

GREAT TEACHERS ARE NOT BORN, THEY ARE MADE

CASE STUDY EVIDENCE FROM MASSACHUSETTS CHARTERS

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EXECUTIVE SUMMARY

In recent decades, the Commonwealth of Massachusetts has implemented reforms aimed at improving and controlling the quality of the teaching workforce in public schools. Among those reforms are tests for licensure that assess both general and content-area specific knowledge, requirements for ongoing teacher professional development, and procedures for teacher evaluation. Given notable increases in student achievement across the Commonwealth in the past twenty years, it is reasonable to assume that these reforms have contributed to an uptick in the effectiveness of the teaching workforce over time, when effectiveness is defined by student outcomes on standardized tests of student achievement.

Notable, however, is the continued high performance of Massachusetts's commonwealth charter schools—schools that, by law, do not have to comply with requirements for teacher licensure. With a teaching workforce that is comparatively young, unlicensed, and slightly less likely to stay in the profession, Massachusetts's charter schools achieve stellar student achievement results.

Case studies of five high-performing charters schools from around the state reveal that these schools create highly effective teaching workforces in specific ways. First, they take great advantage of the autonomy that they have to assemble their own teaching workforces, in most cases without having to consider teacher tenure or other common constraints that teachers unions impose on traditional public schools. When assembling their workforces, high performing charter schools tend to be agnostic with regard to whether or not teachers are licensed, and instead consider factors such as academic background, 'buy-in' to the school's mission, and whether or not a candidate will contribute to a department and/or a school, on the whole.

Case studies also reveal that high-performing charter schools cultivate tailored approaches to teacher induction and professional development—approaches that, in all cases, emphasize the use of frequent evaluations, specific

and actionable feedback, and the leverage of peer and mentor teachers in these processes. All of the charter schools studied for this report cited teacher induction and ongoing professional development as integral to supporting high levels of student achievement. In some cases, charters have chosen to take their own specific brand of professional development and work with the Commonwealth to offer paths to licensure to their teachers.

Finally, the schools included in this report have varied but well defined philosophies about the importance of teacher retention and the need to build organizational pipelines to support the induction of new teacher recruits and the growth of more experienced faculty members. Especially in the context of the slow but probable growth of many successful charter schools into charter management organizations that support many schools in many different areas of the Commonwealth, a focus on organizational pipelines and the retention of highly effective teachers is paramount to understanding the future of charter schooling in Massachusetts and to understanding the best practices that these schools can share.

INTRODUCTION

Teachers have a greater impact on student achievement than any other resource. In the past decade, research on teacher impacts has consistently found that a good teacher can make all the difference in student outcomes, even when other resources are lacking or unavailable.¹ Students assigned to the most effective teachers—when “effective” is defined as the extent to which individual teachers help students to grow on standardized measures, such as assessments—“are more likely to go to college, earn higher incomes, and less likely to be teenage mothers.” In fact, having an effective teacher, according to one study, “raises a child’s cumulative life income by \$80,000.”²

The Commonwealth of Massachusetts is a leader in student achievement: on the 2013 National Assessment of Educational Progress (NAEP), which tests students in reading and math at grades four and eight, Massachusetts students outperformed the national average, tying for first in the nation at both grades in both subjects.³ On other internationally recognized assessments, students achieve similar outcomes: on the 2011 Trends in International Mathematics and Sciences Study (TIMSS), students in the Commonwealth outperformed all other students in participating states; they also outperformed students in all but four of the 63 participating nations.

Student performance on these examinations can and should be attributed, in part, to the state’s strong curriculum standards, and its own test of student achievement, the Massachusetts Comprehensive Assessment System (MCAS). Though it is now being phased out in favor of assessments aligned to the Common Core Curriculum, MCAS has contributed to growth in student achievement over the last two decades because it sets high expectations for student performance and holds teachers accountable for teaching critical curricular content. School leaders and policymakers can use MCAS data to determine whether teachers are doing their jobs effectively.

But strong student outcomes in Massachusetts are not only due to state’s comprehensive accountability system; effective teachers do much more than impart curricular content. Student outcomes in Massachusetts suggest that the state has a comparatively high quality teaching force overall, and the quality of that workforce is evidence that schools in the Commonwealth are recruiting and/or developing talented teachers.⁴

Initiated by the Massachusetts Education Reform Act (MERA) of 1993, the Commonwealth has in place a high common standard for entry into the profession of teaching. That standard is defined by an examination that all teachers must pass in order to teach in public schools. Moreover, under the federal *No Child Left Behind Act*, Massachusetts schools are responsible for having a highly qualified teacher in every classroom.⁵ Some argue these policy initiatives have contributed to creating a more effective teaching workforce, one that has enabled achievement gains in NAEP and Massachusetts Comprehensive Assessment System (MCAS) scores over time.⁶

In the context of this overall growth, there are schools that stand out for having made incredible gains and for achieving consistently stellar results—a disproportionate number of those schools are commonwealth charter schools.⁷ These charter schools are worth paying attention to not only because they are high performers but also because, as commonwealth charter schools, they have freedoms that other public schools do not. With very few exceptions, commonwealth charter school leaders have the freedom to assemble the teaching staff that they choose, without consideration of union or district rules.

Such autonomy is a main reason why many charter schools have developed distinctive approaches to teacher development that coincide with the particular mission and vision of their schools. Indeed, some charter schools and charter management organizations have become so committed to their own approaches to training and development that they have become certified

by the state as educator preparation programs. While some traditional public school districts have also opted to provide their own paths to licensure, these charter schools and charter management organizations stand out because they are often much smaller and have less financial and human capital than their district counterparts, which makes the investment to become a provider of certification that much greater.

A look at teacher recruitment and development in some of the Commonwealth's highest performing charter schools can provide a window into how effective teachers are developed and how highly effective teacher workforces are formed; the impact of an effective teacher is comprised not only of his or her individual contributions to students but also of his or her contributions to the culture of the school and to the teaching faculty as a whole. To begin to understand this and other philosophies and approaches to assembling an effective teaching workforce is to begin to understand how to improve schools that are not yet meeting the Commonwealth's high standard for student achievement.

The following report gives an overall picture of the teaching workforce and approaches to teacher development in Massachusetts's public schools. It goes on to profile how some of the Massachusetts's highest performing charter schools build upon the Commonwealth's basic requirements with their own specific approaches to teacher recruitment and development. The anecdotal evidence provided is based upon case studies of teacher development in five of the Commonwealth's highest performing charter schools.

