle and high school levels. This list included 10 traditional schools, 9 pilot schools, and 10 charter schools.

We examined each of the identified schools closely in terms of the demographic characteristics of the students served, with particular attention paid to the percentage of students: eligible for free or reduced price lunch, receiving special education services, first language is not English (FLNE), English language learners (ELL) as well as the race and ethnicity of the student body. To the extent possible, there was an effort to ensure that the students in each of the potential case study schools were comparable to one another (at each level) and similar to students in district overall.

Researchers from the American Institutes for Research and the Rennie Center met to review the preliminary sample of case study schools and to identify the most appropriate case study school candidates by discussing the data described above and taking additional data into consideration including school configuration, achievement data by student subgroup and data on student behavior and engagement (in-school and out of school suspensions, attendance and graduation rates). Comparisons were made between each school and the district, both in terms of student subgroup achievement levels and the achievement gap between white students (the highest achieving subgroup in the city of Boston) and other subgroups. Each finalist school demonstrated higher subgroup performance, and a smaller achievement gap, than the district. The list of schools was then reviewed by the Boston Public Schools District administration to ensure that the pilot and charter schools were representative of high performance.

Last, to mitigate any substantial alterations to the practices and strategies employed in the school that might come about because of a change of leadership; each of the finalist schools was contacted to ensure that the principal had been working in the school for two or more years. In schools where there had been a recent leadership change, a new school was selected.

Table 6 provides a list of the schools selected for participation in the case studies component of the study. And, Table 7 provides summary statistics for each of the case study schools. For a brief description of the case study schools, please see Appendix A.

Table 6. Case study schools, by type, by level

	Charter	Pilot	Traditional	Total
Elementary	Boston Renaissance (k-6)	Samuel W. Mason (K-5)	Manassah Bradley (K-5)	3
Middle	Edward Brooke Charter School (K-8)	Young Achievers (K-8)	Sarah Greenwood (K-8)	3
High	Academy of the Pacific Rim	Tech Boston Academy	Brook Farm Career Academy	3
Total	3	3	3	9

Table 7. Case study Schools summary statistics, 2008-09¹⁵

School	Type/ Level	Location	Grades ¹⁶	# of Students	% of Students				# of Teachers ¹⁷
					Free or Reduced Price Lunch	Special Education	First Language Not English	Limited English Proficient	
Manassah E. Bradley Elementary School	Traditional Elementary	East Boston	K-5	287	76%	16%	35%	13%	21
Sarah Greenwood K-8 School	Traditional Middle	Dorchester	K-8	372	90%	20%	58%	43%	25
Brook Farm Business and Service Career Academy	Traditional High	West Roxbury	9-12	327	77%	21%	41%	5%	24
Samuel W. Mason Elementary School	Pilot Elementary	Roxbury	K-5	207	71%	25%	23%	11%	19
Young Achievers School of Science and Mathematics Pilot School¹⁸	Pilot Middle	Jamaica Plain	K-8	327	73%	19%	12%	3%	23
TechBoston Academy¹⁹	Pilot High	Dorchester	9-12	355	NA	18%	NA	NA	24
Boston Renaissance Charter Public School	Charter Elementary	Boston	K-6	1,224	76%	10%	22%	4%	98
Edward W. Brooke Charter School	Charter Middle	Roslindale	K-8	398	71%	10%	12%	1%	36
Academy of the Pacific Rim Charter Public School	Charter High	Hyde Park	7-12	474	52%	14%	14%	1%	40

¹⁵ Data are from the 2008-09 school year.

¹⁶ These data are from the 2008-09 school year. In 2009-10 school year, TechBoston Academy served students in grades 6-12.

¹⁷ Data for # of students, % free and reduced lunch, % students receiving Special Education Services, % of students FLNE, # of teachers all comes from the Massachusetts Department of Elementary and Secondary Education School Profiles, and is from the 2008-2009 school year.

¹⁸ Young Achievers School of Math and Science took over a low-performing middle school in the 2009-10 school year and moved from Jamaica Plain to Mattapan (where the site visit took place).

¹⁹ TechBoston Academy took over a low-performing middle school in the 2009-10 school year.