OVERVIEW OF ROUTES TO TEACHING IN THE COMMONWEALTH

With the Education Reform Act (MERA) of 1993, Massachusetts made a strong commitment to recruiting and developing a more effective teaching workforce. The MERA authorized the development of two tests for licensing prospective teachers (one on teachers' skills, the

other on teachers' subject matter knowledge) and required the board of education (now the board of elementary and secondary education) to develop guidelines for ongoing professional development for teachers. In 1998 the Commonwealth established the Massachusetts Tests for Educator Licensure (MTEL), which measure general reading and writing ability as well as depth and breadth of knowledge in forty different domains from mathematics to the visual arts. Furthermore, in recent years, the Commonwealth has developed a sophisticated data system that provides information about the impact of individual teachers on student test scores. It has also implemented a new system for ongoing teacher evaluation and made strides in linking teacher pay to student performance and enabling districts to more easily dismiss ineffective teachers.⁸

These policy initiatives have helped Massachusetts's teachers to rank highly in comparison to their counterparts in other states. A study conducted by the National Council on Teacher Quality (NCTQ) ranks Massachusetts ninth out of 50 states, largely on the basis of policies it has in place to place an effective teacher in every classroom. With an overall grade of B- (the highest grade awarded to any state was a B), Massachusetts earned high marks for some policies that ensure teachers are prepared academically and high marks for policies that allow districts to factor student achievement into decisions to dismiss ineffective teachers.⁹ (See Table 1).

Even if the NCTQ ratings show some room for improvement, the data demonstrate a link between policies designed to enhance teacher effectiveness and the path to licensure in Massachusetts. Teachers in pre-kindergarten to twelfth grade settings are required to hold one of three academic licenses at different points in their careers.

Preliminary licenses and initial licenses cap two pathways to entering the profession; they differ according to whether the prospective teacher has

**TABLE 1. NATIONAL COUNCIL ON TEACHER QUALITY (NCTQ)
2014 FINDINGS: MA HIGHLIGHTS¹⁰**

Teacher Evaluations	MA is one of only 16 states that does <i>not</i> require student academic growth to be an important criterion in teacher evaluations
	MA is one of 20 states in which student growth <i>is</i> considered in tenure decisions
Teacher Preparation	The Commonwealth does <i>not</i> ensure that teacher preparation programs admit students with superior academic records
	The Commonwealth <i>requires</i> 10 weeks of student teaching before teachers can teach in a public school
Performance Linked to Pay	Massachusetts <i>links</i> teacher pay to performance in limited ways

completed a professional preparation program. The preliminary license may be granted to candidates who possess a Bachelor's degree and have passed the Massachusetts Tests for Educator Licensure (MTEL). It is valid for up to five years of employment and was designed to attract young people with content-area specific expertise and mid-career professionals to the profession of teaching.¹¹

The initial license is designed for prospective teachers who have completed an educator preparation program. The program has to appear on an approved list that is maintained by the state; most, though certainly not all approved programs are provided by colleges, universities, and schools of education.¹²

After five years of employment under a preliminary or initial license, teachers must obtain a professional license. The professional license requires that all teachers complete in their first year a "teacher induction program." These programs are designed to support new teachers in honing their crafts, and include things such as workshops and specialized training, the establishment of coaching/mentoring relationships, and supervised evaluations that provide evidence of a new teacher's ability to positively impact student achievement.

To obtain a professional license, teachers have to meet additional academic requirements. They may complete a Master's degree program in their content area or in education. Alternatively, teachers may earn certification from the National Board for Professional Teaching Standards (NBPTS) or a similar, recognized and approved organization.¹³ (See Table 2).

Through its licensure system, the Commonwealth has regulated the profession of teaching in a manner that seeks to ensure a high minimum level of academic competency for all teachers. Though the system itself suggests a level of regulatory burden on the profession and though some researchers suggest that traditional certification/licensure is, in general, not a good predictor of teacher quality,¹⁴ the certification requirements laid out in the Commonwealth coincide with an increase in student achievement that may speak to improved teacher quality. This could be because the Commonwealth's requirements for licensure are linked to teacher education and, through relatively demanding licensure tests, the development of content-area expertise.¹⁵ (See Tables 3 and 4).^{16,17}

Most school leaders interviewed for this report believe that the basic requirements the Commonwealth has in place generally enhance

TABLE 2. DEMOGRAPHIC PROFILE OF TEACHERS IN THE COMMONWEALTH OF MA, 2014

Total Number of Teachers	70,489
% of Teachers Licensed in Teaching Assignment	98%
Average Teacher Salary	\$71,620
Average Percent of Teachers Retained	90%
Percent of Teachers Evaluated	84%
Percent of Teachers Achieving a rating of “Proficient” or higher	94%

their ability to assemble a competent teaching staff. One reflected: “we can at least know that all of our fellows (newest teachers) have some demonstrated subject matter competence.”¹⁸ It is notable, however, that charter schools, even the highest performing, do not seem to place a high premium on licensure. Some charter school leaders see any regulation related to their ability to assemble the teaching force they desire as a unnecessary regulatory burden. Others cite a preference for emphasizing a candidate’s subject-area qualifications over licensure.

According to Massachusetts law written in response to federal No Child Left Behind requirements, charter school teachers must become certified *or* pass the subject matter licensure test within one year of being hired.¹⁹ Beyond this, charter schools are not subject to licensure and certification regulations. Consequently, many charter school teachers (who, as a group, tend to be younger and have less teaching experience than their peers in district schools) are not licensed: in 2013 the Department of Elementary and Secondary Education (DESE)

TABLE 3. 2013 NAEP READING ASSESSMENT PERCENTAGE OF STUDENTS AT OR ABOVE PROFICIENT IN THE TOP 10 STATES¹⁶

	Grade 4		Grade 8
Massachusetts	47	Massachusetts	48
Maryland	45	New Jersey	46
New Hampshire	45	Connecticut	45
Virginia	43	Vermont	45
Connecticut	43	New Hampshire	44
Vermont	42	Maryland	42
New Jersey	42	Pennsylvania	42
Minnesota	41	Washington	42
Colorado	41	Minnesota	41
Pennsylvania	40	Montana	40

TABLE 4. 2013 NAEP MATHEMATICS ASSESSMENT PERCENTAGE OF STUDENTS AT OR ABOVE PROFICIENT IN THE TOP 10 STATES¹⁷

	Grade 4		Grade 8
Minnesota	59	Massachusetts	55
New Hampshire	59	New Jersey	49
Massachusetts	58	Minnesota	47
Indiana	52	Vermont	47
Vermont	52	New Hampshire	47
Colorado	50	Colorado	42
New Jersey	49	Washington	42
Washington	48	Pennsylvania	42
North Dakota	48	North Dakota	41
Ohio	48	Kansas	40

reported that “45 percent of charter school teachers did not have active teaching licenses... of those that did, 32 percent held a preliminary license.”²⁰

This is not to suggest that charter schools, especially those that are very high performing, do not have sophisticated systems of educator preparation and professional development. In fact, some charter schools run their own Commonwealth-approved educator preparation programs. Instead, these data reveal that there are other important factors beyond licensure and certification that inform the ability of charter schools to assemble an effective teacher workforce. Understanding these factors could be key to understanding one important way that charter schools impact student achievement.

TEACHERS IN MA CHARTERS

If good teaching is one of the most effective ways to raise student achievement, then Commonwealth charter schools are particularly successful at recruiting and developing effective teachers. It is well documented that students in Massachusetts’s charter public schools demonstrate higher growth than their peers in non-charter public schools. Indeed, recent reports from the Center for Research on Educational Outcomes (CREDO) at Stanford University cite Massachusetts’s charter schools, especially those in the Boston area, as some of the most effective schools in the nation.²¹ The study, published in 2013, finds that “on average, students in Massachusetts charter schools learned significantly more than their [virtual] counterparts in reading and math.” In fact, Boston’s charter schools are so effective, that the study’s authors state: “the average math and reading growth found in Boston’s charter schools in the largest state or city level impact that CREDO has identified thus far.”²²

Results from the Commonwealth’s own assessments are even more revealing. A recent report from the MA DESE finds that first year teachers in charter public schools contribute to student growth at rates higher than their young

peers in other schools. According to the report: “first-year teachers at charter schools have a median growth of 54 in mathematics and 56 in ELA, compared with a growth percentile of 48 in mathematics and 46.5 in ELA among first-year teachers in non-charter public schools.”²³ Though “growth percentiles among charter school teachers begin to drop off in later years,” converging with teachers in district schools, these data suggest that charter schools have very effective mechanisms for teacher recruitment, induction, and development.²⁴ (See Table 5).²⁵

Interestingly, charters achieve these stellar results with a comparatively young and less experienced teaching workforce. Teacher data from the Boston Public Schools and a high performing charter in the same area are both representative and revealing: At City on a Hill Charter Public School in Roxbury, MA (one of the highest performing high schools in the Commonwealth), 41% of teachers are between the ages of 26-32, and an even greater percentage are under the age of 26. In Boston, on the other hand, only 19% of teachers are between the age of 26-32, and far fewer than that are under the age of 26.²⁶ These statistics beg the question, ‘why is the average charter school more successful, despite a younger teaching workforce that has fewer years in the classroom?’

A contributing factor to the success of charter school teachers could be their academic backgrounds. Anecdotal evidence from some Boston area charters suggest that charter leaders add significant weight to applicants who hold undergraduate degrees in the content area that they want to teach. It also suggests that they attract candidates who have attended highly competitive colleges and universities. According to Paul Hays, Chief Academic Officer of City on a Hill Charter Public schools, the ability to hire teachers who have had a rigorous undergraduate experience is a positive contributing factor to the quality of the academic program delivered at all City on a Hill Charter Public Schools. “If we can start with teachers who have had the benefit of a rigorous undergraduate and graduate school

TABLE 5. DEMOGRAPHIC PROFILE OF TEACHERS IN MAJOR MASSACHUSETTS DISTRICTS AND CHARTER PUBLIC SCHOOLS BY AGE, SALARY, LICENSURE, AND RETENTION²⁵

	Percent Teachers Aged 26-32 (2014)	Average Teacher Salary (2013)	% of Teachers Licensed in Subject-Area (2014)	Teacher Retention Rate (2014)
Boston Public	19%	\$79,263	96%	81%
Springfield Public	15%	\$58,693	96%	82%
Worcester Public	11%	\$91,504	97%	83%
City on a Hill Charter Public (Boston)*	40%	\$59,164	79%	66%
Boston Collegiate Charter Public (Boston)	43%	\$62,767	58%	78%
Mystic Valley Charter Public (Malden)	38%	\$51,916	70%	74%
Francis W. Parker Essential Charter (Devens)	25%	\$47,440	74%	74%
Abby Kelley Foster Charter Public School	24%	\$52,692	95%	87%

*Circuit Street Campus, Roxbury

experience, we often find more success teaching these educators to use methods and systems we believe are positive for our students.”

Data on teacher background from one very successful charter reveals that its teachers do indeed have impressive academic backgrounds. A random sample of 15 teachers from Boston Collegiate Charter Public School reveals that 86% of teachers hold undergraduate degrees from “more selective” or “most selective” institutions, according to *U.S. News and World Report* rankings.²⁷ Though an admittedly small sample, it stands in contrast to a 2010 study, which looked at teachers in the Boston Public Schools (BPS) and found that only two-thirds of teachers in BPS came from “more selective” or “most selective institutions.” Important to note is that the same study highlighted the fact that BPS teachers, on average, attend more prestigious undergraduate institutions than their counterparts in other urban districts.²⁸

It is also notable that many area charter schools tend to hire young teachers who have only a subject-matter university degree and not a degree from traditional school of education. At Boston Collegiate, for example, only one teacher in the sample had a degree obtained at a school of education, and that degree was only one of two Bachelor’s degrees that the teacher holds, the other being in history and obtained from a College of Arts and Sciences. While it could be that many charters are simply agnostic as to the type of degrees applicants hold (from traditional schools of education or otherwise), it is more likely that these schools are not actively seeking teachers with traditional education school credentials; instead they are seeking the best candidates to fill given needs at a given time.²⁹

For some schools the best candidates are young people who already have advanced degrees, despite the cost this implies, as teachers with advanced degrees often earn higher salaries than their counterparts. At City on a Hill Charter

Public School (COAH) 73% of the licensed teaching faculty hold advanced degrees, including doctoral degrees from elite universities, such as Columbia and Brown. This statistic suggests that COAH teachers are highly educated, even compared to Boston Public Schools, where more than 60% of teachers have coursework equivalent to at least one Master's degree.³⁰ The difference, however, is that City on a Hill teachers do not necessarily earn salaries that are on par with Boston Public Schools (BPS), where the salary schedule dictates that advanced coursework (which does not necessarily correlate with more effective teaching) results in a salary increase.³¹ (See Table 6).³²

So, how can schools like City on a Hill attract such an educated workforce with a lower salary than their district counterpart? The anecdotal evidence suggests that teachers are attracted to the mission driven work of the school, opportunities for teacher leadership, and the ongoing professional support that the school provides. Through its own professional development program, City on a Hill's teachers can earn a Master's degree in teaching from Simmons College, though only a portion of the teachers represented in the data above have obtained their degrees through that route.³³ COAH offers the Master's degree through Simmons because the network tailors the

coursework to be highly specific to the kind of teaching that City on a Hill values.³⁴ This matters when one considers research suggesting that advanced degrees do not always correlate with more effective teaching.³⁵

The same sense of mission that attracts City on a Hill's most educated teachers to the school also attracts those who are hired without an advanced degree. The idea that mission matters was cited by many of the school leaders interviewed for this work. Thus young, qualified teachers are not flocking to charter schools because they need not be licensed to apply; they are also interested in the missions of these high-performing charter schools.³⁶

But the mission driven work of the school, isn't always enough to keep them. As mentioned, the charter teacher workforce is young in comparison to district teacher workforces. One clear reason for this is that charters retain teachers at rates lower than their district counterparts.³⁷ Low retention is likely due to a couple of reasons: charter school teachers make, on average, lower salaries than their peers in district schools and thus are more likely to leave charters after gaining experience and/or when family considerations make a higher salary attractive. Also, charter school leaders have increased flexibility to dismiss ineffective teachers, which

TABLE 6. CITY ON A HILL CHARTER PUBLIC SCHOOL NETWORK, TEACHER DATA³²

Total Licensed Faculty and Staff	71
Percent of Licensed Faculty with Advanced Degrees	73%
Percent of Advanced Degrees in Education	94%
Percent of Faculty with Doctoral Degrees	4%
Percent of "Bachelor's-Only" Faculty with Degree in Subject-Area	68%
Percent of "Bachelor's-Only" Faculty with Degree in Education	32%
Percent of "Bachelor's-Only" faculty with degrees from "more" or "most selective" colleges	52%

could lead to higher teacher turnover than would be seen in districts where collective bargaining contracts make the dismissal process lengthy and difficult. This noted, it should also be pointed out that emerging research suggests that charter school teachers are more likely to leave of their own accord than to be dismissed.³⁸

Despite their youth, inexperience, and comparatively low pay, teachers are clearly the driving force behind student achievement in Massachusetts charter schools. One reason for the highly effective teaching that takes place in charter schools could be that these schools are able to hire more teachers who have had the benefit of rigorous, subject-area undergraduate training.