Development of Site Visit Protocol

The site visit protocol consisted of three distinct sections: 1) Principal Interview Protocol, 2) Teacher Focus Group Protocol, and 3) Classroom Observations. Each of the protocols was designed to explore elements of the autonomy framework as well as school climate. The protocols were divided into seven key areas: 1) *governance & leadership*, 2) *budget*, 3) *staffing*, 4) *professional development*, 5) *scheduling & time*, 6) *curriculum & instruction*, and 7) *school climate*. A literature review of effective schools research²⁰ and high performing urban schools research informed the design of the interview and focus group protocols. Both the interview and focus group protocols were semi-structured and designed to last one-hour. The classroom observations consisted of a 10 to 15-minute walkthrough, whereby researchers completed a form for observed strategies used in the classroom as well as classroom management data. In addition, we identified classroom practices mentioned in the interview to obtain supporting evidence of the practices, and took notes on the activities observed. To the extent possible, we verified data from the classroom observations during the interviews and focus groups.

The case study protocols were reviewed by the AIR research team, AIR senior researchers and Rennie Center researchers to ensure that it encompassed the latest research in each area, and that it was tailored to incorporate the Massachusetts and city of Boston policies and terminology. Finally, all sections of the site visit protocol were reviewed by AIR's Institutional Review Board (IRB) to ensure that the appropriate ethical considerations were followed and that research participants were protected from overly intrusive or potentially harmful research methods.

Case Study Data Analysis

During and immediately following each site visit, steps were taken to ensure thorough and accurate capturing of all collected data. Detailed notes were taken throughout each interview and focus group, and these sessions were audio-recorded, allowing researchers to verify information and quotations from study participants. The classroom observation information was entered into an observation worksheet and supplemented by notes for each classroom. Documents from extant sources (including policy documents, faculty handbooks and student and parent handbooks) were gathered and coded according to key study focus areas.

Case study data were coded using data capture workbooks in Excel that featured constructs related to each of the key areas identified through a review or research in each of the autonomy areas. Next, data were divided by school type (traditional, pilot, charter) and compared and contrasted. Emerging themes were identified through a consensual qualitative research (CQR) method²¹ chosen because it incorporates a process by which a research team identifies themes and findings. The research team held several data meetings to identify emerging themes, discuss evidence to support themes, and to

²⁰ For example:

Aaronson et.al. (2003), Jordan, et.al.(1997), Rockoff (2004), Rowan, et.al. (2002)

²¹ Hill, Thompson and Williams, 1997

identify additional data that support the themes. These meetings and the CQR method were used to improve the validity and reliability of the reported findings.

Extant Data

A combination of publicly available school level data, student level data, and documents collected from case study sites comprised the extant data collection. The public data were gathered from a combination of the *MADESE School and District Profiles* and the Boston Public School District websites.

Student level data on all students attending traditional, pilot and charter schools in the city of Boston came from the MADESE and included student level data from the 2009 MCAS and Student Information Management System (SIMS) enrollment data from the 2008-09 school year. The school level data were used to select the traditional school survey sample, select the case study schools, to disaggregate survey data by high achieving schools, and to analyze student enrollment patterns by school as described in earlier sections of this report.

Student Enrollment

We conducted additional analyses on student enrollment to examine 1) the numbers and level of need among special education and English language learner students by school type; and 2) overall trends in student enrollment among the schools. First, student level data from the MA DESE SIMS were used to closely examine the numbers of special education and English language learner students as well as their levels of need by school type. Second, the school level student enrollment patterns by school and within school by grade level in the 2008-09 school year were used to examine student enrollment levels by school type. To conduct these comparisons, all schools were identified as traditional, pilot or charter. Subsequently, schools that served common grade levels were grouped together. For example, elementary schools that served kindergarten through fifth grade were grouped together, as were schools that served grades kindergarten through eighth grade, middle school (sixth- through eighth-grade) and high school (ninth- through twelfth-grades). Schools that covered more than one “level” were split into two levels. So, for example a school that covered sixth through twelfth grades would be counted in the middle schools sample only for sixth through eighth grades, and then again in the high school set, but only for ninth through twelfth grades. Data were then calculated in terms of the percentage of students at each grade level in terms of the total number of students in the level (elementary, kindergarten through eighth-grade, middle or high) being examined. Last, for the elementary and K-8 schools, kindergarten was not included in the total enrollment or the difference enrollment calculations. First grade was used rather than kindergarten, because the numbers of kindergarten students did not appear to be a good representation of the school enrollment levels as they had great variation by school, and are likely influenced by some type of school or district policy. These findings are available with comprehensive findings available online.