But teacher academic background alone is probably not enough to explain the excellent results that so many charter schools are able to achieve. Places like Boston Public Schools are also able to attract a highly educated workforce, and may even be able to attract more candidates who have gone to highly selective undergraduate institutions than some area charters. Given this, understanding how charter schools develop their teacher workforces can be helpful to understanding approaches that might help all schools to improve. While it is difficult to gather quantitative data on the ‘soft’ things that charter schools do in the hiring, induction, and developing processes, a case study approach can be revealing.

CASE STUDIES IN DEVELOPING CHARTER TEACHER WORKFORCES

When it comes to assembling an effective teaching workforce, the most important lever cited by charter school leaders interviewed for this work is their ability to recruit and hire the best candidates. Hiring without consideration to licensure or to teacher tenure rules imposed by unions, according to interviewees, allows the school to consider personal qualities and characteristics, not just baseline academic and professional qualifications. Considerations such

as a candidate’s ability to develop his or her practice on the basis of feedback (‘coachability’), the likelihood that a candidate will integrate well with the school’s culture and help to further its mission, and the degree to which a candidate, through his or her qualifications and personal characteristics can fill “holes” within a department or school, were all cited as important components to the development of an effective faculty.

In addition to hiring, interviewees cited tailored and (for the most part) home-grown professional development approaches as integral to their success. Massachusetts charters are required to have mission-driven approaches to their work, and those missions quite often include specific pedagogical approaches to schooling. Considering these things, many charter schools choose to train teachers in their ‘way of doing things.’ In the majority of cases that ‘way’ includes intense and ongoing professional development and frequent evaluations for both new and experienced faculty members.

Finally, because many charters feel that the nuanced and mission-driven nature of their work necessitates home-grown approaches to teacher training and development, these schools have also come to view approaches to professional development as part and parcel of an overall professional pipeline. Many of the school leaders interviewed for this work noted that it is desirable to promote from within when filling new administrative roles or establishing teacher leader positions, such as coaches and mentors. To fill these positions with outside candidates, they note, means inculcating new hires into the culture of the school. With a defined system of training and development, these schools can more easily create a professional pipeline, one that allows them to grow and even replicate, as the Commonwealth allows.

Also important to note is that among charters that see value in having licensed teachers on staff, some have chosen to become providers of approved educator preparation programs. They do

so in an attempt to guarantee that young teachers will be educated to teach in a manner that the organization deems most effective and valuable. As one leader of school with its own program notes, “we’ve designed the program so that new teachers can learn our systems and way of doing things.”³⁹ Says another, “we have a very specific approach to teacher development—we do not take anyone else’s approach and ‘slap’ it on.”⁴⁰

Specific charter school educator preparation programs provide one window into how these schools develop effective teaching workforces. In addition to these programs, however, it is also very useful to understand how other charter schools, especially those that are high performing, recruit and develop faculty.

AN EMPHASIS ON HIRING

“As a school leader,” notes Joseph McCleary, the most important thing I look for when hiring is a match between institutional ideals and vision and teacher ideals and vision.” McCleary, who is the former director of the Mystic Valley Regional Charter Public School and current director of Lowell Collegiate Charter Public School has hired many teachers in his career, and assembling a successful faculty, he suggests, requires developing a distinctive mission and vision for a school and using it to attract the right people to work in the institution. A record of excellence in a particular content area is always important for teachers to have, according to McCleary, but if a person with content-area expertise does not believe in what the school is doing and the approach that it takes to get there, then knowledge, even when coupled with a sound instructional approach, won’t be enough to ensure effective teaching.⁴¹

On the whole, the charter school leaders interviewed for this report concur with McCleary. Because charter schools, especially the most successful, tend to be such focused, mission-driven places, they are, by definition, not a fit for every teacher. The idea that ‘fitting in’ to a school’s culture is a necessary but not sufficient condition for any new teacher to meet is

grounded in a belief that intelligent and willing people can and should be developed into effective teachers. Teachers are not born, these leaders suggest, they are made.

Sonya Pratt, principal on City on a Hill Public Charter School’s Dudley Street campus provides a unique perspective on the hiring process. She has been through the process as a prospective teacher and school leader, and is now in charge of it as the principal of a school in the network where she began her teaching career. When hiring new teachers, Pratt always observes candidates teach a sample lesson. She says:

I can tell within the first five minutes if they are going to be a fit for the school. It doesn’t come down to experience, it comes down to the candidate’s perspective on our school and my ability, as an institutional leader, to support him or her—to develop the teacher. With the right support within the school I can take a first year teacher and help him or her learn how to teach—what matters is a match between our values and hiring someone with a command of the content that I need them to teach. I don’t need a math teacher, for example, who wants to teach algebra and nothing else.⁴²

‘Fit,’ in the sense that Pratt describes does not hinge only upon whether or not a candidate ‘buys in’ to the mission, vision, and even pedagogical approach of the school. It also means that a candidate has a high level of subject-area expertise but is nonetheless willing to be developed—in many cases willing to be coached—in order to deliver his or her content-knowledge in the way the school thinks best.

Beyond this, there are considerations of whether a teacher’s knowledge, approach, and personality will fill needed gaps within a school or department and whether the candidate will make needed contributions to the school as a whole, academic or otherwise.

Charter schools in the Commonwealth tend to be small schools, and school size can also play a large role in hiring decisions. The English

teacher, for example, is rarely only expected to teach English. He or she may need to run an advisory for students, have responsibility for an extra-curricular club or team, or participate directly in the development of other faculty members by acting as a teacher leader outside of the classroom. The number of roles charter school teachers may have the opportunity play might be one reason these schools are attractive to teachers at the beginning of their careers.

Teachers who understand the charter sector or know only the charter sector are more likely to commit to working in it. Notes one school leader: “though we don’t seek candidates who have only worked in other charter schools, many of our new hires, if they are experienced, end up coming from the charter school world. I think it is in part because even if they have different pedagogical approaches, charter schools tend to emphasize the importance of school culture, especially around teacher development.”⁴³ This emphasis also seems to attract students who have not taken traditional university-based approaches to entering the profession (education school coursework), which could be one of the reasons why more charter teachers enter the profession without licensure.

In addition to the ideas of ‘fit’ and ‘coachability,’ charter schools also have to account for more practical considerations that make hiring an important part of assembling a strong workforce. Simply put, many charter schools operate on very tight budgets, which is evidenced by the data above that show much lower average salaries in charter public schools in comparison to their district counterparts. Even if a charter school leader values having a range of teaching experience within a department and/or school (as many interviewed for this work do), budget considerations can prevent the school from hiring a very experienced teacher who may come “with a heftier price-tag.”⁴⁴ Perhaps more importantly, despite the relative autonomy that charters have to dismiss ineffective teachers, the actual process of doing so can be incredibly costly and time-consuming.

As one leader explains, “a bad hire is costly in so many different ways. We have to consider the time that we’ve put into training and evaluating the teacher in addition to the large cost to the school’s culture. Dismissing a teacher can affect performance across classrooms, which is the main reason why it is best to be risk averse when it comes to hiring.”⁴⁵

Indeed, in the few cases that Massachusetts charter school teachers have decided to unionize, one of the main reasons cited is that teachers need to be protected from what they and their union organizers have argued are unjust dismissals. This was certainly the case when Advanced Math and Science Academy (AMSA) teachers in Marlboro quietly joined the teamsters union in 2014. One faculty member was quoted in the local news as saying: “A lot of key people, award-winning teachers, were let go. That decision cannot be made in five minutes in a back room so someone else can get the job. We need a process so that everyone can feel more protected.”⁴⁶ This is a common theme among teachers who are comfortable in a union, but it also suggests that schools should not have the ability to hire and fire at will, a theory adverse to the notion of charter school freedoms and the ‘autonomy for accountability’ bargain.

While unfair dismissals certainly warrant scrutiny, personnel decisions are confidential, and teachers, no matter their salary level, may not fit into a particular charter schools operating philosophy or mission. The impact of bad hiring or firing decisions can have reverberations in any school, especially those that are small and mission-driven. As proven charter schools in Massachusetts are approved to expand and replicate programs, the importance of hiring to prevent making difficult dismissal decisions should be taken quite seriously.

Moreover, as charter networks begin to establish central offices to manage the day-to-day functions of more than one school, these charters will have to strike the balance between efficiently running a larger organization and

maintaining the kinds of practices that make the autonomies to hire and dismiss staff autonomies worth having. “As we expand, it is becoming more and more difficult to dismiss ineffective teachers because of the protections that faculty feel they need to have in place,” notes Cristin Berry, Principal of City on a Hill’s Circuit street campus. “This makes hiring protocols and decisions all the more important.”⁴⁷

So what does a sound approach to hiring look like? According to Emily Charton, it is inherently “personal.” During the process, she notes, “we encourage each candidate that we think we want to hire to have take a ‘gut check’ as to whether this is the right place for him or her. It is also incumbent upon us, as we hire, to have a very honest conversation with each candidate, to ensure that we are making the right decision.”⁴⁸

The emphasis on hiring described here, one that is personal and concerned with understanding whether the candidate and the institution have a common vision, is an autonomy that charter school leaders hold dear because they understand that so many of their traditional public school counterparts are unable to reap its benefits. In a context where teacher experience rather than expertise dictates hiring decisions, public school administrators may be challenged to develop and/or maintain school cultures that are conducive to teacher development and, by extension, to student achievement.

It is important to note that the school leaders interviewed for this work all described the autonomy to hire the right candidate as more valuable than the autonomy to dismiss a teacher who is ineffective. A common complaint of some outside of charters is that charters ‘churn and burn’ teachers (work them too hard) or provide their faculty with no protections against unfair dismissal which is, at least in these cases, unsupported.⁴⁹ In fact, the importance of assembling the right workforce seems second only to the importance of developing the right workforce in the minds of these charter leaders.

INDUCTION AND PROFESSIONAL DEVELOPMENT

The induction and training of new charter school teachers is something that all charter leaders who contributed to this case study emphasized as integral to helping students achieve. With considerations of candidate fit and school culture factoring heavily into the hiring process, school leaders need to firmly believe that they can train anyone with the requisite subject-area expertise to deliver content to students in a manner that is not just comprehensible but also engaging and effective.

Approaches to the training of new teachers, or induction-phase teachers, tend to combine three things: an induction into the teaching and learning culture of the school, or ‘our way of doing things;’ a rigorous and ongoing training process marked by the delivery of specific and actionable feedback; and a rigorous and ongoing evaluation process, in which teachers are evaluated not just on what they do in the classroom but also on the results of what they do. The bottom line for successful charter schools is: ‘what does this teacher do that leads to student achievement?’⁵⁰

Though licensure, as noted previously, is not a requirement for charter school teachers, some organizations view it as a good thing to have, while others believe that offering a path to licensure can help them attract strong candidates to teach within their schools and networks. Still other charter schools and networks see their own specific brand of preparation as so important for new teachers that they have chosen to become approved providers of educator preparation programs and are thus able to provide new teachers training that will lead to state licensure.

“Of the 80 educator preparation organizations in Massachusetts, 57 of them are colleges or universities. The remaining 23 non-higher-education organizations include 9 private organizations, 5 collaboratives, 3 charter schools, 3 public school districts, 2 professional associations, and one private school.”⁵¹ Among the charter schools and collaboratives that

provide licensure or higher degrees are City on a Hill Public Charter School, the New Teacher Collaborative at Francis W. Parker Charter Essential School, and the Match Teacher Residency program. Though very different in the pedagogical approaches they champion, all of these programs share some common features and all have strong records of preparing excellent teachers.

The Match Teacher Residency (MTR) program, for example, admits candidates with undergraduate degrees and strong subject-area expertise and puts them through a year-long program focused very specifically on the kinds of teacher ‘moves’ that are proven to lead to success in the urban No Excuses charter school context. The MTR program includes an intense semester in which students are immersed in the experience of tutoring students while also engaging in academic coursework and classroom simulations that prepares them for the rigors of teaching. In the second semester of the program candidates are matched with a teacher-coach who they observe and who observes them as they act in a student-teaching capacity. Throughout the entire experience of the teacher residency, teacher candidates are given specific and actionable feedback on how to improve their practice and then evaluated time and again as they implement that feedback. After completing the first year of the program, participants obtain a Massachusetts teaching license and, in most cases, a school placement. After completing a second year that consists of online coursework and ongoing evaluations of their teaching, participants can earn a Master’s degree in education from the Charles Sposato Graduate School of Education.⁵²

Much like MTR, the New Teachers Collaborative (NTC) at the Francis W. Parker Charter Essential School (a member of the Coalition of Essential Schools) inducts new teachers into a very specific philosophy of teaching and learning. Different from Match’s ‘No Excuses’ approach, the NTC grounds new teachers in the Ten Principles of Essential Schooling—it does so by connecting each

new teacher with a teacher mentor, using an apprenticeship model so that learners can engage in “relevant experiences with real students.” In addition to mentoring teachers so that they learn to do things such as “plan collaboratively and become empowered to make curricular decisions,” (which, at Parker are in the hands of teachers and not administrators or policy makers), teacher mentors also coach students in the tactical moves that support student success in the classroom. Feedback and evaluation on the basis of interactions with students is an essential component of the NTC.⁵³ In this sense it is much like MTR. (See Table 7).⁵⁴