APPENDIX B – Brief Description of the Case Study Schools

Traditional Schools

The **Manassah E. Bradley School** is a traditional elementary school that serves students in kindergarten through fifth grade. The mission is “to provide a safe, motivating, and fully engaging learning climate that sets the highest expectations for all students, and where all staff is committed to the success of every child.”²² The school was selected for a case study because of the high performance of students in 4th grade. The Manassah E. Bradley School was founded in 1958, and the current principal has been at the school for nine years. The school has a traditional leadership structure, with one principal, a Teacher-in-Charge, and an Instructional Leadership Team. The school employs 21 teachers, many of whom have taught at the Bradley school for more than ten years. The school practices full inclusion in its classrooms, and is also home to an Advanced Work Class in 4th and 5th grades.

The **Sarah Greenwood School** is a traditional school that serves students in kindergarten through eighth grades. The mission of the school is “to make sure that every child is prepared to face the future, to get along with others, and strive to learn forever, to become life long learners, and take risks.”²³ The school was selected for a case study because of the high performance of students in 8th grade. The school was founded in 1919, and the current principal has been at the school for 22 years. The school has a traditional leadership structure, with one principal and an instructional leadership team, as well as a Head of Curriculum. Many of the teachers speak both English and Spanish fluently, as the school is one of only three schools in Boston that offers two-way immersion instruction in both English and Spanish in all classes. The Sarah Greenwood School was able to purchase SmartBoards for nearly every classroom after receiving an award for high achievement, and both students and teachers routinely utilize them for learning purposes.

The **Brook Farm Business and Service Career Academy** is a traditional high school that serves students in 9th-12th grades. The mission of the school is “to create lifelong learners who will better their lives and their community.”²⁴ The school was selected for a case study because of the high performance of its students in 10th grade. The school was founded in 2005 after West Roxbury High School was divided into several smaller schools. The current principal designed the plan for the existing high school and has been the leader since it was started. The school has a traditional leadership structure, with one principal and an Instructional Leadership Team. The principal has developed a strong relationship with the teacher preparation program at Boston College and the Donovan Urban Teaching Scholars Program. Each year the scholars complete internships at Brook Farm, and many of the current staff were hired directly following their internships. Additionally, the school is the site for several specialized programs, including a Perkins School for the Blind program and a substantially separate classroom serving student with severe autism.

²² Retrieved from <http://boston.k12.ma.us/bradley/> on January 19, 2010

²³ From Principal Interview.

²⁴ Retrieved from the Brook Farm Business and Service Career Academy Proposal to become a new school.

Pilot Schools

The **Samuel W. Mason Elementary School** is a pilot school that serves students in kindergarten through fifth grade. The mission of the Mason School is “to provide a comprehensive and rigorous full inclusion academic program supported by committed teachers, staff, teacher interns, devoted parents, and a strong community working collaboratively and learning together.”²⁵ The Mason School was selected for a case study because of the high performance of students in the 4th grade. The current principal has been at the Mason School for three years. The school has a governance board, principal, and Instructional Leadership Team. Teachers are dual certified in regular and special education. In the early 1980s the Mason School suffered from having the distinction of being the “least chosen” elementary school in Boston, but completed a turnaround over the next decade, resulting in being awarded a National Blue Ribbon of Excellence in 1997.