Indeed, ongoing evaluation and feedback on the basis of interactions with students is a theme that pervades charter school teacher induction programs—the only theme mentioned as often as actionable feedback is that of helping new teachers to understand each school’s vision for its students. As Christine Gentry, Director of Certification at City on a Hill describes, “we begin by teaching our fellows (new teachers) about who we are: a place of high expectations for all students, a place that emphasizes the importance of teacher leadership, and a school that teaches the value of citizenship.”⁵⁵

These programs stand out not only because they are small schools and charter schools that are approved to prepare educators by the state. They also stand out because the approach that they take to teacher training is in one way fundamentally different from the approach that a majority of new teachers experience in university-based preparation programs: Whereas the university experience, especially at the undergraduate level, is rooted in three and one-half years of coursework in core subject areas and pedagogy and ten weeks of student teaching, these models flip the traditional approach on its head by exposing new teachers to real students and tactical approaches to teaching from day one. Notes Gentry:

We know that teachers accepted to our program have content-knowledge, and we have designed our curriculum around

TABLE 7. COALITION OF ESSENTIAL SCHOOLS, 10 COMMON PRINCIPLES⁵⁴

Learning to use one's mind well
Less is more: depth over coverage
Goals apply to all students
Personalization
Student as worker, teacher as coach
Demonstration of mastery
A tone of decency and trust
Commitment to the entire school
Resources dedicated to teaching and learning
Democracy and equity

what we know these teachers need. We can emphasize areas that we know are important, such as how to maintain a safe and orderly classroom, equity in the classroom, and understanding diversity as we teach fellows how to teach.⁵⁶

Even charter schools that do not provide licensure through their professional development programs describe an approach to developing teachers that is fundamentally rooted in inculcating teachers into a particular culture and constantly evaluating and providing feedback on a teacher's ability to successfully implement teaching strategies that lead to student achievement. Schools leaders all described frequent (often weekly for newer teachers) and consistent approaches to teacher observation and evaluation that include mentors and/or coaches giving feedback to new teachers and then following up with teachers to understand whether and how feedback has been implemented.⁵⁷ They also described an emphasis on collaboration within and among departments and the use of time as a resource to allow teachers to plan carefully, both for their students and for their own professional development.

Developing more experienced teachers is also important to many of these successful schools, and the offer of professional development is often something that charters feel can make up for

comparatively lower average salaries and/or fewer opportunities to advance organizationally given the small size of many charter schools. For Todd Sumner at Francis W. Parker Charter Essential School ongoing professional development includes providing eight hours of common planning time a week for teachers to collaborate with and learn from others working in their subject-area domains. It also includes a long tradition of using "critical friends groups," which meet once a month and provide a structured, protocol-based way for teachers to help one another understand and improve their practice.⁵⁸

At other schools, such as Boston Collegiate, teachers are supported to design in-house professional development for their peers and/or to seek out outside professional development opportunities that will benefit their practice.⁵⁹ These kinds of advanced opportunities for development not only enable more experienced teachers to become leaders and mentors of their less experienced peers, they can be one weapon in a larger arsenal designed to retain good teachers in charter schools. Boston Collegiate's comparatively strong teacher retention numbers (78% for 2014)⁶⁰ speak to the success that some schools are having with these strategies.

TEACHER RETENTION AND ORGANIZATIONAL PIPELINES

Retaining effective teachers is something that more and more charter schools are emphasizing. Some schools see more experienced faculty are the bearers of school culture and feel that experienced, effective teachers are the best candidates to provide the mentorship and coaching that new teachers need. Indeed, providing coaching and mentorship opportunities is one tactic that some schools are using to retain teachers. Will Gardner of Alma Del Mar notes that, as his young organization has grown, it has tried to provide a career ladder for teachers who would like responsibility outside of the classroom. Alma Del Mar has established “teacher team leaders” and given those leaders direct reports that they can mentor and evaluate.⁶¹

Not only does this approach help to “spread out some of the responsibility of management,” it allows both parties, the more and less experienced teachers, to develop themselves in different ways. Gardner sees the expanded opportunities he and his team are providing as integral to building and maintaining a culture of high performance at his school. “There is no limit,” he says “to how great a great teacher can get—if you invest, you will get more bang for your buck.”⁶² Many organizations, Gardner notes, fail to invest in their experienced, high-performing teachers, which has various consequences. When experienced, high-performing teachers are not supported, they may go elsewhere, stop performing and/or burnout, or simply fail to contribute to the growth of the organization in ways that they might if they were well supported.

Providing more opportunities for experienced teachers to grow and hone their crafts is not only about developing teachers, it is also about attracting them. As small and relatively flat organizations, charter schools, especially those that are not a part of a larger network, have few opportunities for advancement into administrative positions. By creating positions that keep good teachers in the classroom but also enable them to grow outside of the classroom,

schools can effectively create opportunities where they might not otherwise exist.

In the context of a charter school movement in Massachusetts that is expanding outside of large urban centers and into “middle cities,” the existence of these new opportunities may help to attract teachers who might otherwise not want to leave the greater Boston area. In this sense, charter schools are becoming more savvy about how they build additional teacher pipelines; they are doing so by going beyond sophisticated teacher induction and training programs and thinking about how to retain more experienced educators.

And as charter schools and networks grow, thinking about both types of pipelines (those to recruit new teachers and those that will help to grow new administrators) will become increasingly important. If charter schools are to begin to scale and do so in a way that helps them to maintain a high standard of academic excellence, they will have to hold dear practices that are tried and true while building upon those practices to increase their reach. They will also have to consider the basic reasons that teachers leave charter schools at higher rates and whether they need and want to address them. Stuit and Smith find, for example, that teacher turnover in charter schools varies by organizational age and type but that, generally speaking, charter school teachers are more likely to leave schools because they are dissatisfied with the organization, which may suggest that there is not a good fit between the teacher’s vision and the school’s.⁶³ Emily Charton of Boston Collegiate points out that when teachers do leave her school it is usually because they can command a higher salary in the traditional district (after benefiting from development at Boston Collegiate) or because, in rare cases, “they want to work fewer hours.”⁶⁴

Because they are generally not unionized, charter school teachers may put in more time on the school site, and many charters are very clear about this expectation. Notes Michael Goldstein, founder of Match Charter Public School, one

of the keys to charter school success is longer school days, which include more time spent not only on student instruction, but also on other things that can make a difference, such as “phone calls home, meaningfully helping students after school, and meaningfully using [student] data [to make decisions about] changing lessons, etc.” Because many high performing charters expect a sixty hour work week from teachers in order to achieve great results, some see a great benefit in keeping a cadre of effective but less experienced teachers on board, as teachers who are newer to the profession are often more able and/or willing to put in the hours. These schools certainly see great benefit in having more experienced, mentor teachers on faculty, but the proportion of less experienced teachers in these schools is higher than it likely would be if teacher retention were emphasized. Notes Goldstein, in some cases, school leaders might feel the pressure of a narrative that says teacher retention is important, but it might only be important as a “perception issue.”⁶⁵

Perception or not, some charter schools have made concerted attempts to make long and/or intense work weeks more attractive and sustainable for teachers. Emily Charton of Boston Collegiate says, “I want my staff out of here at 4:30, I don’t want anyone burning out.” To that end, her school has also devised ways to help teachers achieve a greater work/life balance, such as having an on-site day care and allowing working mothers to experiment with more flexible schedules.⁶⁶

Now more than twenty years into the charter school experiment in Massachusetts, it is clear that these schools are making an important difference for students and their academic achievement. It is also clear, that many have both literal and figurative room to grow. Teacher retention and an emphasis on building strong and effective teacher pipelines may be the next big challenge that charter schools in Massachusetts face, especially as they seek to serve increased and different populations of students.

CONCLUSION AND RECOMMENDATIONS

In the past decade, policies have focused on ensuring that teachers are highly qualified. Now more than ever, policy makers, school leaders, and teachers are coming to understand that qualifications can be important but they do not always correlate with teacher effectiveness. A more recent push in forward thinking schools, states, and districts, led in part by organizations such as the National Council on Teacher Quality, to put effective teachers at the head of every classroom has highlighted what effective teaching looks like and the powerful impacts that effective teachers can have.

Increased student achievement scores on standardized examinations suggest that the high quality standards and strict accountability system the Commonwealth has put in place have made a difference. They also suggest that the Commonwealth has made strides in recruiting and developing effective teachers in its schools. It has done so by setting a comparatively high bar for licensure—one that emphasizes the importance of subject-area expertise—and by offering alternative and non-traditional routes for entering the profession of teaching. Additionally, by implementing a new teacher evaluation system that links teacher performance to student achievement and by encouraging districts to link pay to performance in some limited ways, Massachusetts is helping to set an example for other states, where considerations of teacher quality are absent from education policies.

Despite its standing and progress, the Commonwealth still has a way to go if it is to help all schools place effective teachers in front of every student. It must also do a better job of holding schools and districts accountable when it is clear that their teaching staffs are not having an impact on student achievement.

Policies aimed at recruiting, developing, and retaining effective teachers should focus on more than just the teacher. They must necessarily

consider students and student performance, teachers in the context of the school as a whole, and the master teachers, mentors, and coaches that schools must leverage if they are to help all teachers, new and experienced alike, to consistently improve.

Some Massachusetts charter schools have achieved stellar results over time because they have become masterful at assembling teacher workforces that help students grow academically and achieve at very high rates. Interestingly, these groups of high performing charter teachers often enter the profession with great enthusiasm for teaching but comparatively little exposure to the pedagogical content to which their peers who have attended traditional teacher training schools are exposed. Charter schools know that if they are going to get the best out of their teachers, they are going to have to put their best in, specifically by developing rigorous programs for teacher training and evaluation and by attending very closely to how each teacher impacts students and the overall life of the school.

As the Commonwealth continues to refine policies that will help all schools assemble strong teacher workforces, it should look to some of its high performing charters for clues about what works. In this sense, it may be time for Massachusetts to put less energy into designing bureaucratic hoops for prospective and experienced teachers to jump through and more energy into supporting educator preparation programs and schools to train and support teachers in different ways.

RECOMMENDATIONS

EMPOWER SCHOOLS TO ASSEMBLE THE RIGHT STAFF

The case study data provided in this report suggest that the key to having an effective teacher in every classroom is having an effective overall teacher workforce at every school leader's disposal. The role that the distinctive mission and vision of a school can play is not to be underestimated, nor is the importance of teacher

buy-in to that mission and vision. When a school assembles a staff that operates on the same set of beliefs about how students learn, how teachers teach, and 'how we do things around here,' that staff is not only motivated to teach and to learn, it is motivated to grow together and to build a network of support for continuous teacher improvement. In environments where school leaders do not have the ability to assemble their own teacher workforces, a school's capacity to develop a highly effective culture of teaching and learning is diminished.

PROMOTE EXCELLENCE IN TEACHING THROUGH MODELING AND FEEDBACK

Whether or not a new teacher has completed a teacher training program, highly effective schools induct them not only into the culture of the school but into a way of teaching that the school knows to be effective for its students. In the view of these schools, effective teachers are not born, they are made; and to become effective new teachers need to see what effectiveness looks like. Teachers in educator preparation programs run by charter schools spend a minimum of one semester interacting with and learning to understand students before they teach them. And when it comes time for them to teach, these teachers are seen more as interns or residents than practitioners. Through a long and rigorous process of trial and error and through the provision of specific and actionable feedback, charter schools ensure that teachers have command of the 'moves' that lead to student achievement. Schools that struggle to ensure teacher effectiveness could benefit from a model of teacher development that incorporates such an approach.

TIE EVALUATIONS TO STUDENT PERFORMANCE

Although the Commonwealth is now requiring all schools to factor student achievement into teacher evaluations, it must begin to do so in a way that entails real consequences for ineffective teachers. Teachers who struggle to impact student achievement should be closely monitored and provided with weekly evaluations that are

focused on giving them the tools they need to improve. Those tools should be designed to help teachers impact student achievement, and teachers should use data, provided to them in a timely manner, to understand the impacts of their moves on student achievement. Although it is costly and undesirable to dismiss a teacher for poor performance, in cases where teachers have had the opportunity to grow but have failed to do so, school leaders should be able to leverage student achievement data to dismiss those teachers without the burden of a lengthy or difficult process. As costly as dismissal can be to the culture of a school, an ineffective teacher can cost countless students opportunities to achieve.

PROVIDE OPPORTUNITIES FOR THE BEST TEACHERS TO GROW ACADEMICALLY AND PROFESSIONALLY

The development of a school's highest-performing teachers should be kept front of mind, even as schools seek to attract and train younger people to the profession, and even if having a cadre of young teachers is important to a school. Too often experienced and high-performing teachers are 'left alone' in the profession and provided limited opportunities for development. Not only can this lead to burnout and an inability to retain teachers, such an approach fails to leverage the most effective teachers in developing those who do not have the benefit of experience. High performing schools want to retain the very best teachers, and some charter schools, notably schools outside of large urban centers such as Boston, are increasing teacher retention as they build new development opportunities for their more experienced staff. Both charter and district schools should pay close attention to this model, which holds promise as a more efficient and effective way to develop *all* teachers.