The **Young Achievers Science and Mathematics Pilot School** serves students in kindergarten through eighth grades. The mission of the school is “to create an exceptional teaching and learning environment in which science and mathematics concepts are explored by new technologies are central to teacher and student inquiry.”²⁶ Young Achievers was selected for a case study because of the high achievement of students in the 8th grade. Young Achievers was founded in 1995, and the current principal has been there for 13 years. The school is led by the principal, a School Site Council comprised of parents and staff, and a Leadership Team. In 2009 Young Achievers moved into a larger building and took over a low-performing middle school as part of a Boston superintendent’s initiative. As of the 2009-10 school year, the school increased student enrollment by an additional 130 students.

TechBoston Academy is a pilot school that serves students in sixth through twelfth grades²⁷. The mission of the school “is that every student can learn and develop into a responsible citizen by providing an environment that is both nurturing and challenging.”²⁸ TechBoston was selected because of the high performance of students in the 10th grade. The school was founded in 2002, and the current headmaster has been there for seven years. The school is led by a headmaster and a chief academic officer, who oversees the day-to-day operations of the high school grades, and, a governance board that includes teachers, and other senior administrators. In the 2009-10 school year, the school took over a low performing In the 2009-10 school year, the school expanded to include students in sixth through eighth grades as part of the Boston superintendent’s initiative. The school took over a nearby low-performing middle school

²⁵ Retrieved from the Samuel W. Mason School website: <http://masonpilot.blogspot.com/2008/10/about-us.html>

²⁶ Retrieved from the Young Achievers School website: http://youngachieversschool.org/mission_statement.cfm

²⁷ In the year (2008-09) from which the data used to select TechBoston Academy as a case study school, the school only served students in ninth through twelfth grades. When the site visit was conducted (2009), the school had expanded to serve students in sixth through twelfth grades.

²⁸ Retrieved from the TechBoston Academy website: <http://techbostonacademy.org/about/tbas-mission/>

Charter Schools

The **Boston Renaissance Charter Public School** is an elementary school that serves students in kindergarten through sixth grades. The mission of the school is “to nurture and develop children academically, socially, and emotionally, in a stimulating supportive environment.”²⁹ The school was selected because of the high performance of students in the 4th grade. The Boston Renaissance Charter School was founded in 1995, and the current principal of the elementary school has been there for 3 years. The school is led by a Board of Trustees, a superintendent, and three individual school principals that direct the Kinder, primary, and elementary schools respectively. There is also a Leadership Team comprised of administrators and instructional coaches that shares leadership responsibilities. Boston Renaissance is one of the largest charter public schools in Boston, and is currently located in a 16-story high-rise in downtown Boston, with plans to move to a new school building next year in Hyde Park. After suffering from low student achievement and at risk of losing their charter, the school was restructured and downsized in 2004. Since 2004 Boston Renaissance has seen continual improvement in student achievement scores.

The **Edward W. Brooke Charter School** is a charter school that serves students in kindergarten through eighth grades. The mission is “to provide a quality college preparatory education to Boston’s underserved children.”³⁰ The school was selected because of the high performance of students in the 8th grade. The Edward Brooke Charter School was founded in 2002, and the current principal has been there for seven years. The school is led by two principals that divide their duties among the elementary and middle schools respectively and a governance board. While the Edward Brooke Charter School was initially founded as a middle school, the school recently expanded to include elementary education.

The **Academy of the Pacific Rim** is a charter school that serves students in 5th-12th grades. The mission of the school is “to empower urban students of all racial and ethnic backgrounds to achieve their full intellectual and social potential by combining the best of the East – high standards, discipline and character education with the best of the West – a commitment to individualism, creativity, and diversity.”³¹ The school was selected because of the high performance of students in the 10th grade. Academy of the Pacific Rim was founded in 1995, and the current principal has been there for 6 years. The school is led by an Executive Director and two principals that manage the middle and high schools respectively, a governing board, and department chairs. All students at the Academy of the Pacific Rim learn to read, write, and speak Mandarin Chinese beginning in the 7th grade.

²⁹ Retrieved from the Boston Renaissance Charter School website:

<http://www.bostonrenaissance.com/Default.aspx?tabid=34>

³⁰ Retrieved from the Edward W. Brooke Charter School website: <http://www.ebrooke.org/who-mission.asp>

³¹ Retrieved from the Academy of the Pacific Rim Public Charter School website:

http://www.pacrim.org/our_story.htm