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Endnotes

1. Teachers matter: understanding teachers impacts on student achievement,” (2012) RAND Policy Brief, downloaded from http://www.rand.org/content/dam/rand/pubs/corporate_pubs/2012/RAND_CP693z1-2012-09.pdf, January 5, 2015.
2. Chetty, Friedman, and Rockoff (2011) “The long-term impacts of teachers: teacher value-added and student outcomes in adulthood,” NBER Working Paper, 17699. Quotes cited here downloaded from <http://www.nber.org/papers/w17699>, January 16, 2015.
3. Massachusetts Department of Elementary and Secondary Education (DESE) (2013) NAEP results, downloaded from <http://www.doe.mass.edu/mcas/naep/results/default.html>, Jan. 20, 2015.
4. DESE 2011 Trends in International Mathematics and Science Study (TIMSS), (2011), downloaded from <http://www.doe.mass.edu/mcas/timss.html>, Jan. 20, 2015.
5. US Department of Education (2004) “New No Child Left Behind Flexibility: Highly Qualified Teachers,” downloaded from <http://www2.ed.gov/nclb/methods/teachers/hqtflexibility.pdf>, January 29, 2015.
6. 2013 NAEP Reading and Mathematics: State Results (2013), Massachusetts Department of Elementary and Secondary Education/National Assessment of Educational Progress, downloaded from: <http://www.doe.mass.edu/mcas/naep/results/default.html>; Massachusetts Department of Elementary and Secondary Education (DESE), “Spring 2013 MCAS results: Summary of state results,” downloaded from <http://www.doe.mass.edu/mcas/results.html?yr=2013>, January 28, 2015.
7. Center for Research on Education Outcomes, Charter School Performance in Massachusetts, February 2, 2013, Stanford University, downloaded from http://credo.stanford.edu/documents/MAReportFinal_000.pdf, accessed January 29, 2015.
8. Ngowi, Rodrigue, “Study: Mass teacher quality improves,” *The Associated Press*, January 25, 2012.
9. National Council on Teacher Quality (NCTQ) (2014) “New report from the National Council on Teacher Quality gives Massachusetts improved grades for policies that support effective teaching,” Press Released, downloaded from http://www.nctq.org/dmsView/2013_State_Teacher_Policy_Yearbook_Massachusetts_Press_Release, accessed January 24, 2015.
10. *ibid*
11. Massachusetts Department of Elementary and Secondary Education (DESE), *Status of the Massachusetts educator workforce: focus on first-year teachers*, December 2013, p. 12; MA DESE website, “Preparing educators, Academic (pre-k-12 licensure),” http://www.doe.mass.edu/Educators/e_license.html?section=k12, accessed January 24, 2015.
12. MA DESE website, “Educator preparation programs directory,” <http://www.doe.mass.edu/educators/directory.html>, accessed January 24, 2015.
13. MA DESE website, “Preparing educators, Academic (pre-k-12 licensure),” http://www.doe.mass.edu/Educators/e_license.html?section=k12, accessed January 24, 2015.
14. See Constantine et. al, who “examined the efficacy of different teacher preparation models in relation to student achievement.” They found no difference in achievement scores among students with traditionally and alternatively certified teachers (Constantine et. al (2009), “An evaluation of teachers trained through different routes to certification,” Institute of Education Sciences, US Department of Education, Washington, DC. Also see, Goldhaber and Brewer who evaluated results for over 6,000 students and found no difference in mathematics and science achievement for students with certified teachers and those who had teachers with emergency certification. Goldhaber, D. and Brewer, D. (2000), “Does teacher certification matter? High school teacher certification status and student achievement.” *Education Evaluation and Policy Analysis*, 22(2), pp. 129-45.

15. Stotsky, Sandra (2015), *An Empty Curriculum: the Need to Reform Teacher Licensing Regulations and Tests*, Rowman & Littlefield.
16. Excerpted from: *2013 NAEP Reading and Mathematics: State Results* (2013), Massachusetts Department of Elementary and Secondary Education/National Assessment of Educational Progress, downloaded from: <http://www.doe.mass.edu/mcas/naep/results/default.html>
17. *ibid*
18. Interview with Cristin Berry, Principal, City on a Hill Charter Public Schools, January 2, 2015.
19. Massachusetts charter school regulations, 603 CMR 1.07,
20. Massachusetts Department of Elementary and Secondary Education (DESE), *Status of the Massachusetts educator workforce: focus on first-year teachers*, December 2013, p. 12.
21. Center for Research on Education Outcomes, *Charter School Performance in Massachusetts*.
22. Center for Research on Education Outcomes, *Charter School Performance in Massachusetts*, p. 16.
23. *Ibid*, p. 23.
24. *ibid*
25. Data compiled from Massachusetts Department of Elementary and Secondary Education, *School and District Profiles*, downloaded from: <http://profiles.doe.mass.edu/profiles/general.aspx?topNavId=1&orgcode=00000000&orgtypecode=0&>
26. MA DESE *School and District Profiles*, <http://profiles.doe.mass.edu/profiles/general.aspx>, downloaded January 28, 2015.
27. Data provided by Boston Collegiate Charter Public School.
28. National Council on Teacher Quality (NCTQ), *Human Capital in Boston Public Schools*, February 2010, page 19.
29. Interview with Sonya Pratt, Principal of City on a Hill Charter Public Schools, January 2, 2015.
30. *Human Capital in Boston Public Schools*, page 48.
31. *ibid*
32. Data provided by City on a Hill Charter Public School Network (campuses in Boston and New Bedford, MA).
33. <http://www.cityonahill.org/urban-teaching-fellowship/>
34. Correspondence with Paul Hays; also see NCTQ, *Human Capital in Boston Public Schools*, page 48.
35. *Human Capital in Boston Public Schools*, page 48.
36. Interview with Joseph McCleary, Director, Lowell Collegiate Charter Public School and former principal of Mystical Valley Regional Charter Public School, December 22, 2014.
37. Massachusetts Department of Elementary and Secondary Education (DESE), *Status of the Massachusetts educator workforce: focus on first-year teachers*, December 2013, p. 13
38. Stuit, D., and Smith, T., *Teacher Turnover in Charter Schools*, working paper, Vanderbilt University, downloaded from http://www.vanderbilt.edu/schoolchoice/documents/stuit_smith_ncspe.pdf, accessed January 29, 2015.
39. Interview with Sonya Pratt, Principal, City on a Hill Charter Public Schools, January 2, 2015.
40. Interview with Todd Sumner, Francis W. Parker Essential Charter School, January 9, 2015.
41. Interview with Joseph McCleary
42. Interview with Sonya Pratt
43. Interview with Emily Charton, Boston Collegiate Public Charter Middle School, principal, January 5, 2015.

44. Ibid
45. Interview with Will Garder, Executive Director, Alma Del Mar Charter Public School, New Bedford, MA, January 13, 2015.
46. Nicodemus, Aaron “Charter school teachers turn to union for help,” *Worcester Telegram*, August 3, 2014.
47. Interview with Cristin Barry
48. Interview with Emily Charton
49. Also see: Also see Stuit, D., and Smith, T., *Teacher Turnover in Charter Schools*, Working paper.
50. Interview with Joseph McCleary
51. Massachusetts Department of Elementary and Secondary Education (DESE), *Status of the Massachusetts educator workforce: focus on first-year teachers*, p. 14.
52. Candal, Cara (2014) *Matching students to excellent teachers*, Pioneer Institute White Paper, No. 111.
53. Interview with Todd Sumner
54. Downloaded from <http://essentialschools.org/>
55. Interview with Christine Gentry, City on a Hill Charter Public School, Director of Certification, February 2, 2015.
56. Interview with Christine Gentry
57. Interview with Emily Charton, Interview with Cristin Barry; also see *Matching students to excellent teachers*.
58. Interview with Todd Sumner
59. Interview with Emily Charton
60. See MA DESE *School and District Profiles*
61. Interview with Will Gardner
62. ibid
63. Stuit, D., and Smith, T., *Teacher Turnover in Charter Schools*, Working paper.
64. Interview with Emily Charton
65. correspondence with Michael Goldstein, February 4, 2014.
66. ibid



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